

# **The Extras of Meta-Morphology**

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The Home Page is:

<http://www.noologie.de/>

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The .htm version is here:

[http://www.noologie.de/\\_extra.htm](http://www.noologie.de/_extra.htm)

This contains all the www-links that can be accessed.

Wikipedia: Noology External links:

<http://en.wikipedia.org/wiki/Noology>

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### 3 Hyperlinks Referenced

->ambrose\_bierce      ->andreas\_platthaus      ->angelsfear      ->anopheles      ->associative      ->ayllu  
->bildung\_german      ->bildungs\_reise  
->carcrash      ->circular\_architect      ->corncob  
->continental\_condition->contemplate\_reflect  
->derrida\_sephardic      ->devils\_dictionary      ->diamond\_jared  
->diamond\_guns\_germs      ->disease\_evolution  
->eco\_rose      ->evil\_empires ->expounding\_def      ->fire\_human\_evolution  
->five\_skandhas      ->gigerenzer      ->gumilev\_empires      ->hierarch\_hypertext  
->hydraulic\_system      ->hypertext      ->incommensurability      ->kerkeling      ->kant\_bildungsreise  
->ketzer\_moench      ->las\_meninas ->learn\_new\_guinea  
->malaria      ->mark\_twain ->maya\_collapse  
->meta\_noia      ->morphology\_science ->morphology\_history  
->magic\_mirror      ->mirror\_neuronal  
->mirror\_structure      ->mirror\_cabinets      ->morpheus  
->morpholog\_bildung      ->morpholog\_ikonos      ->morpholog\_meaning  
->murder\_and\_traffic      ->narciss\_echo      ->narcowar      ->newguinea      ->noologie\_comparison  
->ode\_tax\_collector      ->ooda\_loop      ->rosary\_reflect      ->rundgesang\_nietzsche  
->samuel\_johnson      ->self\_reflection      ->sloterdijk\_computer      ->sloterdijk\_intro  
->sloterdijk\_special      ->sloterdijk\_sam\_han      ->sloterdijk\_traum      ->sloterdijk\_abbreviation  
->small\_pox      ->spengler\_morph      ->spieglein\_wand      ->sprach\_blasen  
->swift\_gulliver      ->tribes\_tributes      ->tripolarity\_complementary  
->voltaire\_candide  
->warburg1  
->zettel\_kasten

## 4 Abbreviations

AG The Abbreviation AG is used as short for "the present author".

[AG: ... ] This is used for a comment by AG within a quotation.

[[ ... ]] This is used when AG makes a longer comment or footnote, because within an .htm text footnotes are cumbersome and result in excessive clicking. In the www-lingo, there is a very common misuse called "click baiting". For serious contributors, this should be avoided.

### 4.1.1 Sloterdijk Literature Abbreviations

The writings of Sloterdijk are referenced with these Abbreviations:

Sloterdijk, Peter:

Eurotaoismus, Ed. Suhrkamp, Frankfurt am Main (2018), orig. 1989, abk. "**Eurotao**"

Sphären Band I, Blasen, Suhrkamp, Frankfurt (1998), abk. "**Blasen**".

Sphären Band II, Globen, Suhrkamp, Frankfurt (1999), abk. "**Globen**".

Sphären Band III, Suhrkamp, Frankfurt (2004), abk. "**Schäume**".

"Im Welt-Innenraum des Kapitals. Zu einer philosophischen Geschichte der terrestrischen Globalisierung". Suhrkamp, Frankfurt am Main 2005, ISBN 3-518-45814-0. abk. **WIKA**

"Zorn und Zeit. Politisch-psychologischer Versuch. Suhrkamp, Frankfurt am Main (2006), ISBN 3-518-41840-8, abk. **Z&Z**.

"Gottes Eifer", Verlag der Weltreligionen (2007), abk. "**Eifer**".

"Du mußt dein Leben ändern. Über Anthropotechnik". Suhrkamp, Frankfurt am Main (2009), ISBN 978-3-518-41995-3, abk. **DMDL**

"Kritik der zynischen Vernunft". 2 Bände. Suhrkamp, Frankfurt am Main (1983), ISBN 3-518-11099-3. abk. "**ZynV**"

"Was geschah im 20. Jahrhundert? Unterwegs zu einer Kritik der extremistischen Vernunft". Suhrkamp, Berlin (2016), ISBN 978-3-518-42507-7, abk. "**20JH**".

## 5 The Science of Morphology

The Science of Morphology is the scientific study of forms (morphae). All forms change, some very slowly, like in Geology, some very fast like waves in water. The study of the change of forms is sometimes called *Meta-Morphology*, with the special term *Meta-Morphosis*. In the Insect world we have a good example of Meta-Morphosis: From a caterpillar through a stage called chrysalis, to a creature that can take to the air, a butterfly. So much is very well known in scientific circles. Morphology is mostly associated with Goethe's work, who called his scientific studies Morphology. And he practically did the Morphology of about everything: Plants, Insects, the Cosmos, the Clouds in the Sky, the Forms of the Waves in Water, even the Morphology of Geology, of Stones and Minerals. Goethe was interested in everything of the large and wide world. Even if he was dabbling and an amateur in so many fields. But the idea of Morphology has stuck. There exists the concept of Morphology in many sciences, even if there is not much connection to the Morphology of Goethe. The Goethe-kind morphology tradition is mostly forgotten now, I had made list of that tradition in my Dissertation and then something more about Goethe.

This is a more theoretical discussion of Morphology:

<http://www.noologie.de/desn17.htm>

This is a discussion of Whitehead's "Process and Reality"

<http://www.noologie.de/desn16.htm#Heading58>

This is a more theoretical discussion of Meta-Morphology:

<http://www.noologie.de/desn09.htm>

This is about the Morphology in Goethe's Faust:

<http://www.noologie.de/faust.htm>

This is somewhat similar to faust.htm

<http://www.noologie.de/desn08.htm>

This is somewhat similar to faust.htm

<http://www.noologie.de/desn27.htm>

### 5.1 Some History of Morphology

On the following www-pages of Noologie we find some more of the theoretical foundations of Morphology or Cultural Morphology which I have written in some earlier years.

The design.htm files are from my dissertation of 1999.

<http://www.noologie.de/desn24.htm#Heading130>

<http://www.noologie.de/desn09.htm#Heading32>  
<http://www.noologie.de/desn17.htm>  
<http://www.noologie.de/faust.htm>  
<http://www.noologie.de/morph.pdf>

I have been working on Morphology since about 1980. I first picked up Spengler and Goethe and I understood something of their thinking. I had already known the work of Joseph Campbell and I had read extensively the works of the Indian Advaita Vedanta philosophy of Shankara, then the Buddhist tradition like the works of Nagarjuna, which I consider the highest achievement that the Buddhist tradition could ever come up with. **I like clear, cold Logic the most, and this is the Nagarjuna Style.** No embellishments, no superfluous rituals or prescriptions for lifestyle, praying, and doing offerings etc. pp. And the other Scriptures that all those different Buddhist schools had produced, were not so much to my liking. Like the Mahayana Buddhism or even the Tantrayana of the Tibetans. The Dalai Lama belongs to one of these schools. But these are more or less the Tibetan Bon traditions with a veneer of Buddhism on top of it. It is pretty much like the Japanese Shinto, like the Yamabushi who morphed into Shingon Buddhists. Beneath that veneer of Buddhism there always remained the Shinto. And since the Japanese are very pragmatic about religion they couldn't care less what kind of name that religion called itself.

<https://studybuddhism.com/en/advanced-studies/history-culture/buddhism-in-tibet/the-origin-of-the-yellow-hat>

<https://stallman.org/articles/yellow-hat.html>

<https://www.britannica.com/topic/Dalai-Lama>

<http://factsanddetails.com/china/cat6/sub34/item221.html>

14th Dalai Lama and 17th Karmapa historic discussion on Four Sects of Tibetan Buddhism

[https://www.youtube.com/watch?v=1FTkJyN5M\\_o](https://www.youtube.com/watch?v=1FTkJyN5M_o)

<https://de.wikipedia.org/wiki/Gelug>

<https://en.wikipedia.org/wiki/Bon>

<http://www.spiritwiki.de/w/B%C3%B6n>

Introduction to Bon Tradition

<https://www.youtube.com/watch?v=yhm1vSWwFYw>

Tenzin Wangyal Rinpoche on Bon Buddhism - Interview

<https://www.youtube.com/watch?v=eF1VkSdXmVI>

## 5.2 The Definition of Expounding

I just give the definition of expounding again: You pound on something so long and so hard until it becomes Ex. "Ex arachae hoti proton genet auton", as the good Hesiodos and the good Homeros used to say. The quotes are identical in both works. So someone must have cribbed something from the other one. I have no idea to whom the copyright belongs, since at those olden times, there existed no copyright. It was very privileged knowledge that had been totally lost to the sages of the Library of Alexandria around 300-200 BCE, when they morphed that into the common language of the Hellenistic Empires which was the Koinae.

## 5.3 A Morphology Writer named Oswald Spengler

One other Morphology writer, who is very in-famous by now, was Oswald Spengler. He claimed that he knew the Morphology of history, which is a pretty strong claim to make. Because history is only that which we know about history. And there is quite a lot of history that we don't know anything about. Because the records are irretrievably lost.

[A particularly bad case of lost records are those of the early times of the religions of Christianity and Islam. This is very strange indeed, and there must have been some records. And they are gone, with the wind as one may say. I have just a little suspicion that they didn't vanish by themselves. Someone must have helped them in vanishing, this I believe in my naive mind. For example the earliest written records of the Hadith, the sayings of Mohammed, were produced a few 100 years after his death (c 632). (Muhammad al-Bukhari c. 864)

[https://en.wikipedia.org/wiki/Criticism\\_of\\_hadith](https://en.wikipedia.org/wiki/Criticism_of_hadith)

[https://en.wikipedia.org/wiki/Muhammad\\_al-Bukhari](https://en.wikipedia.org/wiki/Muhammad_al-Bukhari)

]

History is just in the eye of the beholder, or better this is what the rulers told the historians (or palace writers) what they had to write and record about, and for whom it should serve. History is almost always written by the victors, and the rulers. Sometimes there is a different spelling: His-Story, since the rulers were mostly

male. And as many historians as you have, so many histories you get. Which proves that history is in the eye of the beholder. And this is the deeper reason why Spengler's attempt was destined to utterly fail.

But at least he had tried. And he still has made some good contributions to Morphology, when you ignore his faulty historical work. I have written about that in my article below. Then there is Peter Sloterdijk who in his "Sphären" also wrote about Morphology, this time about some round objects, which are called Spheres, Bubbles, Globes, Bullets, and something like that, and even Footballs, when he did an exegesis of the "Ludo Globi" by Cusanus. And he really did a good job at describing the cultural history of all that is connected to round objects. At this he was more successful than poor Spengler. I have written more about this here:

<http://www.noologie.de/morph.pdf>

<http://www.noologie.de/morph.htm>

Now, as I have stated in my above article, since Morphology is not an established academic domain, there are as many Morphologies as there are Morphology thinkers. The problem with a form (or Morphae) is that is entirely in the eye of the beholder. Now there are some more or less universally accepted kinds of form, like the form of Mount Everest. And in science, we have also certain established kinds of form, like the outlay of all the vertebrate animals with a spine, four legs, a head, an intestine, sometimes a tail, sometimes not. In the bird class the front legs are converted into wings, but that doesn't contradict the overall pattern, since the wings are morphed front legs. So here we can see that forms have their own Meta-Morphosis. But when it comes to less defined classes of forms, the situation is different. There everyone concocts his/her own sort of Morphology. This is why the academic establishment doesn't recognize Morphology per se as academic at all. So here I am also doing my own kind of Morphology. And I concentrate more on Meta-Morphology, the scientific study of morphing. And this is a little distinct from other approaches to Morphology. Since morphing is a process. As I spell this out in greater detail, this is the Heraklitean approach. Everything is flowing, and there is, in the long run, nothing that is stable, even if that process takes a few couple of billion years. There will always be change. This is also the core of Buddhist thinking. Which is called in the Pali language: Paticca Samuppada. In Sanskrit it is called Pratityasamutpada. I have enlarged this in the following section of my dissertation:

<http://www.noologie.de/desn16.htm#Heading60>

<https://en.wikipedia.org/wiki/Prat%C4%ABtyasamutp%C4%81da>

Unfortunately this URL doesn't fit into word.

So one has to call the google to search for **Pratityasamutpada**.

#### **5.4 Some kinds of Morphology: Meta-Morphosis, and Meta-Noia**

Now there are two more important terms about Morphology: Meta-Morphosis, and Meta-Noia. Meta-Morphosis is the description of the time-span when something is morphing. Now this can be very short, like a Second, or it can be very long, like a few billion years. Meta-Noia is the case when an intelligent being, like a human, has a sudden change of mind. So the mind itself is morphing. And the personality with it. One has been this kind of person at one instant, and then, suddenly the next instant, one becomes another person. This doesn't happen very often, and most often in an accident, which is mostly bad. But there are cases when the Meta-Noia occurs for the better when one gets hit on the head. I know of one case when a pretty derelict man and alcoholic, was hit on the head, and then he became a very famous painter. I don't know the exact literature for this. But there is always a good place to look for that kind of things: Oliver Sacks.

<https://www.oliversacks.com/>

[https://en.wikipedia.org/wiki/Oliver\\_Sacks](https://en.wikipedia.org/wiki/Oliver_Sacks)

[http://sajtichek.narod.ru/books/without\\_translation/wife\\_hat.pdf](http://sajtichek.narod.ru/books/without_translation/wife_hat.pdf)

The Man Who Mistook His Wife For A Hat and other clinical tales.

In other more productive cases Meta-Noia is called Enlightenment. There is a whole lot of literature about this, especially in the Eastern traditions, like Samadhi (Yoga), or Satori (Zen). But we also have a good example in the history of Christianity. This was the Meta-Noia of Saulus into St. Paulus. This was one of the most important Meta-Noia's in the whole history of humanity. I will go into more detail on this case in a later passage. When one looks at the spiritual literature of the West, we can find a whole lot of such Meta-Noia's. It is mostly called sudden conversion, or seeing the Holy Virgin Maria, or something like that. Also the philosophical Western tradition knows this phenomenon. Platon had described this in his 7th letter:

Denn es steht damit nicht so, wie mit anderen Lehrgegenständen: es läßt sich nicht in Worte fassen, sondern aus lange Zeit fortgesetztem, dem Gegenstände gewidmetem wissenschaftlichen Verkehr und aus

entsprechender Lebensgemeinschaft tritt es plötzlich in der Seele hervor wie ein durch einen abspringenden Funken entzündetes Licht und nährt sich dann durch sich selbst.

## 5.5 Meta-Morphology and Morpheus

There is an interesting correspondence between Morpheus, the Greek god of sleep and dreams, and Meta-Morphology. Because the dreams are these mental images that have a perpetual morphing. We experience it all, when some forms and themes of a dream change imperceptibly from one to the other. Dreams have a quality that is also called Protean, from Proteus, another Greek god who constantly changed forms. And in Indian Vedic mythology, there are the Asuras, who also constantly changed forms. This makes it also very difficult to do dream-analysis, since the waking consciousness that tries to remember a dream can follow only one dream-track that makes some sense to it. And the dream is multi-dimensional, as I write it in some other text. The dream has a quite holographic quality. Only in ancient times, it seems that the dreams of people were easier to follow for the people. I also give a few explanations why that could happen in ancient times but not any more in present-day civilizations.

## 5.6 Peter Sloterdijk on Traumdeutung

Peter Sloterdijk has made an interesting discussion of dreams and dream-interpretation in 20JH, "Derridas Traumdeutung", p. 137++. Here he mentions the "philosophische Anthropologie" on p. 139 as his viewpoint. There is also the comparison of living and death and the dream-images that connect both, and this is also a quite familiar theme for the present work on Meta-Morphology. The dream consciousness resembles in many aspects the Tibetan Bardo Thodol imagery. Sloterdijk even mentions some themes of the "Einprägungen" (p. 144) which are called imprints by Aby Warburg. But Warburg is never mentioned by Sloterdijk anywhere as far as I could not find anything in all his works (and I have read most of them). Because of the lack of an index it is not possible to verify this. But he mentions also the "Semiodynamik" and "Somatodynamik" on this page. So there are obvious connections between the psychoanalysis of Freud and modo Derrida, and the analysis of mythology by Aby Warburg. He also talks about "Freudianismus, diesem verwelkten Mythos des 20. Jahrhunderts" on p. 145. His term "Binarismen" is just another, more logical expression for Dualism. On p. 146 he mentions "die Zukunft des psychologischen Wissens vom Menschen und der Kulturen". The theme of Tri-Polarity or is also central to Meta-Morphology. "Derrida ein Ägypter" is a quite fitting expression since it encapsulates all the Dream-Time knowledge of the ancients, which I also expound in the Dream of Nabuchandanosor. Derrida could of course also rely on the knowledge of his Hebrew ancestry which was preserved in the Talmud. Here is the quote (p. 146-148) where Sloterdijk mentions exactly the themes that are also expounded in the Meta-Morphology:

...Türen zu öffnen, die in die Zukunft des psychologischen Wissens vom Menschen und der Kulturen führen. Es sind die gleichen Türen oder zumindest benachbarte Türen, durch die im vergangenen Jahrhundert Denker wie Ernst Bloch, Gotthard Günther, Jean Baudrillard und Niklas Luhmann, in unserer Zeit forschende Geister wie Bruno Latour, Peter Galison, Heiner Mühlmann und Roberto Esposito - um unter einer Vielzahl von Kollegen nur sie zu nennen - gegangen sind und zu gehen nicht aufhören. Was diese Denker bei all ihrer Heterogenität verbindet, ist die gemeinsame Suche nach einer komplexen Begriffskultur, in der die herkömmlichen Binarismen der metaphysischen, politischen und wissenschaftlichen Vokabulare überwunden wären - ob es nun um die alte Entgegensetzung von Geist und Materie geht oder um die von Menschen und Dingen oder die von Natur und Gesellschaft und was dergleichen altehrwürdige Paar-Formeln mehr sind. ... Ich hatte mich seinerzeit entschlossen, nicht in direktem Modus über Derridas Werk und über den Wortlaut seiner Schriften zu sprechen, sondern mich einer Methode-der indirekten Spiegelung zu bedienen - eines Verfahrens, das man in einem anderen Kontext als »Konstellationsforschung« bezeichnet hat.' In P. 147

dem kleinen Essay, der den Titel Derrida ein Ägypter trägt, ging es darum, einige Grundfiguren des dekonstruktiven Denkens durch ihre Versetzung in die nähere oder fernere Nachbarschaft mit analogen geistigen Gebilden zu »illustrieren« - die Systemtheorie Niklas Luhmanns, die Freudsche Psychoanalyse, die humanistische Mythologie Thomas Manns, die Kulturtheorie Franz Borkenhaus, die Mediologie von Régis Debray, die Zeichentheorie Hegels und die Archiv- und Museumstheorie von Boris Groys. Weil all diese Anmerkungen umständehalber eher flüchtig als gründlich geraten mussten und mehr der Anregung als der gelehrten Vertiefung dienten, bin ich froh, mit dem heutigen Vortrag wenigstens an einer Stelle für etwas mehr Ausführlichkeit sorgen zu können. Ich gebe zu, daß dies bedenkllicherweise die am meisten spekulative und am weitesten von Derridas eigenem Text wegführende Passage meiner Pariser Kommentare betrifft. Ich beziehe mir hier auf den Passus, den ich unter der Überschrift »Thomas Mann und Derrida« präsentierte. Dort wurde suggeriert, der große Romancier habe, als er seine Josephs-Tetralogie verfaßte, in gewisser Weise das Phänomen Derrida poetisch vorweggenommen, indem er in der bezaubernden Figur des jungen Joseph den Typus des hochbegabten Außenseiters portraitierte, dem es dank ungewöhnlicher Talente

gelingt, von der Peripherie eines Imperiums aus ins Innerste der Zentralmacht vorzudringen, um sich dort als Traumdeuter, als Ratgeber, ja als das bessere Selbst des Herrschers, im aktuellen Fall des Pharaos, unentbehrlich zu machen. Ich nannte diese Struktur bzw. diese Position den » Josephismus« und wollte damit eine kulturdynamisch brisante Konfiguration bezeichnen, die in der Moderne zu großer Bedeutung gelangte. Ich behaupte, daß sich ohne Rücksicht auf sie das Drama der Kämpfe um die Interpretationshoheit in der westlichen Zivilisation seit

p. 148

dem späteren 19. Jahrhundert unmöglich verständlich machen läßt.

Die Unwiderstehlichkeit der josephistischen Position ergibt sich aus dem Umstand, daß sie es ihrem Agenten erlaubt, gewissermaßen ins »Zentrum, des Zentrums« vorzustoßen und dabei eine neuartige exzentrische Interpretation der Zentralität zu erzeugen, eine Interpretation, die für die Inhaber der Zentrumspositionen selbst von hoher Attraktivität sein kann, sich aber auch nicht selten als subversiv gefährlich erweist. Die Prozedur, die an den problematischen Ort führt, den ich das Zentrum des Zentrums nenne, kann - wie die von Thomas Mann phantastisch erweiterte biblische Geschichte zeigt - keine andere als die Traumdeutung sein. In den Träumen der Mitte nämlich wird erst deutlich, daß die Mitte nie wirklich die Mitte ihrer selbst sein kann. Damit die Dinge von Anfang an deutlich werden, füge ich hinzu, daß es hierbei nicht um die Deutung von) edermanns Träumen geht, sondern geradewegs um die Deutung der Träume der hohen Herren, mehr noch, der Träume, die der Herr der Herren, der Pharao in höchsteigener Person, träumt und die, wenn auch auf vorerst dunkle Weise, von den Schicksalen des Reiches und des Thrones handeln.

Thomas Mann hat diese Situation in einer grandiosen erzählerischen Sequenz beschworen: Der Pharao hatte also die bekannten Träume geträumt, in denen die mageren Kühe die fetten verschlangen, und hatte seine Hofraumdeuter befragt, was denn von diesen Visionen zu halten sei. Unzufrieden mit deren Antworten, greift er bereitwillig das Gerücht auf, ein junger Jude, der in einem Gefängnis im Süden des Reichs eine Strafe verbüße, weil er, der Sklave, mit der Frau eines hohen Beamten ein Verhältnis gehabt haben soll, besäße die Gabe der Traumauslegung in einem wunderbaren Maß. Der Pharao läßt ein Schiff über den Nil entsenden, um den jungen Mann an seinen Hof zu holen, damit er ihm eine Probe seiner Kunst gebe - der Rest ist bekannt. Was weniger bekannt ist, dürfte die Tatsache sein, daß seither viele Hermeneutiker, die große Texte deuten, ihrerseits von einem nach Deutung rufenden Traum heimgesucht werden.

## 5.7 Derrida and the Sephardic Knowledge

This article gives some in-depth information about the thought structure of the Sephardic Jews (of the ancient Moorish empire of Spain) who are called Marannes in French. Derrida was of Algerian Jewish ancestry and as the article says, his father was the chief Rabbi of the synagoge of Algiers. I have written more on the history of the school of Toledo in the Appendix where it connects to "The Name of the Rose" by Umberto Eco.

<https://www.cairn.info/revue-rue-descartes-2014-2-page-102.htm#>

Dans une des scènes du film de Safaa Fathy, D'ailleurs, Derrida, ce dernier est à Tolède, filmé dans la synagogue Santa Maria la Blanca dont l'architecture est celle d'une mosquée. Cette synagogue qui, ainsi que toutes les mosquées de Tolède, était redevenue une église après l'Inquisition, est aujourd'hui un musée. Santa Maria la Blanca suscite en Derrida l'évocation d'une autre synagogue, celle d'Alger où son père l'amenait, enfant, avec son frère, les jours de grandes fêtes; la synagogue d'Alger est aussi une ancienne mosquée et elle l'est redevenue après la décolonisation. L'énoncé de cette succession d'attributions renvoie bien sûr à une histoire « coloniale et précoloniale » violente, telle que « tous les lieux de culte (ont été) appropriés, expropriés, r appropriés, désaffectés, réaffectés », et ce jusque dans la période post-coloniale. En même temps, une telle succession de réappropriations et de détournements fragilise toute prétention d'un culte à la propriété d'un lieu. Aucune installation nouvelle n'échappe au fantôme des anciens propriétaires, chaque nouveau culte est toujours hanté par la mémoire de l'autre. Les synagogues, les mosquées et les églises sont ici des « lieux de passage » à l'identité précaire. Derrida aime ce type de lieu, comme s'il était plus propice que d'autres à accueillir sa propre situation « d'émigré ou de migrant », de celui qui traverse, qui passe par des lieux sans en être, sans qu'aucun de leurs noms ne le qualifie jamais. Celui qui traverse ou passe n'est cependant pas sans qualificatif, dans la mesure où « à partir » de l'expérience du traverser ou du passer, certaines possibilités surgissent. Cet « à partir de » n'est pas un lieu, mais, dans la mesure où il rend possible quelque chose, Derrida le nomme une « situation », mot qu'il corrige pour lui préférer celui de « site », de « site sans lieu ». Le mot Tolède possède pourtant pour lui un pouvoir évocateur spécifique que le qualificatif d'émigré ou de migrant ne recouvre pas tout à fait. Tolède c'est l'Andalousie, l'Inquisition et le phénomène marrane, nom de ces Juifs extérieurement convertis au catholicisme mais qui perpétuaient et transmettaient le judaïsme en secret, et dont un grand nombre quitta la péninsule ibérique pour se réfugier en Afrique du Nord. Aussi Derrida ne se qualifie-t-il pas seulement de migrant mais encore de « marrane clandestin », un marrane moderne cependant car indissociable non seulement d'une « certaine histoire des colonies françaises » mais aussi de ce qu'il nomme ici la « postcolonialité [1]

[1] Toutes les citations qui précèdent, sont tirées de la... ».

Certes « marrane » n'est pas le seul qualificatif que Derrida s'attribue, il peut aussi parler de lui comme d'un « franco-maghrébin [2]

[2] Jacques Derrida, *Le Monolinguisme de l'autre ou la prothèse... »* ou du « dernier des Juifs [3]

[3] J. Derrida, « Un témoignage donné », in *Questions au judaïsme... »*, et il nuance souvent cette qualification en précisant qu'il n'est qu'« une sorte de marrane [4]

[4] J. Derrida, « Circonfession », in G. Bennington et J. Derrida, ... ». Le mot « marrane » exerce cependant sur lui une fascination particulière, comme il l'indique un peu plus loin dans le film de Safaa Fathy : [3]

Si je suis tombé amoureux (du mot « marrane ») qui est devenu comme une sorte d'obsession qui réapparaît dans tous mes textes ces dernières années, c'est parce qu'il renvoie à ces origines supposées judéo-espagnoles, mais aussi parce qu'il dit quelque chose d'une culture du secret et naturellement la question du secret m'a toujours beaucoup occupé indépendamment de ma question juive [5]

[5] D'ailleurs, Derrida, op. cit. [4]

« Marrane », mais on pourrait dire aussi « migration », ne sont pas des concepts, ce sont des mots chargés d'un pouvoir d'évocation, de renvoi à des sites qui sont des sites de l'entre (les pays, les religions). De tels mots font naître des figures qui donnent forme à ce qu'on pourrait nommer des motifs de pensée, à des thèmes susceptibles d'une pluralité de modulations. Entre ces motifs et ces sites, Derrida parle de rapport d'« affinité [6]

[6] « Je suis une sorte de produit colonial ou postcolonial... ». Dans le film comme dans d'autres textes, il est remarquable que, pour dire ce rapport d'affinité, Derrida en passe par un mode d'« anamnèse autobiographique » qui raconte par bribes « l'enfance d'un petit Juif français doublé d'un petit Juif indigène d'Algérie [7]

[7] J. Derrida, « Abraham, l'autre », in *Judéités. Questions pour... »*. Une telle anamnèse ne présuppose pas l'identité « mais un processus interminable, indéfiniment phantasmatique d'identification [8]

[8] J. Derrida, *Le Monolinguisme de l'autre*, op. cit., p. 31. ».

## 5.8 On Multi-Valued Logic and the OODA-Loop

In the work of Sloterdijk quote we also find Gotthard Günther who had devoted his life's work to a non-dualistic / non-binary logic, meaning at least Tri-Polar and then multi-valued logic. All of Gotthard Günther's works are found on the vordenker.de www site. Of course there exist quite a few applications of multi-valued logic in practical use. But they are not formal, and more episodic. The most developed is the logic of war, because war is always a multi-valued enterprise. But normally philosophers are not too concerned with the logics of war. This is especially the case with the German Geisteswissenschaften after WWII, since the Germans didn't want to be reminded at all about warfare. The only towering exception of a western philosophy of war is Xenophon, who knew all about this, from hard-won personal experience. Clausewitz comes in close second place. But he died too early to add some more important chapters on the philosophical aspects of warfare. Also Spengler had some knowledge of this, but he had never known the practical sides. He had spent WWI in his study, reading all the history books of the Münchner Staatsbibliothek. And of course the military academies of Sandhurst (British) and West Point (USA) know all about this. There is the famous principle of the OODA loop of the US Air Force Colonel John Boyd. But this is practically unknown outside of the military circles. So there is some room for augmentations beyond the theses of Peter Sloterdijk. Even Heiner Mühlmann doesn't mention this essential part of the logics of war in his book "Die Natur der Kulturen". And one of the foremost strategists of the logics of warfare was John v. Neumann. And the relevance of his work is practically unknown except some insiders. Because he had formulated the US strategy of the cold war against the USSR.

[https://en.wikipedia.org/wiki/OODA\\_loop](https://en.wikipedia.org/wiki/OODA_loop)

The **OODA loop** is the cycle *observe–orient–decide–act*, developed by military strategist and United States Air Force Colonel John Boyd. Boyd applied the concept to the *combat operations process*, often at the operational level during military campaigns. It is now also often applied to understand commercial operations and learning processes. The approach explains how agility can overcome raw power in dealing with human opponents. It is especially applicable to cyber security and cyberwarfare [1]

<https://www.vordenker.de/ggphilosophy/>

[https://www.vordenker.de/ggphilosophy/gg\\_theorie-mehrwert-logik.pdf](https://www.vordenker.de/ggphilosophy/gg_theorie-mehrwert-logik.pdf)

[https://de.wikipedia.org/wiki/Gotthard\\_G%C3%BCnther](https://de.wikipedia.org/wiki/Gotthard_G%C3%BCnther)

## 5.9 The five Skandhas

Then there is an appropriate quote from the Buddhist Wisdom: The five Skandhas.

Hier, O Sariputra, Form (rupa) ist Leere (shunyata) und gerade die Leere ist Form; Leere ist nicht verschieden von Form, und Form ist nicht verschieden von Leere; was auch immer Form ist, das ist Leere, was auch immer Leere ist, das ist Form, und dasselbe betrifft Gefühle (vedana), Sinneswahrnehmungen (samjna), Impulse (samskara), und Aufmerksamkeit (vijnana).

<http://www.noologie.de/shunya01.htm>

<http://www.noologie.de/shunya01.htm#Heading30>

This is very deep indeed. And this gives us ample occasion to meditate upon. This is about the deepest thought that was ever uttered in the spiritual history of mankind. I will refer to this, when I am speaking about the Kenoma and the Pleroma in Greek and Christian thought further down. Because Kenoma is identical to Shunyata. And this is VERY DIFFERENT from the Gnostic idea of this.

## 6 On Mirror Structures

### 6.1 The (Self-) Reflection and Narcissism

On mirror structures, and the (Self-) Reflection and Narcissism... And the genius of Diego Velasquez.

[https://en.wikipedia.org/wiki/Diego\\_Vel%C3%A1zquez](https://en.wikipedia.org/wiki/Diego_Vel%C3%A1zquez)

**Diego Rodríguez de Silva y Velázquez**<sup>[a]</sup> (Spanish: [ˈdjeɣo βeˈlaθkeθ]; baptized June 6, 1599 – August 6, 1660) was a [Spanish](#) painter, the leading artist in the [court](#) of King [Philip IV](#), and one of the most important painters of the [Spanish Golden Age](#). He was an individualistic artist of the contemporary [Baroque](#) period. He painted initially in a precise [tenebrist](#) style, but later developed a free manner characterized by bold brushwork that produced an illusion of form only when viewed at a suitable distance. In addition to numerous renditions of scenes of historical and cultural significance, he painted scores of [portraits](#) of the Spanish royal family, other notable European figures, and commoners, culminating in the production of his masterpiece [Las Meninas](#) (1656).

From the first quarter of the nineteenth century, Velázquez's artwork was a model for the [realist](#) and [impressionist](#) painters, in particular [Édouard Manet](#). Since that time, famous modern artists, including [Pablo Picasso](#), [Salvador Dalí](#) and [Francis Bacon](#), have paid tribute to Velázquez by recreating several of his most famous works.

The production of his masterpiece Las Meninas (1656).

[https://en.wikipedia.org/wiki/Diego\\_Vel%C3%A1zquez#Las\\_Meninas](https://en.wikipedia.org/wiki/Diego_Vel%C3%A1zquez#Las_Meninas)

*Las Meninas*

One of the *infantas*, [Margaret Theresa](#), the eldest daughter of the new Queen, appears to be the subject of *Las Meninas* (1656, English: The Maids of Honour), Velázquez's [magnum opus](#). However, in looking at the various viewpoints of the painting it is unclear as to who or what is the true subject.<sup>[17]</sup> Is it the royal daughter, or perhaps the painter himself? The answer may lie in the image on the back wall, depicting the King and Queen. Is this image a mirror, in which case the King and Queen are standing where the spectator stands? Are they the subject of Velázquez's work? Or is the work simply a court painting?

Created four years before his death, it serves as an outstanding example of European [baroque](#) art. An apotheosis of the work has been effected since its creation; [Luca Giordano](#), a contemporary Italian painter, referred to it as the "theology of painting",<sup>[18]</sup> and in the eighteenth century the Englishman [Thomas Lawrence](#) cited it as the "philosophy of art", so decidedly capable of producing its desired effect. That effect has been variously interpreted; [Dale Brown](#) points out an interpretation that, in inserting within the work a faded portrait of the king and queen hanging on the back wall, Velázquez has ingeniously prognosticated the fall of the [Spanish Empire](#) that was to gain momentum following his death. Another interpretation is that the portrait is in fact a mirror, and that the painting itself is in the perspective of the King and Queen, hence their reflection can be seen in the mirror on the back wall.

Las Meninas (1656). This is a true masterpiece in the whole history of art, since it shows something quite unprecedented. It shows in the background a mirror image of the king and his queen. And it shows the painter himself on the left side, and the canvas that he was just painting, of the left border... It was some kind of multiple reflexion, pretty much the same as I am doing with Reflexion Theory. So the poor author of the wikipedia article didn't quite understand it so well. There was no subject per se. It was the mirroring process itself which was the subject. All the other things in the painting are just paraphernalia. Now this was in the year 1656. To have come up with this piece of Self- and Other- (auto- and hetero- and allo-) Reflexion was something quite good for those times. I just needed about 363 years of thinking until I arrived at the same kind of Reflexion Theory. This seems like a pretty long time that one needs to re-think in Logics what Diego Velasquez had already done in his painting. There is nothing new under the sun, I would say. The phenomenology of mirroring is quite phenomenal. Because there is so much neuronal processing involved, before one is able to understand that what one has in front of himself, is a mirror image of oneself. There are so many animal experiments dealing with what animal can comprehend that it is looking at a mirror image of itself. Some fish, for example continue endlessly to battle their own mirror image, believing that it is a rival.

So those poor fish are classified as minor intelligence. I have read all the literature about this, but at the moment, I don't have the time to google it all. Actually googling it is quite easy. But it takes time. Most of the higher animals, like apes and elephants, and I believe also ravens and crows are able to recognize that they are just confronted with their own mirror image. So to be able to do this, is a sign of intelligence. And of course humans are able to do multiple mirrorings. Like when we call it Reflexion Theory, which is the Theory of Mirroring on many levels at once.

## 6.2 Mirror Cabinets

There are many works of art or not so art, where we have mirror cabinets.

One is The Man with the Golden Gun:

[https://en.wikipedia.org/wiki/The\\_Man\\_with\\_the\\_Golden\\_Gun\\_\(film\)](https://en.wikipedia.org/wiki/The_Man_with_the_Golden_Gun_(film))

Another, more art-like is Hermann Hesse: Steppenwolf

<https://www.zeit.de/1980/09/der-steppenwolf>

<https://www.inhaltsangabe.de/hesse/der-steppenwolf/>

## 6.3 Spieglein, Spieglein an der Wand

"Spieglein, Spieglein an der Wand, wer ist die Schönste im Ganzen Land?" This is the Magic Mirror from the fairy tale Snow White. Aber der Spiegel war erbarmungslos. (The mirror had no mercy on the poor queen.) He told this poor queen something like that: You are just an ugly old hag. And you should not try to be beautiful. At your age you should better try to be wise. But the Queen in her own Narcissism, she was not so satis-factioned (I can't get no sätis-fäck'schun'. If you remember that story). So the the Queen in her own Narcissism, and so on... We all know the story so I don't need to repeat it. This is what the fairy tales are for. They are there to make an excursion into your Unterbewusstsein (Sub-Unconscious, which is even deeper than the Unconscious), and so deep deep down, the not-so-conscious, rather the Verdrängungs- Conscious (The right English expression for this... maybe repression) ... it is always something that you would be very ashamed of, if anyone of your friends knew about this.

[https://en.wikipedia.org/wiki/Magic\\_Mirror\\_\(Snow\\_White\)](https://en.wikipedia.org/wiki/Magic_Mirror_(Snow_White))

The **Magic Mirror** is a mystical object that is featured in the story of *Snow White*, depicted as either a hand mirror or a wall-mounted mirror it is used by the **Evil Queen** in order to find out who is the "fairest in the land", each time the Evil Queen asks this question the mirror states "My Queen, you are the fairest in the land.", up until it states that Snow White is in fact more fair. Which results in the Evil Queen hiring a huntsman to kill Snow White in the contemporary version of the fairy tale.

## 6.4 Mirroring as a Deep Psychological and Neuronal Phenomenon

The process of mirroring is a very deep psychological phenomenon. Because in Neuro-Science, there exists a type of Neuron, which is called Mirror-Neuron or Spiegel-Neuron in German. Now since we have the mirroring on a phenomenological level, we have it also on the Neuronal level. This becomes a very deep philosophical question to ponder. What is so special about a mirror on the phenomenological level?

[https://en.wikipedia.org/wiki/Mirror\\_neuron](https://en.wikipedia.org/wiki/Mirror_neuron)

We all know the sad story of the Narcissos, who fell so much in love with his own mirror image in the pond, and he became so enchanted with the beauty of his mirror image, that he lost his balance, and plunged into the pond. Since he couldn't swim, the poor fellow he was, he just drowned. So much for suicide because of self-admiration. This is a pretty interesting kind of suicide, for all those psychiatrists to meditate upon. The other version is that he was so transfixed by his image but he could never reach it, and so he sat there in the same place, until he died of starvation. Not a much better solution to the problem of Narcissism.

<http://www.gottwein.de/Lat/ov/ovmet03339.php>

<https://gutenberg.spiegel.de/buch/metamorphosen-4723/19>

[https://www.fachdidaktik.klassphil.uni-muenchen.de/forschung/seminarertraege/ovid\\_met/metamorphosen\\_archiv/referat\\_br\\_hopp.pdf](https://www.fachdidaktik.klassphil.uni-muenchen.de/forschung/seminarertraege/ovid_met/metamorphosen_archiv/referat_br_hopp.pdf)

<https://www.greekmyths-greekmythology.com/narcissus-myth-echo/>

<https://psychcentral.com/lib/narcissus-and-echo-the-myth-and-tragedy-of-relationships-with-narcissists/>

[https://en.wikipedia.org/wiki/Echo\\_and\\_Narcissus](https://en.wikipedia.org/wiki/Echo_and_Narcissus)

Narcissus and Echo were tragic Greek characters in a story told by the Roman poet Ovid in *Metamorphoses*. This poignant myth crystallizes the tragic problem of relationships with narcissists. Sadly, both partners are locked into a painful drama, where neither feel satisfied or sufficiently loved. Although it's anguish for them both, the narcissist blames the cause on his or her partner, and sees him or herself as irreproachable, and too often his or her partner readily agrees.

## 6.5 The Myth of Narcissus and Echo

<https://psychcentral.com/lib/narcissus-and-echo-the-myth-and-tragedy-of-relationships-with-narcissists/>

Narcissus was a handsome hunter who broke the hearts of the many women. Despite their love, he remained aloof and arrogant. Pridefully, he held them in disdain.

Meanwhile, the beautiful forest nymph Echo had incurred the ire of the goddess Juno, who punished Echo for talking too much by depriving her of free expression. From then on, she could only repeat the last words of others. Echo spotted Narcissus and became infatuated. She longed for his attention, but he was fixated on himself. She tried to call out to him, yet couldn't.

One day, Narcissus became separated from his hunting companions and called out, "Is anyone there?" Echo could only repeat his words. Startled, he said, "Come here," which Echo repeated. Echo jubilantly rushed to Narcissus, but he spurned her, saying, "Hands off! May I die before you enjoy my body." Humiliated and rejected, Echo fled in shame. Nevertheless, her love for Narcissus grew.

To punish Narcissus for his arrogance, Nemesis, the goddess of revenge, put a spell on him. When Narcissus next noticed his reflection in a pool of water, love overtook him. He believed that he'd finally found someone worthy of his love and became entirely absorbed with his own beautiful image, not realizing it was actually himself.

Unable to get Narcissus' attention, Echo's obsession and depression grew. As the years passed, she lost her youth and beauty pining away for unattainable Narcissus until she wasted away, only leaving behind her echoing voice. He eventually committed suicide, consumed by his impossible love, leaving a flower in his place.

I have off-loaded more discussion of Narcissism to another section. There it is under:

"On the Invention of Narcissism. No it wasn't the Narcissos. It was someone else".

<http://www.noologie.de/noo.htm>

<http://www.noologie.de/desn.htm>

## 6.6 The Circular Structure is also an Architectonic

And the circular structure (of the Rosary) is also an Architectonic in the Kantian sense. It is not an Aggregate, and Heidegger had said the same about his S&Z. [S. 182: Die Ganzheit des Strukturganzen ist phänomenal nicht zu erreichen durch ein Zusammenbauen der Elemente.]

It is just a circular Architectonic, which means that there are no primary foundations on which we may build it up in a vertical manner to reach the highest conclusion. In a circular reflexive structure, all the elements are intermeshed and there is no hierarchy of ideas. As one goes around the rosary of the last metaphor, reflexions build up, and they become more and more intermeshed. We can apply a metaphor from Whitehead who talked about the nexus. A nexus has con-nexions, so the con-nexions build up to form a spider web like structure. And a spider web is also not built up from bottom to top, if that metaphor helps us to understand the process of building a spider web.

[As a little aside thought: I even believe that the title The Name of the Rose, has also something to do with the Rosary. But also with the Rosicrucians, and the Rosslyn Chapel. Oh dear Dan Brown please have pity on me! Remember the Lord's prayer:

and forgive us our trespasses, as we forgive those who trespass against us

and lead us not into temptation, but deliver us from evil.

That you may never read a Dan Brown novel.

Amen.]

<https://www.rosslynchapel.com/>

[https://en.wikipedia.org/wiki/Rosslyn\\_Chapel](https://en.wikipedia.org/wiki/Rosslyn_Chapel)

<https://www.rosslynchapel.com/wp-content/uploads/2017/01/explore-the-mystery2a.jpg>

## 6.7 The Structure of the "Rundgesang"

I have mentioned the "Rundgesang" of Nietzsche at the beginning of this text. Now I will do some enlarging of the concept of the "Rundgesang". As I had said, the "Rundgesang" also implies the "Rundtanz" which I have also dealt with in depth in the chapter from "Gold im Wachs". And the structure of the text of Meta-Morphology is more like a "Rundgesang" in the terminology of Nietzsche, meaning it is also similar to a "Rundtanz", but of course in a text one cannot make a "Rundtanz". In consequence, this text is NOT LINEAR AND GOAL-ORIENTED like maybe a scientific text, where you can write an abstract in front of it, then do some discussion of the subject, and then come to some conclusion, to finally make a management summary, to present it to your boss or your professor or at a conference. Unfortunately with the subject matter at hand this is impossible. As a "Rundgesang", the (morphological) structure of Meta-Morphology is similar to "Sein und Zeit" (S&Z) by Heidegger, who (in my view) also did some Existential-Philosophy.

## 6.8 About Contemplation, Reflexion, and Refraction

In my morphological method one does it like this: One contemplates the Subject Matter from as many angles as one can come up with. Since I am using metaphors a lot, we can find some metaphors here also: So we can look at the Subject matter like one may look at a diamond and turning it around at so many angles to see all the reflections or better the refractions it can produce. But since this is just a metaphor, we don't need to get into the business of reflection and refraction theory too deeply. Reflection is everything connected with physical rays of light as they are mirrored on a water or polished metal or mercury surface. Metal mirrors can have a property that is difficult with water to achieve: They can be curved. Spherically or A-Spherically, convex or concave. In Astronomy this is put to good use. When you take a round trough filled with mercury, and you turn it around on a turntable, you can have some pretty interesting phenomena of mirroring. Because of the turning and because of centrifugal force, the mercury forms a perfect parabola, but in 3-d. One could also call this the phenomenology of mirroring. This is quite an interesting philosophical subject in itself. So we can come to the Metaphysics of Mirrors. And the picture Las Meninas above is a piece of the Metaphysics of Mirrors.

Refraction is everything connected with physical rays of light as they are broken in a suitable substance like a diamond. A diamond has the highest Refraction index of all materials. I have written more about the business of refraction in a diamond in my work:

<http://www.noologie.de/diadenk.htm>

There is in the Appendix "Die Diamant-Metapher der Noologie" some more enlargement where I go further into the details.

[http://www.noologie.de/diadenk.htm#\\_Toc512641928](http://www.noologie.de/diadenk.htm#_Toc512641928)

Reflexion is something one does in the mInd. Therefore I am careful to write it like this, not to confuse it with Reflection. Meaning that the Thinking is Reflexed onto itself. And I don't under any circumstance mean the Geist. As I say it everywhere, there is noch such thing as "the" or "a" Geist. This is all Ghostly business, in which I don't want to partake at all. To do Reflexion, one needs to have memory. Because one reflects on the thing that one has in memory, and that what you are thinking right now.

## 6.9 Rosary and Reflexion

Another metaphor for Reflexion is a Rosary. A Rosary is a circular structure and while one is praying the Rosary, with each completion of one round of the chain, one begins at the start again. But this time one has in one's mind a memory of the last time around. And so the second time around, there is a reflexion. What one had done and experienced the first round, is now overlaid with the new experience of the same thing, the rosary bead. But it is now "Overloaded" or "Superpositioned" with the memory. (It is difficult to find the right term for this). So this means re-thinking what one has thought the last time, and then reflexing on it. In Philosophy this is called Reflexion Theory. And the more rounds you go, the more Reflexions build up. [Of course the Religious Rosary is not intended for such use, there one just reiterates, like when you go to confession and the priest tells you: Do the Rosary five times, and each time you have to find a new way to atone for your sins.] So what I am doing here is some kind of philosophical Rosary and I think that this is a very good method for actually doing Reflexion Theory with your hands. Because the hands are also quite useful for doing a proper Reflexion (Manipulare). I have written about this some more in the main text.

<https://www.stjohnpaul.org/rosary-meditations/>

<http://www.how-to-pray-the-rosary-everyday.com/meditations-on-the-rosary.html>

<https://udayton.edu/imri/mary/r/rosary-mystery-reflections.php>

<https://www.ecatholic2000.com/cts/untitled-284.shtml>

<https://www.loyolapress.com/our-catholic-faith/prayer/personal-prayer-life/different-ways-to-pray/the-rosary-as-a-tool-for-meditation-by-liz-kelly>

## 6.10 The Rosary and Reflexion Theory

So the method of the philosophical Rosary is my way of doing Reflexion Theory. And mInd it: I do not do the reflexion in my Rational / Language Processor, but in my Associative Processor. I have off-loaded all this work of memory and reminiscence (see the Aristoteles book by this title) into the Associative Processor. So my Rational / Language Processor is not too overloaded with handling too much memory business. The Associative Processor works simultaneously and in parallel with the Rational / Language Processor. So I don't even need to think consciously about all those many reflexions that I mentioned above, or keep them in my conscious mInd. The Associative Processor does its work, and then re-mInds me, where I have to do some more reflexion. And this works very well.

## 6.11 Zettelkasten and Memory

We find something like this in the Hegelian Reflexion Theory (as I think), but here I do it with a different metaphor and a completely different angle of approach. The philosophers of the olden times had their Zettelkasten (chit box). Hegel was a master of the Zettelkasten. Niklas Luhmann was also a master at this. Then there was Arno Schmidt who was also completely Ver-Zettelt.

<https://www.tagesspiegel.de/gesellschaft/medien/arte-doku-ueber-arno-schmidt-blick-in-den-zettelkasten/9332112.html>

<https://de.wikipedia.org/wiki/Zettelkasten>

<https://www.morgenpost.de/kultur/article205785937/Arno-Schmidt-Ordnung-bringen-in-den-Zettelkasten.html>

<https://www.zvab.com/buch-suchen/titel/arno-schmidt-zettelkasten/>

<https://www.br.de/radio/bayern2/sendungen/radiothema/zettelkasten-zu-zettels-traum-100.html>

<https://das-blaettchen.de/2007/01/gehirntier-isoliert-im-zettelkasten-14462.html>

[http://www2.gs.uni-heidelberg.de/kvv/vz\\_imperia\\_show\\_item\\_pdf.php?vid=958](http://www2.gs.uni-heidelberg.de/kvv/vz_imperia_show_item_pdf.php?vid=958)

<http://ds.ub.uni-bielefeld.de/viewer/ppnresolver?id=ZKLuhm>

[https://www.deutschlandfunkkultur.de/niklas-luhmann-archiv-der-blick-in-den-zettelkasten-ist.2156.de.html?dram:article\\_id=445878](https://www.deutschlandfunkkultur.de/niklas-luhmann-archiv-der-blick-in-den-zettelkasten-ist.2156.de.html?dram:article_id=445878)

<http://ds.ub.uni-bielefeld.de/viewer/ppnresolver?id=ZKLuhm>

<https://www.youtube.com/watch?v=4veq2i3teVk>

<https://www.youtube.com/watch?v=MMo0cU2HUvg>

<https://www.youtube.com/watch?v=XIztPpFqCBw>

<http://zettelkasten.danielluedecke.de/about.php?abs=1>

<https://zettelkasten.de/book/de/>

<https://auratikum.de/blog/von-der-zettelwirtschaft-zum-zettelkasten/>

## 7 Words and Morphological Meaning

Here I give some Definitions of words in the Morphological and the Meta-Morphological Meaning which are at some times or more often, most of the times... Quite different from the common usage in the High-Quality Mainstream Media, like in the US: The New York Times, the Washington Post, the Atlantic, just to mention some of the best-known of them. And in Germany, the "spiegel.de", the "welt.de", the "zeit.de" and the "sueddeutsche.de". As I said it with a touch of Ambrose Bierce: The "spiegel.de" is like a Spiegel-Ei, but without the Ei. This is unfortunately not translatable into English. The google translator translates this faithfully as: fried egg, sunnyside up (Amer.) [COOK.] das Spiegelei pl.: die Spiegeleier. But the double-think meaning of Spiegel in German meaning a Mirror, cannot be translated into English so it is difficult to translate. One could say the German word "Spiegel-Ei" also means "A Mirror-Egg". So some of the word-plays of the German language are not accessible to all the other more Latinized languages of Europe. This is one reason why Heidegger came up with his quip (witzeln) that there are only two languages suitable for proper Philosoph'izing: German and Classical Greek. Latin was not so usable at all. And since all the other languages of Europe were more or less Latinized, this is not possible in those languages. This was because the ancient Romans who didn't know Greek in and out, couldn't properly translate the original *Semantic Fields of Classical Greek*. There very few Romans who knew Greek to such a level of *Depth Semantic Fields*, since they had their Greek Slaves as tutors for their children, and as Librarians, who did all that work for them.

### 7.1 The Morphology of Bildung

I will now cover a subject that goes into the depths of the Morphological Meanings and Spritual Character of the Morphology of Semantics, and the Psychology, which I also call Meta-Noia in a different context. The Meta-Noia is usually a quite sudden experience, and this is quite related to the Kata-Strophae in the postive sense of the word, meaning the sudden about-turning of one's World View and especially of one's Spritual View. Here we get to the deep structures of the Tropia or Tropos, meaning the Turinging in Itself, like one turns a glove in-itself. It is not the literal turning around when a car turns around a corner. And this can only be described in the Terminology of Meta-Morphology. There is a Mathematical Discipline of Topology, which is quite related to that. But there is as yet no Mathematical Science of Transformation of Psychical Topology. If it would exist, this would be synonymous to Meta-Morphology and Meta-Noia.

Bildung is a typical German word that is hard to translate into other latinized languages, with its full Semantic Network. It derives from some very old images (imago, imagination) of Bild, Bildung, Ein-Bildung, Aus-Bildung, Ab-Bildung, and das Ur-Bild. These are all related to originally Greek philosophical

and mythological concepts of the Bild [Ikonos]. Somehow, the Ancient Greek mental imageries of Ikonos existed in the Old Nordic languages also. But there is very little documentation left of the old Nordic Mythological Imagery, except what was preserved mostly in Iceland, in the Eddas.

<https://en.wikipedia.org/wiki/Edda>

[https://en.wikipedia.org/wiki/Poetic\\_Edda](https://en.wikipedia.org/wiki/Poetic_Edda)

<https://www.islit.is/en/promotion-and-translations/icelandic-literature/the-edda-and-the-sagas-of-the-icelanders/>

<https://www.britannica.com/topic/Edda>

<http://www.noologie.de/wagner1.htm>

<http://www.noologie.de/wagner1.pdf>

### 7.1.1 The Meaning of Ikonos and the Meta-Morphology

The Meaning of Ikon(os) [like Ikone in the Orthodox Greek Spiritual Art] Ikonos, Eikonos, Ikonik, Idea, Eidotos, and then some more terms which we find in the philosophy of Platon. In Latin we have the imago and the imagination, so we can draw some parallel philosophical tracks between Latin and Greek. And this all refers to Dream Images, on which I do a lengthy discussion in the present text. As I have stated it somewhere, the Dreams are the forgotten Language of God. See especially my interpretation of the Dream interpretaion of Daniel, when he decrypted the Dream of Nabochondosor. And I did some more Meta-Morphology with this Dream. And I had stated it also in some passage: The Meta-Morphology of Dreams is quite the same as the Meta-Morphology of Foam. Because in the German Language one says: Träume sind Schäume. Dreams are like Foam. They are infinitely Morphable. So this kind of Meta-Morphology leans heavily on the Morphology of our Dreams. I have done some in-depth discussion on the powers and applications of the Dream-Time Processor in the present work.

### 7.1.2 The Bildungsreise

The complemetarity of Meta-Noia is this: Die *Bildungsreise* is more something of a more leisurely manner to make slow process what one could call the *Aus-Bildung* of the Character, meaning the Formation of a *Mature Character*. As one travels around, either in some parts of the Geography and the *Cultural Landscape* of the Planet Earth, one gains Bildung. Because one gets a lot of impressions of some very different cultures and climates on the way. So when one is able to do this with a Multi-Stage Reflexion process, one gains Bildung. The Bildungsreise is an Age-Old process which was ever present in all the *Spiritual Journeys* of humanity. It was also called the Pilgrimage, or *Pilgrim's Process*, and the *Grand Tour* of the Sons of the British'ers Elites. After completing their reading of the Classics at Oxford or Cambridge, like reading *Homer*, *Odysee* and *Illias*, and doing some memorizing a few Greek words from those Classics, and then reading some works of *Shakespeare*, and of *Bunyan* and of *Tennyson*, and some more of the famous British'er Literature. When they had finished their studies, the wealthy families of these students sent them on the *Grand Tour* as it was called. See also: Pilgrim's Progress.

[https://en.wikipedia.org/wiki/Alfred,\\_Lord\\_Tennyson](https://en.wikipedia.org/wiki/Alfred,_Lord_Tennyson)

<https://www.poetryfoundation.org/poems/45392/ulysses>

So they went to the places of the Classics that they had read all about in their Seminars at the University, but now they got the images, the smells, the sounds, and the tastes of these fabulous lands where the Ancients had concocted their Poetry and their Mythologies: Italy, Greece, and Egypt. Some even went to India which was very easy at those times since India was a colony of the Mighty British'er Empire of the Queen Victoria. And everything there was exotic, but with a veneer of British'ness so there was really no Culture Shock.

### 7.1.3 The Bildungsreise of the Germans

An Excerpt from the Handbook for the *Native Tourist Guides* who catered to German Tourists:  
Mein Herr, hat das Essen Ihnen gut geschmocken?

The Bildungsreise also existed for the Germans, like the travels of Goethe to Italy, or the travels of *Schopenhauer* in Europe. Or the travels of *Alexander v. Humboldt* to South America. The only small problem was that Germany was quite poor in the 1700's up to 1870, and so the Germans couldn't travel so far and long with the limited money they had. The best tales about German Tourism at these times were those of the "*Fromme Helene*" by *Wilhelm Busch*, who went to Heidelberg on honey moon with her newly wed husband, and the story goes like this.

<http://www.wilhelm-busch-seiten.de/werke/helene/>

In der frommen Helene beleuchtet Wilhelm Busch satirisch religiöse Heuchelei und zwielichtige Bürgermoral:  
„Ein guter Mensch gibt gerne acht,

Ob auch der andre was Böses macht;  
Und strebt durch häufige Belehrung  
Nach seiner Beß'ung und Bekehrung“

<http://www.wilhelm-busch-seiten.de/werke/helene/kapitel09.html>

Ruinen machen vielen Spaß. -  
Auch sieht man gern das große Faß.  
Und - alle Ehrfurcht! - muß ich sagen.  
Alsbald, so sitzt man froh im Wagen  
Und sieht das Panorama schnelle  
Vorüberziehn bis zum Hotelle;  
Denn Spargel, Schinken, Koteletts  
Sind doch mitunter auch was Nett's.  
»Pist! Kellner! Stell'n Sie eine kalt!  
Und, Kellner! Aber möglichst bald!«  
Der Kellner hört des Fremden Wort.  
Es saust der Frack. Schon eilt er fort.  
Wie lieb und luftig perlt die Blase  
Der Witwe Klicko in dem Glase. -  
Gelobt seist du viel tausendmal!  
Helene blättert im Journal.  
»Pist! Kellner! Noch einmal so eine!« -  
Helenen ihre Uhr ist neune.  
Der Kellner hört des Fremden Wort.  
Es saust der Frack. Schon eilt er fort.  
Wie lieb und luftig perlt die Blase  
Der Witwe Klicko in dem Glase.  
»Pist! Kellner! Noch so was von den!« -  
Helenen ihre Uhr ist zehn. -  
Schon eilt der Kellner emsig fort. -  
Helene spricht ein ernstes Wort. -  
Der Kellner leuchtet auf der Stiegen.  
Der fremde Herr ist voll Vergnügen.  
Pitsch! - Siehe da! Er löscht das Licht.  
Plums! Liegt er da und rührt sich nicht.

<http://www.wilhelm-busch-seiten.de/werke/helene/kapitel12.html>

The pilgrimage of the fromme Helene is equally hilarious.

Some other works by Busch on pilgrimages are also very instructive:

[https://de.wikipedia.org/wiki/Wilhelm\\_Busch#Werke](https://de.wikipedia.org/wiki/Wilhelm_Busch#Werke)

<http://www.noologie.de/Wallfahrt.htm>

I have added some humoristic comments to the work, since it would be senseless if I had just copied it.

[https://de.wikipedia.org/wiki/Der\\_heilige\\_Antonius\\_von\\_Padua](https://de.wikipedia.org/wiki/Der_heilige_Antonius_von_Padua)

Der heilige Antonius von Padua[1] ist eine der frühen geschlossenen Bildergeschichten des humoristischen Zeichners und Dichters Wilhelm Busch aus dem Jahr 1864, veröffentlicht 1870. Ähnlich wie Die fromme Helene (1872) und Pater Filucius (1872) ist die Bildergeschichte von der antiklerikalen Haltung Wilhelm Buschs geprägt.

<https://de.wikipedia.org/wiki/Knopp-Trilogie>

Die **Knopp-Trilogie** ist nach **Max und Moritz** eines der bekanntesten Werke von **Wilhelm Busch**. Der Zweizeiler Vater werden ist nicht schwer / Vater sein dagegen sehr stammt aus dieser Trilogie.

Die Trilogie besteht aus drei Teilen: **Abenteuer eines Junggesellen** war der erste Teil, deren Fortsetzungen als **Herr und Frau Knopp** 1876 und **Julchen** 1877 erschien. Erstmals ist hier der Bürger nicht Opfer handlungsstarker Plagegeister, wie es in Max und Moritz oder *Hans Huckebein, der Unglücksrabe* der Fall war, sondern durchgängig die handelnde Hauptperson.<sup>[1]</sup>

#### 7.1.4 The Bildungsreise of Immanuel Kant

The most egregious example of the Bildungsreise in the mInd was Kant, who had never left Königsberg at all. But he astounded his erudite visitors who had themselves travelled to all those exotic places. Kant had read all the travel books that he could get, and he had memorized them all down to the details. And Kant was able to tell them every detail of every Monument, every Temple, and then some Public Buildings. He had such an excellent *eidetic mInd* that he could visualize all those places. The only thing that he could not visualize was what the Prostitutes did in those places, and especially their prices. Or what it was to be ripped off by some natives when they wanted to show the German tourist the best Restaurants and the best Hotels, and the best Public Spectacles. Because this was just the business of the Tourism Industry of all Places and of all Times. Those friendly *Tourist Guides* always got some good Kickbacks from those Restaurants and Hotels, on top of the meagre *Bakshish* that they got from the Tourists. And since the good *German Tourists* knew nothing at all about the local customs they always got ripped off very expertly. The natives knew full well that the Germans were the most gullible and naive Tourists of them all. And somehow I have the impression that when you see some present-day German tourists in all the Antiquities Markets between Tangiers and Abu Simbel, that the conditions had not changed at all in those 200 years or so. So there was a wholesale market in Egypt of this time when the *Egyptian Antiquities* Forgers came up with so many *historical relics of Ancient Egypt* that they had out-produced the Ancient Egyptians by about an order of magnitude. We will never know how many of those "really original" antique pieces of Egypt in the German Museums are fakes. My informed guess that it is about half of them. But when one doesn't want to know, one doesn't ask. And it would be quite a shame for the good German Museum directors if one would have found out about all this fakery. So they also never allowed any physicists to make any age tests with their precious exhibits.

Beware! fake Egyptian antiques

<https://www.youtube.com/watch?v=mvUm5MeNBtk>

Fakes in the art world - The mystery conman | DW Documentary

<https://www.youtube.com/watch?v=IINSXB4i4fE>

Forged Egyptian Antiquities

<https://www.youtube.com/watch?v=yRs3cfBoHGM>

Sadigh Gallery - Seller in fake antiquities!

<https://www.youtube.com/watch?v=DVqzyAf8pIc>

Then there was the good Hegel, who also never got to go anywhere except Stuttgart and then some environs... and then straight to Berlin where he became Professor of Philosophy.

<https://en.wiktionary.org/wiki/environ>

As a little side note we may mention *Karl May*, who also did a *Bildungsreise*, in the friendly *Library of the Prison* where he was just serving time in. Fortunately this Prison had a very good library of books about Travels into Far-Far-Away contries, so the good Karl May could do his Bildungsreise entirely while sitting in his cell in this Prison, and since he had such a good phantasy, he was able to do the whole Bildungsreise in his mInd. So this proves that one can do a Bildungsreise and not leave your little nice cosy Prison Cell at all.

<https://www.tlz.de/kinder/detail/-/specific/Winnetou-Erfinder-Karl-May-musste-mehrmals-ins-Gefaengnis-290979179>

[https://de.wikipedia.org/wiki/Karl\\_May](https://de.wikipedia.org/wiki/Karl_May)

<https://www.bild.de/lifestyle/kultur/kultur/winnetou-scurrile-fakten-ueber-karl-may-57754312.bild.html>

[http://karl-may-wiki.de/index.php/Bibliothek\\_der\\_Strafanstalt\\_Schloss\\_Osterstein](http://karl-may-wiki.de/index.php/Bibliothek_der_Strafanstalt_Schloss_Osterstein)

Die Gefangenenbibliothek

Verwaltet wurde die Bibliothek 1867 von Katechet **Carl Leberecht Reinhold Hohlfeld**. Zu diesem Zeitpunkt bestand die Bibliothek aus 4.289 Bänden. Diese unterteilten sich in 250 Exemplare Neues Testament/Heilige Schrift, 1.041 Gesangbücher, 222 Bände Lutherische Katechismen und Spruchbücher sowie 2.776 anderweitige Bücher belehrenden Inhalts. Für die Zellengefangenen war eine besondere Bibliothek abgezweigt, die exklusive der Neuen Testamente, Gesangbücher und Katechismen 699 Bände der als anderweitige Bücher ausgewiesenen Werke enthielt.

Die 2.077 "anderweitigen" Bände der Kollektivhaft wurden 1867 26.086 mal ausgeliehen, die 699 Bände der Isolierhaft 3.831 mal.

Für die katholischen Detinierten gab es eine eigene "ziemlich reichhaltige" Bibliothek, die unter der Verwaltung des katholischen Geistlichen stand.<sup>[2]</sup>

And the Germans had another difficulty. Since in the whole of the British'er Empire, which comprised the better part of the Planet, the Lingua Franca was English, so every *Beduin in Egypt* knew some English,

equally every *Ricksha driver* in India and China. [I just liked this Indiana Jones movie temple of Doom. There the Ricksha driver has a prominent role.] So the good Englishman could be sure to get some friendly help from "the natives" who were of course eager to get some "Bakshish" from the always quite wealthy English'er Traveller, who was surely rich when compared to the income of "the natives". We may also note a quote by Wilhelm Busch:

<https://gutenberg.spiegel.de/buch/plisch-und-plum-4189/27>

< Kapitel 27 >

Zugereist in diese Gegend, Noch viel mehr als sehr vermögend, In der Hand das Perspektiv, Kam ein Mister namens Pief. "Warum soll ich nicht beim Gehen" -Sprach er - "in die Ferne sehen? Schön ist es auch anderswo, Und hier bin ich sowieso." Hierbei aber stolpert er In den Teich und sieht nichts mehr. "Paul und Peter, meine Lieben, Wo ist denn der Herr geblieben?" Fragte Fittig, der mit ihnen Hier spazieren geht im Grünen. Doch wo der geblieben war, Wird ihm ohne dieses klar. Ohne Perspektiv und Hut Steigt er ruhig aus der Flut. "Alleh, Plisch und Plum, apport!" Tönte das Kommandowort.

[Alleh -> Allez vous, Enfants de la Patrie. Wilhelm Busch surely didn't like Napolium.]

[https://en.wikipedia.org/wiki/Indiana\\_Jones\\_and\\_the\\_Temple\\_of\\_Doom](https://en.wikipedia.org/wiki/Indiana_Jones_and_the_Temple_of_Doom)

In 1935, Indiana Jones narrowly escapes the clutches of Lao Che, a crime boss in [Shanghai, China](#). With his 11-year-old Chinese sidekick Short Round and the nightclub singer Willie Scott in tow, Indy flees Shanghai on an airplane that, unbeknownst to them, is owned by Lao Che. While the three of them are asleep on the plane, the pilots dump the fuel and parachute out, leaving the plane to crash over the Himalayas. Indy, Shorty, and Willie discover the sabotage and narrowly manage to escape by jumping out of the plane on an inflatable raft. They ride down the mountain slopes and fall into a raging river, eventually arriving at the village of Mayapore in northern India. The impoverished villagers believe the three to have been sent by [Shiva](#) to retrieve the sacred [lingam](#) stone stolen from their shrine, as well as the community's missing children, from evil forces in the nearby Pankot Palace. During the journey to Pankot, Indy hypothesizes that the stone may be one of the five fabled Sankara stones that promise fortune and glory.

The trio receive a warm welcome from the Prime Minister of Pankot Palace, Chattar Lal. The visitors are allowed to stay the night as guests, during which they attend a lavish but grotesque banquet given by the young [Maharaja](#), Zalim Singh. Lal rebuffs Indy's questions about the villagers' claims and his theory that the ancient [Thuggee](#) cult is responsible for their troubles. Later that night, Indy is attacked by an assassin, leading Indy, Willie, and Shorty to believe that something is amiss. After Indy kills the assassin, they discover a series of tunnels hidden behind a statue in Willie's room and set out to explore them, overcoming a number of booby-traps along the way.

The trio eventually reach an underground temple where the Thugs worship [Kali](#) with human sacrifice. They watch as the Thugs chain one of their victims in a cage and slowly lower him into a ceremonial lava pit, burning him alive. They discover that the Thugs, led by their high priest Mola Ram, are in possession of three of the five Sankara stones, and have enslaved the children to mine for the last two. As Indy tries to retrieve the stones, he, Willie, and Shorty are captured and separated. Indy is [whipped](#) and forced to drink a potion called the Blood of Kali, causing him to enter a trance-like state and mindlessly serve the Thugs. Willie is prepared for sacrifice, while Shorty is whipped and put to work in the mines alongside the children. Shorty breaks free and escapes back into the temple, where he burns Indy with a torch to bring him back to his senses. After fighting off the guards and defeating Lal, Indy stops Willie's cage and cranks it out of the pit just in time to save her from the fire, while Mola Ram escapes. Indy retrieves the Sankara stones, and the three return to the mines to free the children. As Indy fights a hulking overseer, Singh—also under Mola Ram's control—tries to cripple him with a voodoo doll. Shorty knocks the doll away and burns him to break the trance, and a restored Indy escapes and leaves the overseer to die in a rock crusher.

The trio escape from the temple in a mine cart, pursued by Thugs, while Mola Ram orders a water cistern dumped in an attempt to flood them out. After barely escaping the deluge, they are again cornered by Mola Ram and his henchmen on a rope bridge high above a crocodile-infested river. Indy cuts the bridge in half with one man's sword, leaving everyone to hang on for their lives. As he and Mola Ram struggle over the stones, he invokes the name of [Shiva](#), causing them to glow white-hot. Mola Ram burns his hand on the stones, causing him to lose his grip and fall to his death; Indy catches the last one safely and climbs up as a company of [British Indian Army](#) riflemen, summoned by Singh, arrive and open fire on the Thuggee archers trying to shoot him. Indy, Willie, and Shorty return to Mayapore with the children and give the missing stone back to the villagers.

### 7.1.5 Bildung is a typical German Word

Bildung is a typical German word that is hard to translate into other latinized languages, since it derives from some very old images (imago) of Bild, Bildung, Abbild, and Urbild, which are derived from originally Greek philosophical concepts of the Bild. Meaning Ikon [like Ikone in the Orthodox Greek Spiritual Art] Ikonos, Eikonos, Ikonik, Idea, Eidotos, and then some more terms which we find in the philosophy of Platon. In

Latin we have the imago and the imagination, so we can draw some parallel philosophical tracks between Latin and Greek. And this all refers to Dream Images, on which I do a lengthy discussion in the present text. As I have stated it somewhere, the Dreams are the forgotten Language of God. See especially my interpretation of the Dream interpretation of Daniel, when he decrypted the *Dream of Nabochondosor*. And I did some more Meta-Morphology with this Dream. And I had stated it also in some passage: The Meta-Morphology of Dreams is quite the same as The Meta-Morphology of Foam. Because in the German Language one says: *Träume sind Schäume*. Dreams are like Foam. They are infinitely Morphable. So this kind of Meta-Morphology leans heavily on the Morphology of our Dreams. I have done some in-depth discussion on the powers and applications of the Dream-Time Processor in the present work.

## 7.2 Samuel Johnson

I will also refer to the dictionary of Samuel Johnson, who came up with his famous work on 15 April 1755. I would call his dictionary a precursor of my own Meta-Morphological work on Language, Linguistics, *Neurolinguistic Reframing* of words and concepts, and also the deep structures of Semantics and Semiotics. See also the work of Umberto Eco who was one of the *Grand Masters of Semiotics*, next to Peirce, Lotman... I have done extensive stories on Semiotics, and I will include some of that work later on. I have also made some studies on the business of Dis-Information using the techniques of Bowdler'izing and Euphemism. One can subsume the latter Dis-Information techniques under the general heading of Neurolinguistic Reframing, as was so well documented in a recent project of the ARD (Deutsches Nationales Qualitäts-Fernsehen).  
<https://www.spiegel.de/spiegel/print/d-13692982.html>

[https://en.wikipedia.org/wiki/A\\_Dictionary\\_of\\_the\\_English\\_Language](https://en.wikipedia.org/wiki/A_Dictionary_of_the_English_Language)

Published on 15 April 1755<sup>[1]</sup> and written by **Samuel Johnson**, *A Dictionary of the English Language*, sometimes published as **Johnson's Dictionary**, is among the most influential **dictionaries** in the history of the **English language**.

OPULENCE

Wealth; riches; affluence

"There in full *opulence* a banker dwelt,  
Who all the joys and pangs of riches felt;  
His sideboard glitter'd with imagin'd plate,  
And his proud fancy held a vast estate."

-- **Jonathan Swift**

There was dissatisfaction with the dictionaries of the period, so in June 1746 a group of London booksellers contracted Johnson to write a dictionary for the sum of 1,500 **guineas** (£1,575), equivalent to about £240,000 in 2019.<sup>[2]</sup> Johnson took seven years to complete the work, although he had claimed he could finish it in three. He did so single-handedly, with only clerical assistance to copy the illustrative quotations that he had marked in books. Johnson produced several revised editions during his life.

Until the completion of the *Oxford English Dictionary* 173 years later, Johnson's was viewed as the pre-eminent English dictionary. According to **Walter Jackson Bate**, the Dictionary "easily ranks as one of the greatest single achievements of scholarship, and probably the greatest ever performed by one individual who laboured under anything like the disadvantages in a comparable length of time".<sup>[3]</sup>

...

Unlike most modern **lexicographers**, Johnson introduced humour or prejudice into quite a number of his definitions. Among the best-known are:

"**Excise**: a hateful tax levied upon commodities and adjudged not by the common judges of property but wretches hired by those to whom excise is paid"<sup>[11]</sup>

"**Lexicographer**: a writer of dictionaries; a harmless drudge that busies himself in tracing the original and detailing the signification of words"<sup>[12]</sup>

"**Oats**: a grain which in England is generally given to horses, but in Scotland [it] supports the people"<sup>[13]</sup>  
A much less well-known example is:

"**Monsieur**: a term of reproach for a Frenchman"<sup>[14]</sup>

He included whimsical little-known words, such as:

"**Writative** – A word of **Pope's**, not to be imitated: "Increase of years makes men more talkative but less *writative*; to that degree I now write letters but of plain how d'ey's."<sup>[15]</sup>

### 7.3 Ambrose Bierce: The Devil's Dictionary

I also make good use of *The Devil's Dictionary* by *Ambrose Bierce*. My favorite philosophical definition is the one on Descartes. Ambrose Bierce had a very keen understanding of all the nonsense that the good Descartes had concocted in his... Well er, I wouldn't call this philosophy at all, because this is exactly a case of very sophisticated *Philosophical Schizophrenia*. It may be very sophisticated, but it still is Schizophrenia. Meaning a split, this time of mInd and the Body, or the Soma and the Spirit. This insanity was consequently enlarged upon and driven into the ultimate logical *Suprematization of Insanity* [See: Sloterdijk: Gottes Eifer] by the good Hegel and his *School of Insanity*, er I mean *The School of German Idealism*. The good Hegel and his school carried the split just a little further into the lofty heights of the Logics of Impossibility and of Vacuity, meaning the Vacuum that forms in the mInd of a *German Idealist Philosopher*, instead of any usable idea: The Split of Leib und Geist, or Körper und Geist, or Materie und Geist. By the same token, one can also call it *The School of German Schizophrenia*. But it all came about by the initial [or original sin] of the system of Descartes. But we can trace that bad idea back throughout all the ages to the good Platon, who came up with the bad idea of the idea, and this was the beginning of all the pitfalls of human thinking. As Whitehead had stated it quite succinctly: Most of the history of Western Philosophy consists of a series of footnotes to Platon.

CARTESIAN, adj.

Relating to Descartes, a famous philosopher, author of the celebrated dictum, Cogito ergo sum -- whereby he was pleased to suppose he demonstrated the reality of human existence. The dictum might be improved, however, thus: Cogito cogito ergo cogito sum -- "I think that I think, therefore I think that I am;" as close an approach to certainty as any philosopher has yet made.

BRAHMA, n.

He who created the Hindoos, who are preserved by Vishnu and destroyed by Siva -- a rather neater division of labor than is found among the deities of some other nations. The Abracadabranese, for example, are created by Sin, maintained by Theft and destroyed by Folly. The priests of Brahma, like those of the Abracadabranese, are holy and learned men who are never naughty.

[https://en.wikipedia.org/wiki/The\\_Devil%27s\\_Dictionary](https://en.wikipedia.org/wiki/The_Devil%27s_Dictionary)

**The Devil's Dictionary** is a [satirical](#) dictionary written by [American Civil War](#) soldier, journalist, and writer [Ambrose Bierce](#) consisting of common words followed by humorous and satirical definitions. The lexicon was written over three decades as a series of installments for magazines and newspapers. Bierce's witty definitions were imitated and plagiarized for years before he gathered them into books, first as **The Cynic's Word Book** in 1906 and then in a more complete version as *The Devil's Dictionary* in 1911.

Initial reception of the book versions was mixed. In the decades following, however, the stature of *The Devil's Dictionary* grew. It has been widely quoted, frequently translated, and often imitated, earning a global reputation. In the 1970s, *The Devil's Dictionary* was named as one of "The 100 Greatest Masterpieces of American Literature" by the American Revolution Bicentennial Administration.<sup>[1]</sup> It has been called "howlingly funny"<sup>[2]</sup>, and *Wall Street Journal* columnist [Jason Zweig](#) wrote that *The Devil's Dictionary* is "probably the most brilliant work of [satire](#) written in America. And maybe one of the greatest in all of world literature."<sup>[3]</sup>

### 7.4 Sample definitions

[Cannon](#)

(n.) An instrument employed in the rectification of national boundaries.

[Conservative](#)

(n.) A [statesman](#) who is enamoured of existing evils, as distinguished from the [Liberal](#), who wishes to replace them with others.<sup>[33]</sup>

[Cynic](#)

(n.) A [blackguard](#) whose faulty vision sees things as they are, not as they ought to be. Hence the custom among the [Scythians](#) of plucking out a cynic's eyes to improve his vision.<sup>[34]</sup>

[Egotist](#)

(n.) A person of low taste, more interested in himself than in me.

[Faith](#)

(n.) Belief without evidence in what is told by one who speaks without knowledge, of things without parallel.

[Lawyer](#)

(n.) One skilled in circumvention of the law.<sup>[35]</sup>

[Love](#)

(n.) A temporary insanity curable by marriage...

### *Marriage*

(n.) A household consisting of a master, a mistress, and two slaves, making in all, two.

### *Positive*

(a.) Mistaken at the top of one's voice.

### *Religion*

(n.) A daughter of Hope and Fear, explaining to Ignorance the nature of the Unknowable.

### *Youth*

(n.) The Period of Possibility, when [Archimedes](#) finds a fulcrum, [Cassandra](#) has a following and seven cities compete for the honor of endowing a living [Homer](#).

Youth is the true [Saturnian](#) Reign, the [Golden Age](#) on earth again, when figs are grown on thistles, and pigs bailed with whistles and, wearing silken bristles, live ever in clover, and cows fly over, delivering milk at every door, and Justice is never heard to snore, and every assassin is made a ghost and, howling, is cast into [Baltimost!](#) —[Polydore Smith](#)<sup>[36]</sup>

Under the entry "[leonine](#)", meaning a single line of [poetry](#) with an internal rhyming scheme, Bierce included an apocryphal couplet written by the fictitious "Bella Peeler Silcox" (i.e. [Ella Wheeler Wilcox](#)) in which an internal rhyme is achieved in both lines only by mispronouncing the rhyming words:

The [electric light](#) invades the dunnest deep of [Hades](#).

Cries [Pluto](#), 'twixt his snores: "[O tempora! O mores!](#)"

## 7.5 Mark Twain

Even though Mark Twain didn't provide a dictionary, one can extract from his works many interesting entries of the Meta-Morphing of words and concepts.

## 7.6 Jonathan Swift: *Gulliver's Travels*

Even though Jonathan Swift didn't provide a dictionary, one can extract from his works many interesting entries of the Meta-Morphing of words and concepts.

[https://en.wikipedia.org/wiki/Gulliver%27s\\_Travels](https://en.wikipedia.org/wiki/Gulliver%27s_Travels)

*Gulliver's Travels*, or *Travels into Several Remote Nations of the World. In Four Parts. By Lemuel Gulliver, First a Surgeon, and then a Captain of Several Ships* is a prose [satire](#)<sup>[1][2]</sup> of 1726 by the [Irish](#) writer and clergyman [Jonathan Swift](#), satirising both [human nature](#) and the "[travellers' tales](#)" literary subgenre. It is Swift's best known full-length work, and a classic of [English literature](#). Swift claimed that he wrote *Gulliver's Travels* "to vex the world rather than divert it".

The book was an immediate success. [John Gay](#) remarked "It is universally read, from the [cabinet council](#) to the nursery."<sup>[3]</sup>

Part I: A Voyage to Lilliput

Part II: A Voyage to Brobdingnag

Part III: A Voyage to Laputa, Balnibarbi, Luggnagg, Glubbudrib and Japan

Part IV: A Voyage to the Land of the Houyhnhnms

*Gulliver's Travels* has been the recipient of several designations: from [Menippean satire](#) to a children's story, from proto-science fiction to a forerunner of the modern novel.

[It] has three themes:

A satirical view of the state of European government, and of petty differences between religions

An inquiry into whether men are inherently corrupt or whether they become corrupted

A restatement of the older "ancients versus moderns" controversy previously addressed by Swift in [The Battle of the Books](#)

A possible reason for the book's classic status is that it can be seen as many things to many different people. Broadly, the book has three themes:

A satirical view of the state of European government, and of petty differences between religions

An inquiry into whether men are inherently corrupt or whether they become corrupted

A restatement of the older "ancients versus moderns" controversy previously addressed by Swift in [The Battle of the Books](#)

In storytelling and construction the parts follow a pattern:

The causes of Gulliver's misadventures become more malignant as time goes on—he is first shipwrecked, then abandoned, then attacked by strangers, then attacked by his own crew.

Gulliver's attitude hardens as the book progresses—he is genuinely surprised by the viciousness and politicking of the Lilliputians but finds the behaviour of the Yahoos in the fourth part reflective of the behaviour of people.

Each part is the reverse of the preceding part—Gulliver is big/small/wise/ignorant, the countries are complex/simple/scientific/natural, and the forms of government are worse/better/worse/better than Britain's.

Gulliver's viewpoint between parts is mirrored by that of his **antagonists** in the contrasting part—Gulliver sees the tiny Lilliputians as being vicious and unscrupulous, and then the king of Brobdingnag sees Europe in exactly the same light; Gulliver sees the Laputians as unreasonable, and his Houyhnhnm master sees humanity as equally so.

No form of government is ideal — the simplistic Brobdingnagians enjoy public executions and have streets infested with beggars, the honest and upright Houyhnhnms who have no word for lying are happy to suppress the true nature of Gulliver as a Yahoo and are equally unconcerned about his reaction to being expelled.

Specific individuals may be good even where the race is bad—Gulliver finds a friend in each of his travels and, despite Gulliver's rejection and horror toward all Yahoos, is treated very well by the Portuguese captain, Don Pedro, who returns him to England at the novel's end.

## 7.7 Voltaire Candide: Also a Bildungsreise

This is also a masterpiece of *Voltaire's satirical thinking* where he rips apart the *Theodicee of Leibniz*. The Morphological similarity with Gulliver's travels is quite apparent, since this is also a Bildungsroman in the Goethe'an sense.

It means that the character of Candide in his travels together with *Professor Pangloss* [This is Leibniz] undergoes some transformation of character leading to some sort of Purification or Des-Illusionment. This is again an Age-Old Theme, because it starts out with the Odyssee.

[I always do the spelling in the original word of Ancient Greek, and not in the corrupted latinized Version of Corrupt English which tends to distort the Semantic Network.]

The Bildungsroman is mostly the Bildungsreise meaning the Spritual Travel or Pilgrimage by which one reaches Spiritual Maturity. So we can extend this genre to the Don Quixote by Cervantes, the Travels of Dante into the many tiers of Hell, and Bunyan's Pilgrim's Progress and then many many more. The Pilgrimage to Compostela is one of the better known Spritual Travels and there is quite a good book by Hape Kerkeling where he describes his inner spiritual experience but with a lot of humor, as we are accustomed from the humoristic masterpieces of Hape Kerkeling.

## 7.8 Hape Kerkeling: Ich bin dann mal weg

Of course the good Hape Kerkeling did a little word-play here. I am quite absolutely sure, that no-one in Germany noticed the word-play: It means "Ich bin gerade mal auf dem Pilger-Weg".

[https://de.wikipedia.org/wiki/Ich\\_bin\\_dann\\_mal\\_weg](https://de.wikipedia.org/wiki/Ich_bin_dann_mal_weg)

**Ich bin dann mal weg** – *Meine Reise auf dem Jakobsweg* ist ein am 22. Mai 2006 als Buch erschienener **Reisebericht** des deutschen Entertainers **Hape Kerkeling**. Er war 103 Wochen lang in den Jahren 2006 bis 2008 auf dem **Platz 1 der Spiegel-Bestsellerliste**.

### 7.8.1 Inhalt

Kerkeling beschreibt die Erlebnisse seiner **Pilgerreise** nach **Santiago de Compostela** im Jahr 2001. Auslöser für die Entscheidung, den **Jakobsweg** zu gehen, war ein **Hörsturz** sowie die Entfernung seiner **Gallenblase**. Er beschäftigte sich zudem mit **Shirley MacLaines** Buch *Der Jakobsweg: eine spirituelle Reise*, in dem die Schauspielerin von ihren bisherigen „**Reinkarnationen**“ berichtet und ihre Reise mit zahlreichen Erlebnissen ausschmückt. Das Buch sowie ein Wanderführer waren auf der Wallfahrt seine einzige Lektüre.

Kerkeling wählte für seine Wanderung den **Camino Francés** und musste sich wie alle **Pilger** mit den physischen und psychischen Anforderungen einer solchen Reise auseinandersetzen. Er lernte dabei nicht nur sich selbst und seinen **Glauben**, – Zitat – „Buddhist mit christlichem Überbau“, besser kennen, sondern traf auch auf die verschiedensten Menschen, deren Charaktere er sehr plastisch beschreibt. Im amüsant plaudernden Ton schildert Kerkeling seine Erfahrungen, die an manchen Stellen tief sinnig werden, und reflektiert über den Sinn des Lebens. Mit dem „klassischen“ christlichen Pilger suchte er keinen Kontakt, er schätzt sie als „nicht lernfähig“ ein (Zitat: „*Die werden als die gleichen Menschen die Reise beenden, als die sie sie begonnen haben...*“). Stattdessen ziehen ihn „Sonderlinge und Exoten“ an, er macht unter anderem Erfahrungen mit einer heiratswilligen **Südamerikanerin**, einem sexlüsternen Mitwanderer, **Spießern**, Kirchenkritikern, **Esoterikern** und **Spiritisten**.

### 7.8.2 Camino de Santiago

[https://en.wikipedia.org/wiki/Camino\\_de\\_Santiago](https://en.wikipedia.org/wiki/Camino_de_Santiago)

The **Camino de Santiago** (**Latin**: *Peregrinatio Compostellana*, "Pilgrimage of Compostela"; **Galician**: *O Camiño de Santiago*),<sup>[1]</sup> known in English as the **Way of Saint James** among other names,<sup>[2][3][4]</sup> is a network of **pilgrims' ways** or **pilgrimages** leading to the shrine of the **apostle Saint James the Great** in the **cathedral** of

[Santiago de Compostela](#) in [Galicia](#) in northwestern [Spain](#), where tradition has it that the remains of the saint are buried. Many follow its routes as a form of spiritual path or retreat for their spiritual growth. It's also popular with hiking and cycling enthusiasts and organized tour groups.

The French Way (Camino Francés) and the Routes of Northern Spain are the courses listed in the [World Heritage List](#) by [UNESCO](#).

### 7.8.3 Enlightenment Era

During the war of American Independence, [John Adams](#) (who would become the second American president) was ordered by [Congress](#) to go to [Paris](#) to obtain funds for the cause. His ship started leaking and he disembarked with his two sons at [Finisterre](#) in 1779. From there he proceeded to follow the Way of St. James in the reverse direction of the pilgrims' route, in order to get to Paris overland. He did not stop to visit Santiago, which he later came to regret. In his autobiography, Adams described the customs and lodgings afforded to St. James's pilgrims in the 18th century and he recounted the legend as he learned it.<sup>[22]</sup>

I have always regretted that We could not find time to make a Pilgrimage to Saintiago de Compostella. We were informed, ... that the Original of this Shrine and Temple of St. Iago was this. A certain Shepherd saw a bright Light there in the night. Afterwards it was revealed to an Archbishop that St. James was buried there. This laid the Foundation of a Church, and they have built an Altar on the Spot where the Shepherd saw the Light. In the time of the Moors, the People made a Vow, that if the Moors should be driven from this Country, they would give a certain portion of the Income of their Lands to Saint James. The Moors were [defeated and expelled](#) and it was reported and believed, that Saint James was in the Battle and fought with a drawn Sword at the head of the Spanish Troops, on Horseback. The People, believing that they owed the Victory to the Saint, very cheerfully fulfilled their Vows by paying the Tribute. ...Upon the Supposition that this is the place of the Sepulchre of Saint James, there are great numbers of Pilgrims, who visit it, every Year, from France, Spain, Italy and other parts of Europe, many of them on foot.

Adams' great-grandson, the historian [Henry Adams](#), visited Leon among other Spanish cities during his trip through Europe as a youth, although he did not follow the entire pilgrimage route.<sup>[23]</sup> Another Enlightenment-era traveler on the pilgrimage route was the naturalist [Alexander von Humboldt](#).

## 7.9 The Pilgrim's Progress from This World

[https://en.wikipedia.org/wiki/The\\_Pilgrim%27s\\_Progress](https://en.wikipedia.org/wiki/The_Pilgrim%27s_Progress)

*The Pilgrim's Progress from This World, to That Which Is to Come* is a 1678 [Christian allegory](#) written by [John Bunyan](#). It is regarded as one of the most significant works of religious [English literature](#),<sup>[1][2][3][4]</sup> has been translated into more than 200 languages, and has never been out of print.<sup>[5][6]</sup> It has also been cited as the [first novel written in English](#).<sup>[7]</sup>

Bunyan began his work while in the [Bedfordshire](#) county [prison](#) for violations of the [Conventicle Act](#) of 1664, which prohibited the holding of religious services outside the auspices of the established [Church of England](#). Early Bunyan scholars such as [John Brown](#) believed *The Pilgrim's Progress* was begun in Bunyan's second, shorter imprisonment for six months in 1675,<sup>[8]</sup> but more recent scholars such as Roger Sharrock believe that it was begun during Bunyan's initial, more lengthy imprisonment from 1660 to 1672 right after he had written his spiritual autobiography *Grace Abounding to the Chief of Sinners*.<sup>[9]</sup>

The English text comprises 108,260 words and is divided into two parts, each reading as a continuous narrative with no chapter divisions. The first part was completed in 1677 and entered into the [Stationers' Register](#) on 22 December 1677. It was licensed and entered in the "[Term Catalogue](#)" on 18 February 1678, which is looked upon as the date of first publication.<sup>[10]</sup> After the first edition of the first part in 1678, an expanded edition, with additions written after Bunyan was freed, appeared in 1679. The Second Part appeared in 1684. There were eleven editions of the first part in John Bunyan's lifetime, published in successive years from 1678 to 1685 and in 1688, and there were two editions of the second part, published in 1684 and 1686.

The entire book is presented as a [dream sequence](#) narrated by an [omniscient narrator](#). The allegory's protagonist, [Christian](#), is an [everyman](#) character, and the plot centres on his journey from his hometown, the "City of Destruction" ("this world"), to the "Celestial City" ("that which is to come": [Heaven](#)) atop Mount [Zion](#). Christian is weighed down by a great burden—the knowledge of his sin—which he believed came from his reading "the book in his hand" (the [Bible](#)). This burden, which would cause him to sink into Hell, is so unbearable that Christian must seek deliverance. He meets Evangelist as he is walking out in the fields, who directs him to the "[Wicket Gate](#)" for deliverance. Since Christian cannot see the "Wicket Gate" in the distance, Evangelist directs him to go to a "shining light," which Christian thinks he sees.<sup>[11]</sup> Christian leaves his home, his wife, and children to save himself: he cannot persuade them to accompany him. Obstinate and Pliable go after Christian to bring him back, but Christian refuses. Obstinate returns disgusted, but Pliable is persuaded to go with Christian, hoping to take advantage of the Paradise that Christian claims lies at the end of his journey. Pliable's journey with Christian is cut short when the two of them fall into the [Slough of](#)

**Despond**, a boggy mire-like swamp where pilgrims' doubts, fears, temptations, lusts, shames, guilts, and sins of their present condition of being a sinner are used to sink them into the mud of the swamp. It is there in that bog where Pliable abandons Christian after getting himself out. After struggling to the other side of the slough, Christian is pulled out by Help, who has heard his cries and tells him the swamp is made out of the decadence, scum, and filth of sin, but the ground is good at the narrow Wicket Gate.

## 7.10 Tennyson, Ulysses

There is a very good poem, the Ulysses by Tennyson, which fits in quite nicely in the present context. So I just include it here.

<https://www.poetryfoundation.org/poems/45392/ulysses>

It little profits that an idle king,  
By this still hearth, among these barren crags,  
Match'd with an aged wife, I mete and dole  
Unequal laws unto a savage race,  
That hoard, and sleep, and feed, and know not me.  
I cannot rest from travel: I will drink  
Life to the lees: All times I have enjoy'd  
Greatly, have suffer'd greatly, both with those  
That loved me, and alone, on shore, and when  
Thro' scudding drifts the rainy Hyades  
Vext the dim sea: I am become a name;  
For always roaming with a hungry heart  
Much have I seen and known; cities of men  
And manners, climates, councils, governments,  
Myself not least, but honour'd of them all;  
And drunk delight of battle with my peers,  
Far on the ringing plains of windy Troy.  
I am a part of all that I have met;  
Yet all experience is an arch wherethro'  
Gleams that untravell'd world whose margin fades  
For ever and forever when I move.  
How dull it is to pause, to make an end,  
To rust unburnish'd, not to shine in use!  
As tho' to breathe were life! Life piled on life  
Were all too little, and of one to me  
Little remains: but every hour is saved  
From that eternal silence, something more,  
A bringer of new things; and vile it were  
For some three suns to store and hoard myself,  
And this gray spirit yearning in desire  
To follow knowledge like a sinking star,  
Beyond the utmost bound of human thought.

This is my son, mine own Telemachus,  
To whom I leave the sceptre and the isle,—  
Well-loved of me, discerning to fulfil  
This labour, by slow prudence to make mild  
A rugged people, and thro' soft degrees  
Subdue them to the useful and the good.  
Most blameless is he, centred in the sphere  
Of common duties, decent not to fail  
In offices of tenderness, and pay  
Meet adoration to my household gods,  
When I am gone. He works his work, I mine.

There lies the port; the vessel puffs her sail:  
There gloom the dark, broad seas. My mariners,  
Souls that have toil'd, and wrought, and thought with me—

That ever with a frolic welcome took  
The thunder and the sunshine, and opposed  
Free hearts, free foreheads—you and I are old;  
Old age hath yet his honour and his toil;  
Death closes all: but something ere the end,  
Some work of noble note, may yet be done,  
Not unbecoming men that strove with Gods.  
The lights begin to twinkle from the rocks:  
The long day wanes: the slow moon climbs: the deep  
Moans round with many voices. Come, my friends,  
'T is not too late to seek a newer world.  
Push off, and sitting well in order smite  
The sounding furrows; for my purpose holds  
To sail beyond the sunset, and the baths  
Of all the western stars, until I die.  
It may be that the gulfs will wash us down:  
It may be we shall touch the Happy Isles,  
And see the great Achilles, whom we knew.  
Tho' much is taken, much abides; and tho'  
We are not now that strength which in old days  
Moved earth and heaven, that which we are, we are;  
One equal temper of heroic hearts,  
Made weak by time and fate, but strong in will  
To strive, to seek, to find, and not to yield.

### 7.11 Gargantua and Pantagruel

The French had considerably less of the famous British'er humour of Samuel Johnson and the others mentioned above. But they also had some good ones.

[https://en.wikipedia.org/wiki/Gargantua\\_and\\_Pantagruel](https://en.wikipedia.org/wiki/Gargantua_and_Pantagruel)

The Life of Gargantua and of Pantagruel (French: La vie de Gargantua et de Pantagruel) is a **pentalogy** of novels written in the 16th century by François Rabelais, which tells of the adventures of two **giants**, Gargantua (/ɡɑːrˈɡæntʃuə/; French: [ɡaʁɡɑ̃tʁya]) and his son Pantagruel (/pænˈtægruəl, -əl, ˌpæntəˈɡruːəl/; French: [pɑ̃tagʁyɛl]). The text is written in an amusing, extravagant, and **satirical** vein, and features much crudity, **scatological humor**, and violence (lists of explicit or vulgar insults fill several chapters).

The censors of the **Collège de la Sorbonne** stigmatized it as obscene,<sup>[1]</sup> and in a social climate of increasing **religious oppression** in a lead up to the **French Wars of Religion**, it was treated with suspicion, and contemporaries avoided mentioning it.<sup>[2]</sup> According to Rabelais, the philosophy of his giant Pantagruel, "Pantagruelism", is rooted in "a certain gaiety of mind pickled in the scorn of fortuitous things" (French: *une certaine gaieté d'esprit confite dans le mépris des choses fortuites*).

Rabelais had studied **Ancient Greek** and he applied it in inventing hundreds of new words in the text, some of which became part of the French language.<sup>[3]</sup> Wordplay and risqué humor abound in his writing.

### 7.12 Cognitive Dissonance

<https://www.linguee.com/english-german/translation/cognitive+dissonance.html>

given by Leon Festinger in which he argued, based on **cognitive dissonance** research, for the incompatibility of intrinsic and...

Leon Feistinger, in dem er aufgrund von **Forschung zu kognitiver Dissonanz die Unverträglichkeit** intrinsischer und extrinsischer Motivationsquellen darlegte.

### 7.13 On Incommensurability

There is also a related expression called *Incommensurability*. It just means that when one doesn't realize that when any two concepts / or moral / or ethical / or law&order ideas are Incommensurable, there arises a *Cognitive Dissonance*. And that means in turn that especially very moral and very principled people have a tendency to entertain at the same time some Incommensurable concepts and ideas, and there must be by necessity be the Cognitive Dissonance because as we all know, people cannot live by those highly abstract ideas. The only person in the intellectual history of humanity who was able to do this was Immanuel Kant. He almost lived perfectly according to his ethical principles. But that had a cost. He could not marry because that would contradict his high ethical standards. And he could almost not do anything practical at all. He probably was, besides Platon, the foremost and highest life-negating philosopher in the whole intellectual

history of mankind. For all the practical matters he had his servant. And we all know his nice dictum about marriage: "Marriage is a "bürgerlicher Vertrag" (meaning a Law&Order pact or contract of the bourgeois society of his time and place of the center of the Prussian Empire) for the reciprocal use of the genitalia". And I believe that he really meant that in all seriousness. Of course he never mentioned the concept of "consensual" which didn't exist in his philosophical world. Because consense can also have the meaning of con-sensual. And Kant had no idea whatsoever what "sensual" could mean. His other famous dictum was: Sapere Aude. Also in this dictum, Kant had forgotten that sapere also means to taste (the fruits of the Tree of Knowledge). As such, I like Kant very much for his theoretical philosophy, about as much as I like Platon. They were both "birds of the same feather". But just like birds in the sky, they knew nothing at all what it is like to live (and breed of course). So when it comes to Practical Philosophy, I rather stick to the good Xenophon. He was for all of eternity the best Practical Philosopher who had ever existed.

**incommensurable** *adjective*

**inkommensurabel** *adj*

**unvergleichbar** *adj*

*less common:*

**unvereinbar** *adj* / **unvergleichlich** *adj* / **nicht vergleichbar** *adj* / **nicht messbar** *adj* / **nicht zu vereinbaren**

## 7.14 On the Tributes

In those earlier times of statehood, the taxes were called tributes.

<https://www.lexico.com/en/definition/tribute>

1 An act, statement, or gift that is intended to show gratitude, respect, or admiration.

'the video is a tribute to the musicals of the 40s'

mass noun 'a symposium organized to pay tribute to Darwin'

1.1 in singular Something resulting from a particular quality or feature and indicating its worth.

'his victory in the championship was a tribute to his persistence'

1.2 as modifier Denoting or relating to a group or musician that performs the music of a more famous one and typically imitates them in appearance and style of performance.

'an Abba tribute band'

'a tribute show'

2historical mass noun Payment made periodically by one state or ruler to another, especially as a sign of dependence.

'the king had at his disposal plunder and tribute amassed through warfare'

3historical A proportion of ore or its equivalent, paid to a miner for his work, or to the

### Origin

Late Middle English (in **tribute** (sense 2)): from Latin tributum, neuter past participle (used as a noun) of tribuere 'assign' (originally 'divide between tribes'), from tribus 'tribe'.

## 8 Peter Sloterdijk Special

**Spoiler Alert! I don't want to spoil anyone's fun,  
but the following text contains some material which some people  
may find Offensive, and even Politically Incorrect.  
But this is Anthropological Material.  
Any further Reading here is wholly on your Own Responsibility!!!**

### 8.1 Introduction to Peter Sloterdijk's Work

Peter Sloterdijk is in Germany a popular writer on philosophical subjects who has among the highest number of books sold to a large public who have some intellectual aspirations... That is, compared to other famous philosophical authors. We can mention a few contenders in popularity: Rüdiger Safranski and Richard David Precht. Of course there is quite a difference between "philosophy" in the US-Brit sense and the German akademik sense. So we could make a sub-classification between "serious" or "akademik" philosophy on one side, and "pop philosophy" in the US-Brit sense on the other side. There can even be a "philosophy" of hamburger cooking. This was developed by Mihaly Csikszentmihalyi in his theory of "flow":

[https://en.wikipedia.org/wiki/Mihaly\\_Csikszentmihalyi](https://en.wikipedia.org/wiki/Mihaly_Csikszentmihalyi)

The experience of "flow" is strikingly reminiscent of Zhuangzi's description of "great skill" achieved by Daoist sages such as carpenter P'ien and butcher Ting, the latter finding bliss in the art of chopping up ox carcasses by "going along with the Dao" of the ox. It is no coincidence that these blue-collar sages are situated on the bottom rungs of the social hierarchy. They discover the Dao much more readily than Confucian scholars, who, according to Zhuangzi, are studying the "dregs of wisdom" in lifeless books and have lost touch with the world of concrete affairs.

<https://ze.tt/zum-angeben-diese-werke-praegen-die-philosophie/>

[https://www.buchreport.de/news/ratgeber-bestsellerliste-philosophie/?utm\\_source=buchreport&utm\\_medium=link&utm\\_campaign=1=lp-gesehen&utm\\_content=3=Denker+im+Wettstreit](https://www.buchreport.de/news/ratgeber-bestsellerliste-philosophie/?utm_source=buchreport&utm_medium=link&utm_campaign=1=lp-gesehen&utm_content=3=Denker+im+Wettstreit)

<https://www.buchreport.de/bestseller/buch/isbn/9783442155286.htm/>

<https://www.buchreport.de/news/verkaufsliste-als-spiegel-des-zeitgeistes/>

Richard David Precht etwa, der mit 3 Titeln unter den Top 5 die Themenbestseller dominiert, hat mit seinen Büchern seine Verdienste für die Popularisierung der Philosophie, aber für die fachphilosophische Diskussion eher keine Impulse geliefert.

One can safely state a quite obvious general rule: The more success a "philosopher" has on the pop philosophy market, the more he will be seriously criticized by the "akademik" philosophy establishment. Such is quite decidedly the case with Peter Sloterdijk's works. Exactly what his style of writing and thinking makes it so popular to a wider readership is of course a source of criticism by the more akademik oriented part of the Mainstream Philosophical community. And there is especially a faction which draws its intellectual orientation on the Frankfurter Schule which talks in the most vicious and adverse terms about Sloterdijk. I don't want to get too embroiled in those very polemical discussions of a climate of quite violently flaring tempers that are showing up there. It is, as Sloterdijk sometimes expresses it: There is no "Streitkultur" in the German Intelligenza, but rather more an un-culture of vicious ideological defamation and ad hominem attacks. See 20JH, p. 262-263, where he becomes quite explicit: "... wobei auffällt, dass es in Deutschland zwar das Wort für die Sache gibt, die Sache selbst aber fehlt, weil bei uns anstelle von Streitkultur eine Hetzkultur, eine Denunziationskultur, eine Herabsetzungskultur entstanden ist, in der die Dinge vorentschieden sind"... I don't think that there can be a more poignant expression than this one.

#### 8.1.1 The Viewpoint of the visiting Anthropologist from Mars

I personally rather like to view this scenario from the viewpoint of an anthropologist. Possibly I would even like to take the position of a visiting anthropologist from another very distant interstellar civilization who has chosen to study the wheelings and dealings of the humanoid inhabitants of the planet Earth from the stance of a distanced and impartial observer. Or as Popper (1962) once expressed it: As a visiting Anthropologist doing field research on the "Totems and Tabus of the natives of the mostly white races of north-western Europe and North America". In one of my more pointed definitions of what an anthropologist should

consider his main task, is that to study all those things that the normal "civilized" humans would never admit that they are doing, despite their overt laws&order and rules&regulations and their moral&ethical professions. A famous saying about puritanism illustrates the point: "Puritanism means that you can do anything whatsoever, as long as you don't enjoy it". We can conduct an anthropological criticism of the ethics and moral rule systems of "higher" civilizations which mostly mean verbal-written-rational-legal codes. As opposed to the mostly unwritten "oral tradition" of the unwritten and often unspoken "Totems and Taboos" of the more "indigenous" oriented societies.

The Kantian Ethics are a good example for this. Also we find the Roman system of law as written out in the Justinian corpus which has more or less become the foundation of all European Law systems. And in a further development, we find the code of Napoleon. Because of all those rules&regulations there is a French way of thinking about law, and one can state it about like this: "For every exception there must also be a rule or law from which the exception is derived". And in this context we can quote Sloterdijk's infamous works on "Menschenpark" and his essay on the "Self-Domestication" of humanity. See 20JH p. 44-69. The arguments that Sloterdijk gives are mostly derived from the Neo-Spencerian work by Heiner Mühlmann "Die Natur der Kulturen". This is based on the "maximal stress cooperation" MSC theory derived from warfare. He also quotes Arnold Gehlen on p. 49 in 20JH. Also it should be noted that these theories can be traced back to the ideas of Hobbes in "Leviathan". Sloterdijk also references Bazon Brock's ideas of "Selbst-Fesselung" meaning that it is a social-sanitary precaution that one should not try to completely fill out the limits of expression, be this the artistic expression, or the political and law expression, or the power potential of science and technology. In any case, the work 20JH sums up a lot of Sloterdijk's earlier works in shorter chapters and with less excessive metaphors and ruminations. One could call it a "Reader's Digest" of the Sloterdijk oeuvre, which comes in fitting that it also marks the end of his Akademik career as the *Principal* of the Karlsruhe "Hochschule für Gestaltung".

### 8.1.2 The Anthropological View of Akademik Philosophy

The anthropological view of akademik philosophy notes that it has its more or less explicit rules of discourse and conduct, meaning that it should be rational in the western philosophical definition of rationality. Clearly the controversy around Sloterdijk's work is going far beyond or better beneath rationality. There can be an Anthropology of Philosophy but not a Philosophy of Anthropology. Sloterdijk expresses this a similar vein, when he says that the theologians seek ever higher suprematizations of their god, whereas the god of the Morphologists goes into ever more profound depths. And I include here the observation that theology is a human philosophical endeavor, and in my view, the Morphologists are also Anthropologists. And the Philosophical Anthropology must by needs be more profound than the mostly eurocentric western Philosophy, since it must encompass the whole of humanity and not just its Western European offshoots. And Anthropology has in its scope a very much wider view of humanity than the verbal-alphabetic-centric writing culture that is at the base of Western philosophy. I may make a short reference of Semiotics, because the endless superposition of textual interpretation is another way to express a sort of "nearly infinite regress" that is possible when we construct "almost infinite levels" of contextualization. They reach as far as the human spirit can go, and end only when the human energy or mental power is completely exhausted.

And there is a point to make that the ancient Greek Sophist way of argument originally depended entirely on the spoken word, it was still an oral culture. Also the Roman legal system was initially purely oral-verbal. The art of the Orator was highly evolved, and we may cite the works of Cicero in this context. Also the work of Augustine is based mainly on his ability as Orator and Lawyer. And so it is no surprise that Augustine is also the author of one of the most inquisitive studies of The Art of Memory, but this time with a Christian "modulation" as one could say. From the antique tradition derive these many "Arts of Memory" that were re-discovered in the Renaissance. The Warburg Library holds one of the largest data bases on this. Giordano Bruno was one of the last Grand Masters of the art, and Frances Yates is most famous for her work on that subject. The work of Umberto Eco and the Semioticians derives at least some of their materials from these sources.

My personal view of Sloterdijk's work is pretty much in the vein of Nietzsche's famous dictum: "Thou shalt not only love thyne enemies, but thou shalt also loathe thyne friends." And surely, Peter Sloterdijk is no friend of mine. So I quote one of my own favourite Byble verse, Matthew 5:44  
But I say'eth unto thou, thou shalt Love thy enemies, bless them that curse thou, doe goode to thym that loathe thy, and praye'the for thym why despitefully use thy, and persycuthe thy.

## 8.2 Some Aspects of the Controversy around Sloterdijk's Work

<https://www.sueddeutsche.de/kultur/jubilaem-wechselseitiger-schuettelverkehr-1.3559872>

<https://www.freitag.de/autoren/der-freitag/was-ist-ein-philosophieboom>

[https://en.wikipedia.org/wiki/Peter\\_Sloterdijk](https://en.wikipedia.org/wiki/Peter_Sloterdijk)

<https://www.spiegel.de/spiegel/print/d-14022505.html>

[https://de.wikipedia.org/wiki/Kritik\\_der\\_zynischen\\_Vernunft](https://de.wikipedia.org/wiki/Kritik_der_zynischen_Vernunft)

Die **Kritik der zynischen Vernunft** ist ein 1983 erschienenes zweibändiges Werk des deutschen Philosophen Peter Sloterdijk. Das Werk behandelt den **Kynismus/Zynismus** als gesellschaftliches Phänomen der europäischen Geschichte.

### 8.2.1 Bunt wie ein Paradiesvogel

<https://www.spiegel.de/spiegel/print/d-14022505.html>

AG: Da der Spiegel wie immer schreibt, wenn er einige Schreiberlinge nicht mag, so mag diese Spiegel-Schreiberei als Beispiel dafür gelten, was herauskommt, wenn man das Spiegel-Ei ohne Ei serviert bekommt:

13.06.1983 / Imperiale Gebärde, rasante Gedanken

Reinhard Merkel über Peter Sloterdijks Kultbuch „Kritik der zynischen Vernunft“ ....

Die „FAZ“ hat den Autor mit Schopenhauer verglichen. - Reinhard Merkel, 33, arbeitet am Institut für Rechtsphilosophie der Universität München.

Ein großer bunter Luftballon steigt auf, und in der Atmosphäre beginnt es zu klingen. Eine philosophische Flaumfeder, leicht und schön, tanzt hoch über den ausgestorbenen Fluren aller Dagewesenheiten, und ein vielstimmiger Chorus hebt an: Gepriesen sei der Name des Herrn. 200 Jahre nach der "Kritik der reinen Vernunft" deutet einer im Pantheon der Kultur auf den leeren Platz neben Immanuel Kant und sagt, wenn auch mit feinem Lächeln: meiner!

Sloterdijks erstaunliche Phantasie vollzieht eine danteske geistige Fahrt durch die Geschichte der abendländischen Vernunft. Aber es ist eine umgekehrte Göttliche Komödie: der Weg führt aus dem Paradies durch eine Art De-Purgatorio zum Inferno, an dessen historischem Rand im Jahre 1933 Sloterdijks Diabolische Komödie abbricht. Der Blick des Autors ermißt eine 2500jährige Distanz zwischen zwei Gelächern:

Jenem anekdotisch berühmten der thrakischen Magd, die dem beim Sternegucken in eine Grube gefallenen Thales von Milet zurief, wie er glauben könne, den Himmel zu erkennen, wenn er nicht einmal die Löcher in der Erde sehe;

[AG: The story of Thales of Milet goes a little differently: Thales did astronomical observations from the bottom of a well, since this was in antiquity the way to observe something in the sky without interference from other objects. The difference between the observations of the sun's position at different latitudes allowed to calculate the circumference of the earth.

<https://www.iep.utm.edu/thales/#H8>

<https://en.wikipedia.org/wiki/Eratosthenes>

He is best known for being the first person to calculate the **circumference of the Earth**, which he did by comparing **angles** of the mid-day Sun at two places, a known North-South distance apart.<sup>[2]</sup> His calculation was remarkably accurate. He was also the first to calculate the **tilt of the Earth's axis**, again with remarkable accuracy.<sup>[3]</sup> Additionally, he may have accurately calculated the **distance from the Earth to the Sun** and invented the **leap day**.<sup>[4]</sup> He created the first **global projection of the world**, incorporating **parallels** and **meridians** based on the available geographic knowledge of his era.

]

Bunt wie ein Paradiesvogel entfaltet die Phantasie des Buches ihre Flügel, die sie in pulsierender Bewegung über einen weiten Horizont von Themen, Assoziationen und Symbolen tragen: zwei Begriffe, mobil genug für solche Dynamik - "Zynismus" und "Kynismus". "Zynismus ist das aufgeklärte falsche Bewußtsein - das unglückliche Bewußtsein in modernisierter Form", ein Bewußtsein, das seine Fähigkeiten mit dem Verlust seiner Moral bezahlt, seine herrische Verfügungsmacht über die Außenwelt mit dem Orientierungsverlust seiner Innenwelt. ...

Mit der Wunderkerze einer funkelnden, manchmal begeisternden Sprache leuchtet Sloterdijk diesen riesenhaften gedanklichen und geschichtlichen Horizont aus. Aus dem Zwielficht des diffusen Zynismus tauchen Gesichter auf. Philosophen und Henker, Dichter und Feldherren, auch Masken und Lemuren, Lügen und Kunstwerke. Im Sturmschritt seiner Diktion durchläuft Sloterdijk das Szenarium, erhellend, was seine Phantasie zu fassen bekommt: die Aufklärung. ...

Ein Herr Schütte, der sich auszukennen meint, hat Sloterdijks 1000-Seiten-Tat in der "Frankfurter Rundschau" als einen "Schlag ins verstaubte Kontor unseres zeitgenössischen Philosophierens" gefeiert. Tatsächlich hat Sloterdijks empfindliches Gemüt einen seit Jahren in der Kulturkulisse summenden Ton, ein schlechtes Geräusch aus vernunftfeindlicher An-sich-Klugheit, habitueller Ironie und neuer Weinerlichkeit

aufgefangen und auf seinen blankpolierten Begriff gebracht. Ein epidemisch grassierender Gehirnzustand, oszillierend zwischen Orakel und Grille, also etwa zwischen Nouveaux Philosophes und Bhagwan, dürfte hier die theoretische Platt-Form finden für jenen sanften Bewußtseinsimperialismus, der nicht "kynisch" ist, sondern ein Selbstmordmotiv.

<https://www.zeit.de/1985/31/ein-unbeschriebenes-blatt/komplettansicht>

<https://www.zeit.de/2009/40/Sloterdijk-Blasen/komplettansicht>

<https://www.nzz.ch/feuilleton/35-jahre-nach-der-kritik-der-zynischen-vernunft-peter-sloterdijk-analysiert-das-zynische-bewusstsein-zu-beginn-des-21-jahrhunderts-ld.1447498>

## 8.2.2 About German "Sprachblasen"

There is a quite interesting field of German "Sprachblasen" (language bubbles) which is almost intranslatable into other languages. This may be an intellectual art form of *over-reaching*, *over-boarding*, and otherwise *misplaced metaphors* that seems to thrive and flourish in the *hydroponic beds* of German *Intellectualism*. I include some of these "Sprachblasen" just for the *sake of documentation*. They don't have any meaning for me, and probably *nothing useful at all* for all the rest of the world.

<https://www.fr.de/kultur/literatur/kunstvolle-zerreibung-einer-welterzaehlung-11732960.html>

Die Erzählbegabung: fast geschenkt. Wer käme da heute als Denk-Prosaist (nicht nur im deutschen Sprachraum) Sloterdijk gleich? Allenfalls Slavoj Zizek, ein freilich noch vagabundierenderer Geist, unsteter in seinen Anknüpfungspunkten, mit schöner Schlagseite zu Trivialitätsphänomenen vom Konsumfilm bis zur Popkultur. Derlei erledigt Sloterdijk eher nebenbei. Er liebt mehr die Höhenluft. Versteht sich als Urenkel Nietzsches. ...

Ein Gedanke, den die bis vor kurzem unumstößlich scheinende Fortschrittsapologie perhorreszierte wie nichts sonst. Sloterdijk propagiert mitnichten die "zyklischen" Weltbilder konservativer Konsistenz, wenn er auch aus seiner Fortschritts-Skepsis keinen Hehl macht. Seinen philosophischen Rundbau errichtet er indes nicht in der steinernen Massivität eines abgeschlossenen Systems. Kein Weltgeist tönt aus hoher Kuppel. Eher siedelt Sloterdijs Geist in beweglichen, zur Verflüssigung tendierenden Raumgestalten. In Fruchtblasen eben oder Globus-Imaginationen, dehnfähig und aufnehmbar für alle erdenklichen Erweiterungen, auch im Sinne des aktuellen Modells "Globalisierung". ...

Deren Fixierung an den Zeitpfeil war vor allem in der marxistischen Denktradition eher optimistisch grundiert - so stellt sich Ernst Blochs Prinzip Hoffnung vor allem als imposante Zeitreise durch eine bis heute andauernde "Vorgeschichte" des aus der Latenz sich herausentwickelnden Humanum dar. Von Blochs Gläubigkeit ist Sloterdijk äonenweit entfernt, aber von der Abenteuerlichkeit seiner Spurensuche ist er, seinerseits ein Abenteuererschritsteller, nach wie vor begeistert. ...

... dass derartiger philosophischer Rückenwind für die "westlichen Werte", im Gegensatz sowohl zu Adornos (oder Benjamins) Grauen vor den dunklen Seiten der Moderne als auch zu Heideggers düsterem Existenz-Heroismus, etwas Hausbackenes, Philiströses ausstrahlt. Dem allzu offensichtlichen Anschein pausbäckiger Affirmation entgeht Sloterdijs so und durch mitunter herrenreiterhaft snobistische Attituden und, bei aller Mitteilsamkeit, oft auch einen Hang zu eskapistischer sprachkombinatorischer Hermetik. ...

Nur, dass er die von ihm hergestellten Räume dann auch wieder zerstört oder gelassen zusieht, wie sie sich nach ihrer Bildung, Ein- oder Ausbildung, im Fortschreiten der Analyse auch wieder auflösen. Am kompaktesten gibt sich, im ersten Kapitel (dem eine immense, ein Drittel des Bandes ausmachende Einleitung vorausgeht), die neunfache Aufteilung "anthropogener Inseln" in Chirotop, Phonotop, Uterotop, Thermotop, Erototop, Ergotop, Alethotop, Thanatotop und Nomotop. Ein wenig flüchtig übersetzt: Berührungswelt, Klangsphäre, Weltbrutkästen, Wärmeraum, Begehrens- und Eifersuchtsfelder, Kampf- und Anstrengungszusammenhang, Wissensraum, Transzendenz, Gesetzes- und Verfassungskontext.

## 8.2.3 The Shape of Things By Sam Han on the Sphären by Sloterdijk

This discussion of Sloterdijk's work is just a little less polemical than what the German Intelligenza could come up with. And I also postulate it that someone who doesn't know German and Classical Greek in-and-out is in no position to understand the finer subtleties of Heidegger's philosophy. His is a totally different mode of thinking and that sets him apart from all the Romanized and Latinized thinkers of the European tradition. So it is of no use at all when one quotes a lot of French intellectuals in order to set something straight about Heidegger. And even though Nietzsche didn't like the German way of thinking at all, he was so deeply steeped in the Greek modes of thinking that he didn't realize how these two languages and thinking systems were "morphologically identical". Of course in my own version of Morphology. And Nietzsche had only Goethe as his "Spiritus Rector" to lean on. Even Schopenhauer was not in the same class of Greek thinking, since Sch. had been in fierce opposition to Hegel's Idealism. And so Schopenhauer was much more used to think the British'er Empirism way. And it was Whitehead who managed to bridge all those mental / philosophical abysses.

<http://reviewsinculture.com/2013/06/15/the-shape-of-things/>

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Peter Sloterdijk. *Bubbles: Spheres Volume I: Microspherology*. Trans. Wieland Hoban. Semiotext(e), 2011. 664pp.

For anyone even remotely interested in philosophy, when a figure sets out to "correct" Heidegger, you want to pay attention. This is not necessarily out of admiration for the author of *Being and Time*, or his ideas, but rather out of a genuine curiosity made up of equal parts amazement and horror. The interest would be compulsory, akin to intellectual rubbernecking, for it is more than likely that he or she, the subject of such an utterance, will, like Heidegger, be vulnerable to intense scrutiny and interpretation. Therefore, when MIT Press describes the much-anticipated *Spheres* trilogy by Peter Sloterdijk as "the late-twentieth-century bookend to Heidegger's *Being and Time*," there is reasonable expectation for it to be disastrous.

Ever since the English translation of his *The Critique of Cynical Reason* in 1988, Sloterdijk has been known in English-speaking intellectual circles as somewhat of a mercurial figure. Not much, still, is known about him. From where, that is, what intellectual milieu or tradition, did he emerge? Is he a Frankfurt guy? Is he a Luhmannite? Is he Heideggerian? The rather out-of-nowhere character of Sloterdijk's work, as well as the inconsistent reception of his work outside a handful of watchers of developments in continental philosophy and social theory, placed Sloterdijk in the category of "heard of him" (otherwise known as "oh right, he wrote that one thing") in North American cultural theory.

But Sloterdijk's trajectory differed tremendously in his native Germany. When copies of *Cynical Reason* started leaving the shelves at a rapid pace upon its release, the then-journalist was boosted into the highbrow German intellectual scene traditionally filled with academics. [AG: he forgets that Sloterdijk had a Dr. of philosophy.]

Today, we can count Sloterdijk among the country's public intellectuals, a group that also includes luminaries like *Jürgen Habermas* and *Axel Honneth* (more on these two later). Sloterdijk is also host to a show called "*Das Philosophische Quartett*" (The Philosophical Quartet), which airs on ZDF, the German equivalent to PBS in the United States or NHK in Japan. It features Sloterdijk alongside guests of various intellectual pedigrees, from academics to journalists.

More recently, Sloterdijk has made himself known among the wider American reading public for a controversy involving *welfare state politics*, class, resentment and Axel Honneth. As a blog post on the *Global Post* summarizes:

According to an article published this past summer in one of Germany's most widely read newspapers, the country's welfare state is a "fiscal kleptocracy" that has transformed the country into a "swamp of resentment" and degraded its citizens into "mystified subjects of tax law." The text, by philosopher Peter Sloterdijk, goes on in that vein for some 3,000 words[...]

Among the country's intellectual class, the article has served as kindling for a fiercely fought and wide-ranging conversation about the national economy that, six months on, still shows little sign of abating. (Abadi)

The article, entitled "*Die Revolution der gebenden Hand*" ("The Revolution of the Grasping Hand"), ...

[[AG: **I must correct some things right here and now.** It is exactly the opposite mis-translation. "Die gebende Hand" is the giving hand. The hand of the tax collector is the *Grasping Hand*. And as an Anthropologist, I must also correct those poor *Intelligenza-Intellectuals*: Because the *system of honor taxes* was very widespread and very successful in almost all "indigenous" or paleo-historic societies. It was written about in so many stories like *Marcel Mauss*, and the system of *Potlatch*, and the "*Feast of the Pigs*". Only the poor US- & European *Intelligenza-Intellectuals* didn't know anything about that. Philosophical Anthropology has had at least some chances to step aside from the *purely eurocentric* (alphabet-centric) *ways of intellectualizing*, but they never bothered to do so.

I also should mention *Leslie White* here, since he had been an *antagonist of Franz Boas*. This didn't serve him well, even though he was at some time the president of the American Anthropological Association. There were also some quite fierce ideological battles in American Anthropology, but the Americans had the advantage that they could not be suspected of being "*Crypto-Nazi*". They were just more or less openly "*Herbert Spencerians*". The latter one is remembered for his dictum "the survival of the fittest". There was just one slight problem with that interpretation. In the Darwinistic sense, *being fit means to fit*. And there is *no grammatical suprematization* of being "fit". No-one of his followers had understood that "fittest" is a *grammatical oxymoron*. You can just take *a key and a lock* as example. The key that opens the lock, is fitting. But there can be no more "fitting" key. This is logically impossible. And we can turn the argument on its head when we study the *Paleontology of Natural History*. It were always the "most fitting" species that died out first. Because the Climate and the Biospheric conditions change all the time over periods of  $x^* 100.000$  or  $1.000.000$  years. So whenever there was a slight change in the Biospheric conditions, those "fittest" organisms died out first. Only the *non-specific* or *not-so-fitting* organisms survived. So it came to pass that the humans as *the most egregiously "not-so-fitting" species* of the whole Biosphere came to dominate all the

rest of it. Because in the distant past when the dinosaurians ruled, our precursors and very distant ancestors were just some shrews. They could only take over when the atmospheric conditions had changed sufficiently. After the Cretaceous-Paleogene extinction event, the earth atmosphere became much thinner, and only suitable for present life-forms.

Cretaceous–Paleogene extinction event,  
[https://en.wikipedia.org/wiki/Chicxulub\\_crater](https://en.wikipedia.org/wiki/Chicxulub_crater)  
[https://en.wikipedia.org/wiki/The\\_Gift\\_\(book\)](https://en.wikipedia.org/wiki/The_Gift_(book))  
[https://en.wikipedia.org/wiki/Leslie\\_White](https://en.wikipedia.org/wiki/Leslie_White)

**Leslie Alvin White** (January 19, 1900, [Salida, Colorado](#) – March 31, 1975, [Lone Pine, California](#)) was an American anthropologist known for his advocacy of theories of [cultural evolution](#), [sociocultural evolution](#), and especially [neoevolutionism](#), and for his role in creating the department of [anthropology](#) at the [University of Michigan Ann Arbor](#). He was president of the American Anthropological Association (1964).

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...must be read as a polemic. While it includes some semblance of genealogical (in the Foucauldian sense) analysis of the modern democratic welfare state, its primary purpose is to offend. He begins with a meditation on the birth of the democratic state as the compromise between classical liberalism and anarchism, each of which was amenable to the declining significance of the state. For liberalism, the state needed to be minimal and imperceptible to its subjects, the citizens. For anarchism, the state needed to be destroyed. Hence, the “modern democratic state gradually transformed into the debtor state, within the space of a century metastasizing into a colossal monster—one that breathes and spits out money” (Sloterdijk, “The Grasping Hand”). For a Europe that is currently under much economic turmoil, and with a Germany that is currently embroiled in a national debate, hinging in large part on a parochial stance toward Southern Europe as fiscally irresponsible debtees, about whether to “bail out” Greece and Spain, this article, for many of its critics, amounted basically to “piling on.” Further, according to its critics, it preyed on extant, albeit latent, nationalist sentiment, which culminated in the infamous book by Thilo Sarrazin, which all but placed the entirety of Germany’s economic woes on its immigrants.

This was the context for the retort by Honneth, one of the last remaining flag bearers of the Frankfurt School. There he accused Sloterdijk of, among many things, being an ideological mouthpiece for advanced capitalism, “a mystical or speculative [interpreter] of history and the world,” and, rather strangely, a reader of Michel Foucault.[1] The gist of Honneth’s critique, which I cannot fully assess in this space, is that Sloterdijk has taken resentment as “first psychology” of the lower classes and has attempted to pull the rug from up under the very foundations of European liberal democracy—the welfare state—by criticizing it. I bring up Honneth’s public spat with Sloterdijk in order to portray a picture of the latter that presents not only his prominence in the German intellectual scene but also his embattled public image. While Sloterdijk may only recently be gaining mass recognition in North America, he has, in Europe, at least, been a visible presence for the past two decades or so.

For Sloterdijk, the problematic of inhabitation is that which courses through the veins of Western metaphysics and philosophy. The “old cosmology of ancient Europe,” as he calls it, “that rested on equating the house and home with the world,” can be seen in even the disparate philosophies of Hegel and Heidegger. Humans in this view were “inhabitants in a crowded building called cosmos”(Sloterdijk, “Spheres Theory”). As it was for his most obvious predecessor, Gaston Bachelard, the motif of the house—signifying order, unity and certainty—is one that unduly holds too much purchase in the West. For Sloterdijk, the Enlightenment should have dispelled the need for a “universal house in order to find the world a place worthy of inhabiting” (Ibid.). Yet, it remains, thanks in part to philosophers such as Heidegger, whose self-proclaimed task to “end metaphysics” as such did not do away with the, if we can call it something, the “metaphysics of the universal house.” Sloterdijk’s project, therefore, in his three-volume study called *Spheres*, is to forge a path beyond Heidegger, by providing a general theory of “associations.”

For Heidegger, the overarching question of metaphysics was temporal—with the keywords “being” and “becoming.” For Sloterdijk, it is spatial; the keyword is “world.” While it is the case that Sloterdijk views Heidegger to have been wrong all along, there is something about the current technological, socio-political moment that has occasioned a particular response. Sloterdijk writes:

It’s the final stage of a process that began in the epoch of Greek philosophical cosmology, and whose present vectors are rapid transportation as well as ultra-high-speed telecommunication. At the same time, it’s the product of a radical disappointment, whereby human beings had to abandon the privilege of inhabiting a real cosmos—which is to say, a closed and comforting world. The cosmos, such as the Greeks conceived it, was the totality of being imagined under the form of a great, perfectly symmetrical bubble. Aristotle and his followers were responsible for this idea of a cosmos composed of concentric, celestial spheres of increasing diameters, the majority of which consisted of a hypothetical material

they called ether. For us, this model of the world is obviously no longer operational.

(Sloterdijk, "Foreword to the Theory of Spheres" 223)

In response to this "inoperability,"<sup>[2]</sup> Sloterdijk offers a "spherology," beginning from the micro, which is the subject of volume I of *Spheres* entitled *Bubbles*, all the way to the macro, the subject of volume III, entitled *Foams*. Sphere, for Sloterdijk, does not assume a totality or finality as the phenomenologically inflected "lifeworld" or "world" entails. As he puts it rather paradoxically, "the primordial existential sphere is created every time a moment of inter-psychic space happens" (Sloterdijk, "Foreword to the Theory of Spheres" 223–224). Against the weight of "existence," Sloterdijk puts forth a succession of events, of happenings, wherein meaningful and significant connections are made but do not suffocate. Hence, the microspherology he presents in *Bubbles*, the volume under review, is, at root, a theory of "atmosphere" or as he likes to say, of "air." He chooses these ethereal metaphors as he believes that spheres, the closest Heideggerian cognate being *Stimmung* (more on this later), "never speak but...brings everything together and makes everything possible...a treasure that that allowed human beings to realize the fact that they're always already immersed in something almost imperceptible and yet very real, and that this space of immersion dominates the changing states of the soul down to its most intimate modifications" (Sloterdijk, "Foreword to the Theory of Spheres" 225).

The development of this "spatial vocabulary" is necessary, therefore, because the concept of "world" is simply too bulky to do anything analytically. "Sphere" works better for several reasons. For one, it is more in tune with the development of modernity, which is characterized by "the increasing removal of safety structures from the traditional theological and cosmological narratives" (Sloterdijk, *Bubbles* 25) that used to provide human subjectivity with a degree of ontological security by providing human beings a place in the world, which was fixed, identifiable and orientating. Yet, these "safety structures" in the form of "worlds," according to Sloterdijk, remained. While the emergence of the Figure of Man, allowed for humans to become the subject and object of knowledge, the "empirico-transcendental" as Foucault so rightly put it, it did not mean the complete "end of metaphysics." It just diverted the sublimated energy. "People," Sloterdijk precisely notes, "no longer wanted to receive their inspired ideas from embarrassing heavens" (Sloterdijk, *Bubbles* 28). Instead of God, these ideas came from within, so to speak, albeit mediated via technology, which reflected the "distance between what God was capable of in illo tempore and what humans will, in time, themselves be capable of" (37). Hence, supposedly secular models of subjectivity that emerged in the wake of the scientific revolutions of Galileo, Copernicus and later Newton, nonetheless remained closely tied to the *imago Dei*. The image of man as God simply shifted the flow of power from one end to another. It did not reconstitute the very elements of the prior cosmological system. The shape of the world, even after the emergence of the Figure of Man, did not much change.

But it was not just the shape of the system that did not budge, but rather the way things in it related to one another. While Sloterdijk takes much care to provide various illustrations having to do with the contours of what he is describing, he is in fact attempting to describe relationality. One could even go so far as to say that for him the way in which certain elements in a system relate—let us call this the "relational quantum"—gives the system itself shape. Thus to call something "foam," "bubble," or "sphere" is really an attempt by Sloterdijk to theorize a "connecting force." Spheres, then, are "the original product of human coexistence." In other words, spheres form out of the relations of certain existing ontological objects, or as Sloterdijk tends to call them, "nobjects." Spheres therefore are unlike environments. "Environment," while certainly a milieu for the facilitation of elements in action therein, is nevertheless a top-down way of thinking about social forms. Environments are determinants and causes, though perhaps not linear or direct ones. They are, still, somehow initiators. Spheres are more "atmospheric-symbolic places." They are like "air" or even "air-conditioning systems in whose construction and calibration, for those living in real coexistence . . . is out of the question not to participate" (46). "Living in spheres" is indeed a condition, a structure but one which is dynamic and ethereal. It "means inhabiting a shared subtlety" (46. *Emphasis added*).

*Bubbles*, the first volume of the project, is a "theory of the shared inside" (542). The bubble is the first step, the most elemental, the smallest unit of sphere. The question, of course, is what kind of bubble are we talking about here? In describing it, Sloterdijk references a variety of illustrations, including vaginas, wombs and soap. Stranger still is Sloterdijk's embrace of the term "soul," not the Cartesian variety but the Platonic one. Spheres are a form of "soul expansion" that would have previously been associated with "spirit," although Sloterdijk claims that what was "meant was always inspired spatial communities" (19). But today, there is no thinking about spatial communities without thinking of networks, which has triggered "a general space crisis," or what Paul Virilio calls "the annihilation of space." This complicates, in particular, age-old ideas about subjectivity.

According to Sloterdijk, the annihilation of space finally reveals the myth of individual autonomy, which he describes as the "basic neurosis of Western culture," that is, "to dream of a subject that watches, names and owns everything, without letting anything contain, appoint or own it, not even if the discreetest God offered himself as an observer, container and client" (86). The Enlightenment emphasized and augmented loneliness as the default setting of the human being. This is the case not only with the ancients but also with Hegel and Heidegger in particular. To the contrary, for Sloterdijk, there is, what we can call, a primary "intimacy" between beings. Even phenomenological conceptions of "intersubjectivity" took as its quantum the individual,

perceiving subject—a point made loud and clear most acutely by post-structuralist critics. But more to the point, the Modern Age too easily discarded the primacy of, what Sloterdijk describes as a magological and erotological tendency. He writes:

Among humans, fascination is the rule and disenchantment the exception. As desiring and imitating begins, humans constantly experience that they not only hold a lonely potential for desiring the other within themselves, but also that they manage, in an opaque and non-trivial manner, to infect the objects of their desire with their own longing for them; at the same time, individuals imitate the other's longing for a third element as if under some infectious compulsion...Where philosophy of the early Modern Age mentions such effects of resonance and infection, it spontaneously draws on the vocabulary of magological traditions. As easy as antiquity, it was reflection on affective causalities of the magical type that initiated the clarification of the interpersonal or inter demonic concert, which, from Plato's time on, was interpreted as a work of eros. (208)

Tracing this genealogy magological of relation from the Middle Ages and the Early Modern Age allows for Sloterdijk to contrast the spheres' model of relationality to that of subjectivity, which he, after Lacan, refers to as the psychoanalytic model. In large part, he does this to tie it to Judeo-Christian understandings of The Law, which "does not encourage merging, but constantly makes the case for constructive separations; its focus is not intimate fusion, but rather the discretion of the subject in relation to the other" (217). The Law model of subjectivity, we can argue, is the basis for so many of the recent theories of the subject that are no doubt derivative of Lacan and Althusser. In the Althusserian version, which I think Sloterdijk has in mind although he more explicitly takes aim at Lacan, the subject is the subject of ideology, constituted in and through the ISAs (Ideological State Apparatuses) that have surrounded the subject's entire identity through various layers of institutional identity formation and recognition. Thus, when the police officer hails you, the subject was always already interpellated, as evidenced by the subject's assumption that it is he that office is addressing. Put in juxtaposition to Sloterdijk, this model seems to be top-down in that there is no theory of "bindability" beyond the superstructural notion of "ideology." This amounts to sacrificing the "relationships between things" for "being-in-itself" (220). Put differently, Sloterdijk identifies in this model of subjectivity an overemphasis on the ontic.

The question of the ontic most certainly leads to questions around notions of thinghood and objects. Especially nowadays, there has been a flurry of philosophical interest in ideas of object-oriented ontology. "Things" or objects are a subject of serious theoretical inquiry. Sloterdijk, hardly a source for many of the thinkers associated with OOO and speculative realism, nevertheless shares these analytic concerns.<sup>[3]</sup> Subjectivity is but one rather convenient level for him to begin. It is a point of entry, not his primary intellectual concern. Nevertheless, the importance of relationality brings Sloterdijk to theorize objects, those very entities whose relations he expresses such profound interest in. In large part, he uses the term "nobject" from Thomas Macho, a German cultural theorist whose work has not quite reached the English-speaking theory world quite yet.<sup>[4]</sup> In Sloterdijk's rendering, nobjects are "things, media or persons that fulfill the function of the living genius or intimate augmenter for subjects" (467). They are "objects that...are not objects because they have no subject-like counterpart" (294). His examples of "nobjects" include air as well as placental blood. Air, he writes, "possesses unmistakable nobject properties as it affords the incipient subject a first chance at self-activity in respiratory autonomy, but without ever appearing as a thing with which to have a relationship" (295). Placental blood is one of the many images of the gynecological register that Sloterdijk draws from throughout the work. The womb is of particular importance to Sloterdijk as it functions to counter the assumed importance of "primary narcissism" (320). Instead, he says that there is a primary duality, which is born out not only in art (a privileged area of evidence for Sloterdijk) but also in mythology. This leads him to venture into some rather odd places. For instance, in a chapter on what he calls "the primal companion," he spends a lot of space on what he calls the "sanitization of afterbirth." There, he argues that the importance of afterbirth which subsequently suffered from a "bourgeois-individualist" attempt to retroactively isolate the subject. He even goes so far as to offer a periodization. He notes that "modern individualism could only enter its intense phase in the second half of the eighteenth century, when the general clinical and cultural excommunication of the placenta began" (384). Thus the "lonely modern subject" is a "fission product from the informal separation of birth and afterbirth. Its positively willful being is tainted by a fault to which it will never admit: that it rests on the elimination of its most intimate pre-object" (386). Hence, the Modern Age can be thought of as defined by "placental nihilism."

Undoubtedly this is stylization taken to the nth degree. But there is something to Sloterdijk's overuse of the metaphor. He views the maternal relationship as the proto-type for his theory of relationality in spheres—"proto-subjectivity." "[I]ntimacy is a transmission relationship . . . not taken from the symmetrical alliance between twins or like-minded parties, where each mirrors the other, but from the irresolvable asymmetrical communion between the maternal voice and the fetal ear" (511). While one could not blame any reader for being fed up with Sloterdijk's "illustrative" method, there is, in my mind at least, a method, that is, a clear intention on the part of Sloterdijk. The imagistic aspect of his illustrative method is born out in not only the

dearth of examples that he uses, but in the countless photographs and illustrations that Sloterdijk includes in *Bubbles*.

But returning to the issue of spheres and proto-subjectivity, Sloterdijk does not necessarily spend all of his efforts in a nostalgic explication for a time where ontological thinking was not devoid of magolological or erotological elements. Instead, he suggests that “modern mass culture” already exhibits this sort of reality of spheres as it “offers new, direct ways of fulfilling the desire for homeostatic communion.” He goes on to argue that “pop music and its derivatives” allow for the “possibility of diving into a body of rhythmic noise in which critical ego functions become temporarily dispensable” (527). These sorts of communions share in common with religious communions the opportunity for “absorption,” as he calls it. The most telling of examples he provides is that of the Love Parade, held in Berlin for a long time but later moved to other cities in Germany. Up until its recent cancellation, the Love Parade was characterized by its particularly EDM (electronic dance music)-heavy focus, exhibitionist ethos, and the sheer number of attendees with figures (though disputed) reported to be in the hundreds of thousands. Of this festival, Sloterdijk writes:

...[T]hey could easily be called “Truth Parades,” as their aim is to absorb large numbers of people, all of whom value the attributes of their individuality, into happy, symbiotic reversible and thus “true” sonospheres. These communions with the audio gods or the rhythmic juggernauts are based on the same truth model as post-Freudian psychoanalysis—with the difference that the latter recommends that its clients develop a strict individual rhetoric of mourning for the lost primal object, while integristic music therapy in the streets relies on drug-assisted group euphorias that may advance flirtation with absorption into a spheric primal body in the short term, but yield little profit for the participants’ media competence in the sobering periods that follow (527–528).

It is in this unlikely example of the Love Parade, where I believe the key to Sloterdijk’s “theory of the shared inside” lies. By viewing this music festival as “communion,” and thus employing a religious register, Sloterdijk arguably betrays, what I view to be, his true intellectual concerns—theology. In showing that “life is always a life-in-the-midst-of-lives, Being-in, then, should be conceived as the togetherness of something with something in something” (542), Sloterdijk ends up using the theological concept of “perichoresis,” which the Protestant German theologian Jürgen Moltmann in his *God in Creation* describes as “the principle of mutual interpenetration.”

In Moltmann’s theology, all relationships “are analogous to God.” This is characterized by a “primal, reciprocal indwelling and mutual interpenetration,” which in theological terms is called perichoresis: “God in the world and the world in God; heaven and earth in the kingdom of God, pervaded by his glory.” This mutual interpenetration disabuses the notion of a solitary life. Against a panpsychic Leibnizian monadology, which sees ontologically individual beings that coordinate with another through a divine pre-established harmony, Moltmann describes the principle of mutual interpenetration as all living things “[living] in another and with one another, from one another and for one another” (Moltmann 17). This is analogous to Sloterdijk’s “onto-theology.”

Yet, no matter how novel Sloterdijk’s overall argument, and mode of argument, in the end, it is rather familiar because it is, even according to him, a corrective. *Bubbles*, and the *Spheres* trilogy generally, is an attempt to demystify, a tact nearly identical to the theoretical methods of Rudolf Bultmann but also—surprisingly—the Frankfurt school, especially Adorno and Horkheimer. To demythologize is to suggest that if we simply understood the proper genealogy of a particular concept at the root of contemporary metaphysics, it would make for a better world. For Sloterdijk, it is “sphere,” whereas for the Frankfurt School, it was “mass culture.” For all of their public back-and-forths regarding the German welfare state, it seems that Sloterdijk and Honneth, the current director of the Frankfurt Institute for Social Research, have more in common than previously imagined.

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#### Notes

[1] While most of this exchange never made it to English-language publications, much of it has been chronicled on blogs. See Gregersen, Thomas. "Axel Honneth Versus Peter Sloterdijk." *Political Theory – Habermas and Rawls*. 26 Sept. 2009. Web. 25 Sept. 2012; Shingleton, Cameron. "The Great Stage: Axel Honneth: Against Sloterdijk (Die Zeit, 24 September, 2009)." *The Great Stage*. 11 Feb. 2010. 25 Sept. 2012.

[2] One cannot but help to think of the continual resonance between Sloterdijk's project and the recent work of Jean-Luc Nancy. This is the case not only with the recent work by Nancy on religious themes and globalization but also his earlier work on "communality" and "singular plurality."

[3] There are many books and other writings, mostly on the World Wide Web, on object-oriented ontology. The best definition of OOO has come from videogame theorist Ian Bogost. That can be found at: Bogost, Ian. "What Is Object-Oriented Ontology?" *IAN BOGOST – VIDEOGAME THEORY, CRITICISM, DESIGN* 8 Dec. 2009. Web. 26 Sept. 2012. Of the books, the following anthologies provide suitable introductions. Bryant, Levi, Nick Srnicek, and Graham Harman. *The Speculative Turn: Continental Materialism and Realism*. re.press, 2011. Harman, Graham. *Towards Speculative Realism: Essays and Lectures*. O Books, 2010.

[4] There seems to be almost nothing of Macho's translated into English. He does, however, have a web site. <http://www.culture.hu-berlin.de/tm/>

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### 8.2.4 Andreas Platthaus

Andreas Platthaus. Verantwortlicher Redakteur für Literatur und literarisches Leben. FAZ

## 9 Rezensionen peter-sloterdijk-du-musst-dein-leben-aendern-der-dreizehnkampfrekordhalter

<https://www.faz.net/aktuell/feuilleton/buecher/rezensionen/sachbuch/peter-sloterdijk-du-musst-dein-leben-aendern-der-dreizehnkampfrekordhalter-1926899.html>

Für einen Denker wie Peter Sloterdijk ist die höchste sportliche Herausforderung gerade recht und die natürliche Überlegenheit des Dezimalsystems kein Maßstab. Also ist ihm der Zehnkampf noch zu wenig als Muster für die Disziplinen, die es im Ideenwettkampf zu bewältigen gilt. Stattdessen proklamiert er einen Dreizehnkampf jenes intellektuellen Bemühens, das er als „Allgemeine Disziplinik“ bezeichnet. Zu bedenken und selbstverständlich auch denkend zu bewältigen gilt es demnach die Fragen von Akrobatik und Ästhetik, Athletik, Rhetorik, medizinischer Therapeutik, Epistemik, Berufe-Kunde, Technik-Kunde, Administrativik, Meditation, Ritualistik, Sexualpraxiskunde, Gastronomie und schließlich – weil dreizehn Disziplinen ja doch nicht genügen – eine „offenen Liste kultivierungsfähiger Aktivitäten, deren Offenheit die Unabschließbarkeit des disziplinenbildenden und damit Subjektivierungen ermöglichenden Feldes selbst bedeutet“.

Das klingt kompliziert, aber an dieser letzten Formulierung kann man nicht vorbei, weil sie umreißt, was das Thema von Sloterdijks heute erscheinendem neuen Buch ist. Es heißt „Du musst dein Leben ändern“, nach dem Schluss von Rilkes Sonett „Archaïscher Torso Apollos“, und als Adressaten des Titels darf man gewiss auch die eigenen Kollegen identifizieren, denn der in Karlsruhe lehrende Philosoph hat sich nicht weniger vorgenommen als die Umstürzung aller Bewertungen. Was die westliche Zivilisation an metaphysischen Maßstäben vor allem in der Neuzeit herausgebildet haben, ist hinfällig, weil die wichtigste Bezugsgröße auf einem Irrtum beruhte: der Religion. Die gibt es gar nicht, stellt Sloterdijk mit einem verbalen Donnerschlag bereits in der Einleitung fest, wir haben sie uns selbst ausgedacht: als Missverständnis einer anthropologischen Konstante, die Sloterdijk unter dem Begriff der „Übung“ fasst.

## 10 Üben als zentrale Praktik

Ihr Prinzip beruht auf der „immunitären Verfassung des Menschenwesens“, also dessen Bestreben, sich materiell, symbolisch und rituell zu perfektionieren, um damit individuelle Schutzgewebe zu schaffen. In der Immunisierung sieht Sloterdijk den Beginn aller Systembildung: der biologischen, die sich in Lebewesen artikuliert, und der kulturellen, die ihren Ausdruck in Praktiken findet. Eine dieser Praktiken – und zwar die zentrale – ist die Übung. Und damit werden Wettkämpfe vorbereitet – im agonalen Sinne der Antike, also nicht im neuzeitlichen Verständnis der Konkurrenz.

Die Disziplinen von Sloterdijks intellektuellem Dreizehnkampf sollen sich allen Werkzeugen widmen, mit denen Menschen an ihren Schutzgeweben arbeiten. Als bisherigen Rekordhalter identifiziert Sloterdijk den Kollegen Foucault, der sich immerhin auf sieben der Denkaufgaben eingelassen habe, während die meisten Philosophen sich allein an die Epistemik als ihr eigentliches Fach und bestenfalls noch an drei weitere gewagt hätten. Aber natürlich musste erst Sloterdijk selbst kommen, um es mit der ganzen wilden Dreizehn aufzunehmen.

## 11 Akrobatik, Ästhetik, Athletik

Das passiert nicht in „Du musst dein Leben ändern“ allein. Bestimmte Fragenkomplexe finden sich bereits in anderen Büchern Sloterdijks angesprochen, so vor allem in der „Sphären“-Trilogie die Bereiche der Therapeutik, Technik-Kunde oder Sexualpraxiskunde, und in „Der Weltinnenraum des Kapitals“ Teile von Administrativik, Rhetorik und Ritualistik. Im neuen Werk sind es nun vor allem die ersten beiden Disziplinen, in denen Sloterdijk sich übt: Akrobatik und Ästhetik sowie Athletik. Denn in dem Maße, wie das Üben zum neuen Schlüsselbegriff Sloterdijks geworden ist, rückt auch der Begriff der Leistung in den Vordergrund – nicht nur als sportliche Wettkampfmethaphorik. Doch es wäre, wie bereits angedeutet, für Sloterdijk ein Unding, wenn man darin Leistungen im Sinne des neuzeitlichen Gesellschaftssystems erkennen würde, dem er völlige Verirrung deshalb attestiert, weil es die Übungskultur umgemünzt habe zu Training, Ausbildung und Arbeit – also zu Übungen, die nicht länger spirituell-individuelle Ziele verfolgen, sondern einem reibungslosen Teamgeist dienen sollen, der die moderne Arbeitsteilung erst ermöglicht. Was Sloterdijk dagegen zum Ideal erhebt, ist eine Übungskultur, die in der Askese ihre Methode findet.

### 11.1 Critique by Axel Honneth

<https://www.zeit.de/2009/40/Sloterdijk-Blasen/komplettansicht>

AG: This really "remarkable" (be-denkens-wert) if you know what the *Frankfurter Schule* is, and why they have such a liking for Peter Sloterdijk and vice versa. To understand this better, one should also know the nice professor *Habermas*, who is probably behind the scenes of this whole theater. *Habermas and Sloterdijk really loved to hate each other. As much as an arch-enemy can love his arch-enemy. Because without the enemy one would have nothing serious to think of. As I have said this in my chapter on the friendly enemy, and why the enemy is good for the intelligence.* When I read the article by Axel Honneth, I am reminded of the *General Law of German philosophy*, that a serious scholar should be careful never to write a sentence shorter than 4 to 7 lines of text. This is just to ensure that every reader recognizes the *superior erudition and intelligence of the writer*. This tradition was especially pioneered by *Kant and Hegel*, and has since then been the *Gold Standard of German philosophical writing*. Any philosopher who writes sentences shorter than that is viewed with the suspicion that he may be *a writer of popular entertainment*.

<https://www.heise.de/newsticker/meldung/Missing-Link-Auch-eine-Geschichte-der-Oeffentlichkeit-Habermas-und-der-Maulwurf-der-Vernunft-4453432.html>

<https://www.spiegel.de/plus/juergen-habermas-90-geburtstag-der-zwanglose-zwang-des-besseren-arguments-a-00000000-0002-0001-0000-000164523797>

### 11.2 Nietzsche, Zarathustra: Ihr Einsamen von heute, ihr Ausscheidenden

I think that this passage is very good for an introduction because "*Ausscheidenden*" has a double meaning in German. It also means "to excrete", as above so below, we could say.

Wahrlich, ich rathe euch: geht fort von mir und wehrt euch gegen  
Zarathustra! Und besser noch: schämt euch seiner! Vielleicht betrog er euch.  
Der Mensch der Erkenntniss muss nicht nur seine Feinde lieben, sondern  
auch seine Freunde hassen können.  
Man vergilt einem Lehrer schlecht, wenn man immer nur der Schüler  
bleibt.

...

Ihr sagt, ihr glaubt an Zarathustra? Aber was liegt an Zarathustra!  
Ihr seid meine Gläubigen: aber was liegt an allen Gläubigen!  
Ihr hattet euch noch nicht gesucht: da fandet ihr mich. So thun alle

Gläubigen; darum ist es so wenig mit allem Glauben.  
Nun heisse ich euch, mich verlieren und euch finden; und erst, wenn  
ihr mich Alle verleugnet habt, will ich euch wiederkehren.

### **11.3 Professor für Philosophie Axel Honneth**

<https://www.zeit.de/2009/40/Sloterdijk-Blasen/komplettansicht>

Er ist Professor für Philosophie an der Goethe-Universität Frankfurt am Main und seit 2001 Direktor des dortigen Instituts für Sozialforschung, der in den zwanziger Jahren gegründeten »Geburtsstätte« der Kritischen Theorie. Einer breiteren Öffentlichkeit bekannt wurde Honneth mit seinem Buch »Kampf um Anerkennung« (Suhrkamp Verlag), das an den jungen Hegel und den amerikanischen Pragmatisten George Herbert Mead anknüpft. Honneths Philosophie zielt auf eine Kritik an den sozialen Verwerfungen moderner Gesellschaften; ihre Themen sind »Entfremdung«, »Verdinglichung« und »Anerkennungsvergessenheit«. Axel Honneth veröffentlichte zuletzt (zusammen mit Beate Rössler) die Studie »Von Person zu Person. Zur Moralität persönlicher Beziehungen«. Zu seinem 60. Geburtstag (ZEIT Nr. 30/09) erschien – ebenfalls bei Suhrkamp – eine 700 Seiten starke Festschrift mit Beiträgen unter anderem von Nancy Fraser, Eva Illouz, Luc Boltanski, Charles Taylor und Michael Walzer.

#### **11.3.1 Die dreibändigen Sphären waren des Umfangs zu viel...**

Hier ist das Zitat:

Gewiss, die dreibändigen Sphären waren des Umfangs zu viel, um sie sich Seite für Seite auch nur zur Ansicht zu bringen; hier reichte die Kenntnisnahme der schwermütigen These, dass wir alle schon im intrauterinen Zustand ein Gefühl der räumlichen Geborgenheit entwickeln, für welche wir, einmal zur Welt gebracht, dann keinen hinreichenden Ersatz mehr finden. Dieser poetische Philosoph war unzufrieden mit den Umständen in anderer Weise, als es die schnöde Gesellschaftskritik der Alten gewesen war; der kritische Einwand galt nicht der institutionellen Einrichtung unseres Gemeinwesens, nicht dem Mangel an sozialer Gerechtigkeit, sondern der Dürftigkeit einer ganzen Kultur, die den harten Gegebenheiten unseres Daseins nicht ins Angesicht zu schauen wagte. Der methodische Zugang, den sich Sloterdijk zu diesen Tatsachen des sozialen Lebens verschaffte, war allerdings alles andere als von philosophischer Raffinesse; so, als habe es Foucaults Einwand gegen den anthropologischen Essenzialismus nie gegeben, so, als seien alle Warnungen vor der Behauptung kultureller Universalien und menschlicher Invarianten in den Wind zu schlagen, ging Sloterdijk schlicht davon aus, dass es bei genauerem Hinsehen eine Reihe von unvermeidlichen Triebkräften im zivilisatorischen Geschehen zu entdecken gäbe. Auf seinem Weg ins Verheißung suchende Milieu schien der Autor alles vergessen zu haben, was er ursprünglich, etwa in einem frühen, glänzenden Aufsatz zu Foucault, selbst einmal geschrieben und gedacht hatte, sodass er nun frei war, eine Art von intuitiver Wesensschau zu betreiben. Um die Schriften des Autors hatte sich in nur wenigen Jahren ein Kokon aus Verehrung, Faszination und schelmischer Sympathie gelegt, an dem vom postmodernen Rundfunkredakteur bis zum alternden Goethe-Instituts-Direktor viele munter webten: Endlich war da jemand der argumentativ überpeniblen, in sich selbst kreisenden Sozialkritik entgegengetreten, hatte deren Fixierung auf die nur mediokren Werte der Gleichheit oder Gerechtigkeit bloßgestellt und uns einen ersten Eindruck von den viel tiefer liegenden, wahrhaften Kräften geschichtlicher Zusammenstöße vermittelt. Allerdings waren auch nach dieser ersten Staffel von Schriften die erlösenden Worte, auf die das zum Meister hochblickende Milieu so begierig wartete, noch nicht gefallen. Sloterdijk hatte in seiner Wesensschau zwar inzwischen die unterschiedlichsten Sachverhalte zutage gefördert, war unerschrocken dem heimlichen Sinn all unseres gentechnischen Experimentierens auf die Schliche gekommen und der ehernen Triebökonomie des Politischen nachgegangen, aber der unter den Nägeln brennenden Frage nach dem sozialen Antagonismus unserer Tage hatte er seine Aufmerksamkeit noch nicht gewidmet. Wie als könne er sein Publikum nicht länger dürsten lassen, machte sich Sloterdijk daher bald nach der Jahrhundertwende daran, unter dem wuchtigen Titel Zorn und Zeit ( Suhrkamp Verlag ) eine "politisch-psychologische" Analyse der Kämpfe im gegenwärtigen Zeitalter zu verfassen. Wieder ist der methodologische Leichtsin, mit dem dabei verfahren wird, atemberaubend, eine bloße Rückerinnerung an die angebliche Trieblehre der Antike soll ausreichen, um uns mit dem notwendigen Rüstzeug einer solchen Gegenwartsdiagnose auszustatten.

Der psychologischen Auffassung der Griechen zufolge, so will uns Sloterdijk ohne jede Kenntnisnahme der neueren Forschungsliteratur weismachen, sei der Mensch neben seinem erotischen Verlangen mindestens ebenso stark von einem "Streben nach Erfolg, Ansehen, Selbstachtung" beherrscht; diese "thymotischen Energien", von der Neuzeit mit der Ausnahme einiger großer Denker ignoriert und von der Psychoanalyse endgültig aus unserem Selbstverständnis verbannt, bildeten den eigentlichen Grundstoff aller politischen Zusammenstöße, weil es in ihnen letztlich nämlich immer um die kollektive Rückeroberung von "Stolz" und "Ehre" ginge. Man will gar nicht erst beginnen, schon hier auf eine gewisse begriffliche Differenzierung zu drängen, besteht doch ein großer Unterschied darin, ob jenes Verlangen auf die Zustimmung des Gegenübers zielt oder sich gerade darüber hinwegsetzen will, also nach intersubjektiver Anerkennung oder nach vermittlungsloser Selbstermächtigung strebt; auch scheint es wenig ergiebig, an dieser Stelle darauf

hinzuweisen, dass so unterschiedliche Theoretiker wie George Sorel oder Barrington Moore schon viel früher auf die Schlüsselrolle der "Ehre" in der Motivierung politischer Bewegungen aufmerksam gemacht haben. Alles das schert Sloterdijk wenig, denn er will auf Wichtigeres hinaus, etwas, das uns in unserem gegenwärtigen Selbstverständnis elementar erschüttert. Wir lernen weiter, dass das Gegenstück zum Stolz, über den die im "Kampf um Anerkennung" (Sloterdijk) Überlegenen verfügen, das Ressentiment derjenigen ist, die von nun an einen untergeordneten Rangplatz in der gesellschaftlichen Statushierarchie einnehmen müssen; um die Schmach dieser Subordination abzuschütteln, werden von hier unten aus moralische Werte der Selbstbeschränkung und der Gleichbehandlung in die Welt gesetzt, in deren Licht die Mitglieder der zum Erfolg gelangten Schichten als Versager dastehen müssen. Insofern besteht das zivilisatorische Geschehen, wie es in bloßer Wiederholung von Nietzsche heißt, in nichts anderem als den immer gleichen Auseinandersetzungen zwischen lebensbejahenden und lebensfeindlichen Gruppierungen, zwischen Kollektiven, die in Stolz ihr Dasein genießen, und solchen, die jenen ihre Vitalität zu verleiden versuchen.

Die einzig originelle Wendung, die Sloterdijk dieser altbekannten Doktrin verleiht, ergibt sich nun aus dem gegen Nietzsche gerichteten Gedanken, dass in den vergangenen zweihundert Jahren die christliche Ethik den Schwachen gerade nicht ein Instrument ihres Ressentiments und Rachefeldzugs habe sein können; denn die im jüngeren Christentum überlieferten Werte und Normen seien von einer derart "humanitär-übersinnlichen" Art gewesen, dass sie den Ansatzpunkt für eine ideelle Attacke gegen die Privilegierten und Begüterten keinesfalls hätten bieten können. Also bedarf es nach Sloterdijks Auffassung einer "noch tiefer ansetzenden Reflexion", um aus dem verschwommenen Dunkel der vergangenen Kämpfe erfolgreich die Werte ans Licht zu zerren, die den "Ressentimentbewegungen" des 19. und 20. Jahrhunderts tatsächlich als Mittel ihrer verschlagenen Revanche haben dienen können – und man ahnt schon, dass jetzt die Schlüsselparole nicht mehr allzu fern ist, auf die die deutungshungrige Gemeinde schon so lange wartete.

Um es kurz zu machen: Nach Sloterdijk sind diese moralischen Werte und Normen diejenigen, die sich die Gleichheitsfanatiker der unterschiedlichsten Couleur auf die Fahnen geschrieben haben, um mit deren Hilfe die Massen zur Attacke auf die bestehenden Verhältnisse zu bewegen. Was hier unter solchen Gleichheitsforderungen verstanden werden soll, bleibt im Ganzen ziemlich unklar, gemeint sind im historischen Prozess aber alle "nationalistischen" und "internationalistischen" Bewegungen, nur dass die ersten soziale Gleichheit ausschließlich für die jeweils nationale Bevölkerung eingeklagt haben, während sie die zweiten für alle Erdenbürger und -bürgerinnen zu reklamieren versuchten. Von hier aus ist es nicht weit zu der Behauptung, dass die weltgeschichtlichen Katastrophen des 20. Jahrhunderts durch den Aufstand von zwei "Zornkollektiven" angezettelt wurden, in denen Intellektuelle, die neuen "Weltgeistlichen des Hasses", den aus Beschämung und Geringschätzung entstandenen Zorn der Massen durch moralisch-humanistische Parolen gegen die Eliten zu organisieren wussten. Irgendwie meint man das alles schon zu kennen, glaubt, ein Amalgam aus Gehlen und Ernst Nolte vor sich zu haben, nur dass die Gleichsetzung von Faschismus und Sozialismus und deren gemeinsame Rückführung auf Motive der Gier und des Ressentiments hier hemdsärmeliger, ja protziger daherkommt.

Selten wohl ist vergangenes Gedankengut, das schon zu seiner Zeit nur dumpfe Ängste und Abwehrhaltungen verriet, mit so viel Aplomb wieder aufgefrischt worden, um es als neuestes Stichwort zur geistig-politischen Lage der Gegenwart auszugeben. Gegen Gehlens Moral und Hypermoral, aus der einige der zentralen Verbindungsglieder in Sloterdijks Argumentation zu stammen scheinen, ist schon vor vierzig Jahren eingewandt worden, dass die Gleichsetzung einer um Werte der nationalen Ehre und Solidarität kristallisierten Binnenmoral mit dem moralischen Universalismus des "Internationalismus" übersieht, mit welcher unterschiedlicher Absicht sich jeweils auf "Gleichheit" berufen wurde: Während dort die im Inneren erstrebte Egalität aller Angehörigen derselben nationalen Herkunft nur die moralische Kehrseite der nach außen gerichteten Bekämpfung des gemeinsamen Feindes war, fällt hier zumindest der Idee nach jeder polemische Bezug auf eine äußere Gruppierung weg, weil alle Mitglieder der Menschheit in den Genuss gleicher Rechte kommen sollen. Die Wertsysteme des Nationalismus und des Internationalismus stellen daher nicht, wie Sloterdijk uns mit Gehlen glauben machen möchte, zwei Seiten ein und desselben humanistischen Gleichheitsideals dar, sondern bilden unterschiedliche Stufen in der Entwicklung der Sozialmoral.

Nicht besser ist es um Sloterdijks These bestellt, derzufolge die moralische Wut und Empörung der sozial benachteiligten Massen nur mit Motiven eines gegen die Privilegierten gerichteten Ressentiments zu erklären seien; hier fragt man sich, warum der Umweg über eine solche Trivialpsychologie genommen werden muss, wenn doch die politischen Verfassungen westlicher Demokratien die Betroffenen geradezu dazu auffordern, von dem begründeten Anspruch auf rechtliche Gleichbehandlung Gebrauch zu machen. Im Kampf gegen soziale Diskriminierung und ökonomische Benachteiligung versuchen die jeweiligen Akteure nur umzusetzen, was ihnen die moralischen Prinzipien des modernen Rechtsstaates versprechen; dazu ist keine Gier nötig, kein Neid und kein Ressentiment. Natürlich steht es jedem Autor frei, beliebig auf Gedankenmotive der Vergangenheit zurückzugreifen. Aber es bedeutet, Normen der intellektuellen Redlichkeit zu verletzen, wenn dabei das Alte als das Allerneueste ausgegeben wird, nur um sich die Diskussion der längst vorgebrachten Gegenargumente zu ersparen.

Nun stellen die bislang wiedergegebenen Spekulationen für unseren Autor offenbar nur philosophische Lockerungsübungen dar, die jenen politischen Faustschlag vorbereiten helfen sollten, zu dem er dann am

10. Juni 2009 in der FAZ endlich ausgeholt hat. Aus der "politisch-psychologischen" Einsicht in die ewige Wiederkehr des Kampfes zwischen den zu Recht Privilegierten und den neidvoll Schlechtergestellten muss doch irgendwann einmal die Konsequenz gezogen werden, das ungute Treiben wenigstens für einen historischen Augenblick lang stillzustellen; dafür kann es nach geschichtsphilosophischem Maß nur die Lösung geben, den Bessergestellten endlich das zu geben, was sie wirklich verdienen, um ihnen derart die Chance zu stolzen, freiwilligen Geschenken nach unten zu gewähren. Die politische Parole für dieses Programm lautet, man glaubt es kaum, "Steuerstreik".

Aus einsamer Höhe verkündet Sloterdijk die lang ersehnten Parolen zur politischen Gestaltung der Zukunft, Parolen, in denen dem rührseligen Traum vom Sozialstaat endlich der Garaus gemacht wird. Sloterdijk knüpft an einige Überlegungen an, die er schon in Zorn und Zeit angestellt hatte, um aus der Lehre von den unserer Zivilisation zugrunde liegenden Energien des Stolzes und der Selbstachtung die Konsequenzen für eine Neuorganisation unserer kapitalistischen Wirtschaft zu ziehen; unter dunkler Berufung auf Georges Bataille war dort die Rede davon gewesen, dass die Reichen und Begüterten nur dann die ihnen kulturell auferlegte "Selbstverachtung" abschütteln könnten, wenn sie in einer "Ökonomie des Stolzes" ihr Vermögen in "schönen Handlungen" der freiwilligen Besenkung nach unten an die Bedürftigen verteilen würden. Das sollte im Klartext so viel heißen wie, dass jede staatliche Pflicht zur Abgabe vom eigenen Reichtum diesen Besitzern nur eine Kränkung des Gefühls wohlverdienten Erfolgs bereite, während dessen souveräne Verausgabung bei den Mitgliedern jener Schichten eine Empfindung beglückender Großherzigkeit auslöse. Hier machte sich jemand, so viel ist klar, sehr ernsthaft Gedanken darüber, wie es in Zeiten einer wachsenden Schere zwischen Arm und Reich um die von der "miserabilistischen" Linken vernachlässigte Seite bestellt ist; genug der Klage über die wachsende Zahl der Arbeitslosen, genug auch der trostlosen Beschäftigung mit dem Leben da unten, ist es nicht viel erbärmlicher und schmachvoller, auf Teile seines selbst verdienten Vermögens unter sozialstaatlichem Zwang verzichten zu müssen!

Diese unausgegorenen Überlegungen, in denen an keiner Stelle geklärt wird, warum ein etwa durch Vererbung oder finanzielle Spekulationen erworbenes Vermögen im Sinne irgendeiner Leistung rechtmäßig "verdient" sein soll, liefern Sloterdijk in seinem Artikel nun die Grundlage für eine politische Programmatik revolutionären Zuschnitts. Mit dem Mut des Freidenkers prüft Sloterdijk, mit welchen Mitteln die historischen Gewinner, die Reichen und Vermögenden, dem grausamen Spiel der stets wachsenden Beschämung ihrer Leistungen ein Ende setzen könnten; das Ergebnis dieses In-sich-Gehens des Autors stellt der Artikel Die Revolution der gebenden Hand dar.

Schon der Titel des kurzen Beitrags soll deutlich machen, dass hier jemand über nichts Geringeres nachdenkt als über einen Umsturz all unserer herkömmlichen Werte und Gepflogenheiten; mit einer bloßen Reparatur der gegebenen Gesellschaftsordnung ist es für Sloterdijk nicht getan, wenn so Großes auf dem Spiel steht wie die elende Lage der herrschenden Klassen. Diese könnten sich ihrer beschämenden Situation nur erwehren, so argumentiert Peter Sloterdijk, wenn sie zu politischen Mitteln der Gegenwehr griffen, die den Grund ihrer Beschämung aus dem Weg zu räumen vermöchten; und dieser Grund, die Wurzel allen Übels ist, wie wir weiter lesen, in nichts anderem zu vermuten als der bloßen Existenz des Sozialstaates, jener gigantischen Wohlfahrtseinrichtung, mit deren Hilfe sich die Benachteiligten im Schulterchluss mit den moralisierenden Intellektuellen an den Vermögenden schadlos hielten – so zentral ist Sloterdijk diese Einsicht, so wichtig das damit verknüpfte Anliegen, dass er den "Steuerstaat" ein wenig zusammenhanglos auch in seinem neusten Buch Du musst dein Leben ändern ( Suhrkamp Verlag) wieder zur Erwähnung bringt, wo er unter Verweis auf Friedrich August von Hayek als "real existierender liberal-fiskalischer Semi-Sozialismus" bezeichnet wird.

Man muss auch das damit angedeutete Argument erst mehrmals in Augenschein nehmen, bevor einem dämmert, welche verschrobene These da mit Nonchalance in die Welt gesetzt wird: der Sozialstaat, in Deutschland das Produkt der von oben durchgeführten Reformen Bismarcks, in England oder Frankreich das Resultat erbitterter Kämpfe der Arbeiterbewegung, soll nichts anderes hervorbringen als eine institutionalisierte "Kleptokratie", eine politische Einrichtung also, die die Schlechtergestellten erfolgreich hätten etablieren können, um sich von den Vermögenden finanziell anzueignen, was sie in blindem Ressentiment für unrechtmäßig erworben hielten. Eine kleine Rückerinnerung reicht aus, um die damit entwickelte Behauptung als baren Unsinn zu erkennen, der sich einer Mischung aus historischer Ignoranz und theoretischer Chuzpe verdankt.

Bei ihren kollektiven Bemühungen, Maßnahmen der ökonomischen Umverteilung durchzusetzen und auf diesem Weg soziale Rechte zu erkämpfen, konnten sich die wirtschaftlich schlechter gestellten Schichten während der kapitalistischen Industrialisierung von Anfang an auf zwei verschiedene Quellen der moralischen Legitimierung stützen: Zum einen sprang ins Auge, dass das rasch wachsende Geldvermögen von Teilen der bürgerlichen Klasse nur in geringem Umfang mit eigenen Leistungen und Anstrengungen, in viel größerem Maße aber mit dem Zufall der familialen Herkunft und den enormen Erträgen aus unproduktivem Eigentum zu tun hatte; warum aber sollte es denjenigen, die bloß glückliche Umstände in die Lage zur Vermehrung ihres Reichtums versetzt hatten, so viel besser gehen als den Schichten, deren Mitglieder mit produktiver Arbeit tagtäglich zur Erhöhung des Volkseinkommens beitrugen? War es somit auf der einen Seite die Berufung auf das vom Bürgertum selbst propagierte Leistungsprinzip, was den lohnabhängigen, häufig verarmten Schichten als moralische Grundlage ihres Kampfes für Umverteilungen

dienen konnte, so auf der anderen Seite die konsequente Auslegung der in den demokratischen Verfassungen verbrieften Bürgerrechte: War darin nicht allen Mitgliedern der neu entstehenden Gesellschaften zugesichert worden, als Gleiche unter Gleichen angesehen und behandelt zu werden, sodass mit Fug und Recht solche sozialen Bedingungen erstritten werden durften, unter denen jeder Bürger die gleichen Chancen zur Teilnahme am gesellschaftlichen Leben besitzen würden?

Kein Ressentiment war hier nötig, um es zu wiederholen, kein Neid und keine Gier, um die Angehörigen der schlechter gestellten Schichten dazu zu motivieren, sich für eine ökonomische Umverteilung von oben nach unten einzusetzen; einzig eine resolute Applizierung der bereits etablierten, vom Bürgertum mitvertretenen Prinzipien auf die herrschenden Umstände war erforderlich, um die Konzentration von ökonomischen Vermögen in den Händen weniger als "Unrecht" zu erfahren und sich dementsprechend zu einer moralischen Gegenwehr aufgefordert zu sehen. Die ganze Idee, dass es dazu erst noch des zusätzlichen Anstoßes durch ein Gefühl des Ressentiments bedurft habe, war von Anfang an die intellektuelle Ausgeburt eines Klassenkampfes von oben. Sie wird nicht besser dadurch, dass sie in Zeiten verschärfter Sozialkonflikte regelmäßig wiederholt wird, und auch dann nicht glaubwürdiger, wenn ihr willfährige Intellektuelle wie Sloterdijk wortmächtig den Segen erteilen.

Mit der Charakterisierung des Sozialstaats als einer institutionalisierten "Kleptokratie" ist Sloterdijk jedenfalls an den Punkt seiner Argumentation gelangt, an dem er nun glaubt, erste politische Handlungsanweisungen geben zu können. Wenn der Sozialstaat als ein reines Instrument des Neids der unteren Klassen von den "produktiven Schichten" immer mehr an steuerlichen Abgaben verlange, wenn er sich gar, wie in den letzten Jahrzehnten, zu einem "geldsaugenden und geldspeienden Ungeheuer" entwickelt habe, dann sei es Sloterdijk zufolge an der Zeit, die Angehörigen der derart ausgebeuteten Eliten zur Überwindung ihrer adressierten Selbstverachtung aufzufordern; und also ergeht über unser Land der Schlachtruf an die Vermögenden und Reichen, endlich zu den ihnen zu Gebote stehenden Waffen zu greifen und einen "antifiskalischen Bürgerkrieg" zu eröffnen, um wieder zu einem Leben in Stolz und beglückender Selbstachtung zurückzufinden.

Dem befreienden Lachen, das eine solche Kampfparole aufgrund ihres Aberwitzes, ihres geradezu atemberaubenden Leichtsinns auslösen könnte, steht nur der Gedanke entgegen, dass es sich dabei um die Sätze eines von den Medien geliebten, von der politischen Öffentlichkeit verehrten und von den Akademien hochdekorierten Intellektuellen handelt. Es fällt einem wieder ein, dass sich ein SPD-, nicht ein FDP-Landesverband noch vor Kurzem mit einem Vortrag dieses Autors schmückte, es kommt einem in den Sinn, dass er im ZDF eine "philosophische" Diskussionsrunde moderiert – nur wenige mag es geben, die da nicht in ein Grübeln darüber verfallen, ob unsere demokratische Kultur nicht inzwischen einen Grad an Verspieltheit, an Ernstlosigkeit und Verquatschtheit erreicht hat, der ihren eigenen Ansprüchen Abbruch tut.

#### 11.4 Peter Sloterdijk and Computer Assisted Philosophy

It comes to my mind that Peter Sloterdijk was the first pioneering *Deutsche Geisteswissenschaftler* who started using a computer for doing multi medial work back in the 1980's. This was "Die Kritik der zynischen Vernunft, of 1983". He did something quite unprecedented, because he included a lot of pictures in his work. At those times it was pretty hard in terms of computer resources to do this. I know this myself, what a struggle it was with the personal computers of the time, to integrate text and pictures. So he was quite a pioneer in the field. Contrarily most of the *Deutsche Geisteswissenschaftler's* always abhorred to put pictures in their work. Especially the philosophers would never have to do with pictures, this was and still is something of a dogma that a philosopher may never use a picture. This is like the *Gottseibeius* of the *Philosophy business*. Sloterdijk was therefore something like an iconoclast. This is something of an irony in itself because he included iconos (or pictures) in his work. And the conventional philosophers consequently abhorred the method of Sloterdijk, and made him *persona non grata* in the philosophical circles. Such are the ironies in the history of the *Deutsche Philosophie*. And consequently no-one in the *Deutsche Philosophie* ever noticed what a pioneering work he had done. The Deutsche Philosophers just bickered so much that the style of writing and thinking of the Sloterdijk was not to their liking. Fortunately he managed to get the post of director at the University (or rather Hochschule) of *Art and Design in Karlsruhe*. This was the only institution in Germany where there was a "sort of" fusion of art and technology. And I must say this with emphasis.

[I had seen some similar works in the USA from around the same time, where it was called "Geometry and Art", Calter, Paul. Dartmouth College. Retrieved 13 August 2009.

[https://en.wikipedia.org/wiki/Mathematics\\_and\\_art](https://en.wikipedia.org/wiki/Mathematics_and_art)

Calter, Paul. "*Geometry and Art Unit 1*". *Dartmouth College*.

]

This was an institution of Art, and not of Philosophy. There he had a small circle of people like Peter Weibel, Bruno Latour, and Bazon Brock. And here he could develop his works and theories. So Sloterdijk couldn't care less what the *Deutsche Philosophers* thought of him. And he made so much money from his books,

which was on top of his salary at the Hochschule, that he was probably the richest Philosopher in all of Deutschland.

<https://www.hfg-karlsruhe.de/personen/peter-sloterdijk>

[https://de.wikipedia.org/wiki/Peter\\_Weibel\\_\(K%C3%BCnstler\)](https://de.wikipedia.org/wiki/Peter_Weibel_(K%C3%BCnstler))

Peter Weibel entwickelte diese Überlegungen ab 1969 konsequent in seinen Videobändern sowie -installationen weiter. Mit seinen Fernsehaktionen, den *teleaktionen*, die das Österreichische Fernsehen (ORF) 1972 im Rahmen der Sendung *Impulse* ausstrahlte, überschritt er die Grenzen des Galerieraumes und untersuchte die *Videotechnik* in ihrer Anwendung im *Massenmedium Fernsehen*.

Am 7. Juni 1968 nahm Weibel an der Aktion „*Kunst und Revolution*“ in einem Hörsaal der *Universität Wien* teil, wo er mit einem brennenden Handschuh einen Vortrag (*Schimpftirade*) gegen die damalige Regierung hielt. Der Vortrag trug den Titel *Was tun?*, in Anlehnung an die berühmte Lenin-Schrift *Was tun?*. Die Aktion war einer der Höhepunkte der *Studentenbewegung 1968* in Österreich.

## 11.5 Bazon Brock

[https://de.wikipedia.org/wiki/Bazon\\_Brock](https://de.wikipedia.org/wiki/Bazon_Brock)

**Bazon Brock**[1] (eigentlich *Jürgen Johannes Hermann Brock*[2]; \* 2. Juni 1936 in Stolp in Pommern)

ist emeritierter Professor für *Ästhetik* und Kulturvermittlung an der *Bergischen Universität Wuppertal*,

Künstler und *Kunsttheoretiker*. Brock gilt als Vertreter der *Fluxus-Bewegung*. [3]

Brocks Arbeitsschwerpunkte liegen auch nach seiner Emeritierung vor allem in der *Neuronalen Ästhetik* und „*Imaging Sciences*“ am Fachbereich „*Architektur, Kunst, Design, Musik*“, wo er lange Jahre Dekan war und im Besonderen als Fachdozent das Fach für „*Nicht-normative Ästhetik*“ betreut.

Er ist Mitglied der „*Forscher-Familie bildende Wissenschaften*“. Diese „*fruchtbringende Gesellschaft*“

beschäftigt sich vorrangig mit der *Kulturgenetik*, um Konzepte zur *Zivilisierung* der Kulturen auszuarbeiten.

Die Ergebnisse werden in der Reihe „*Ästhetik und Naturwissenschaften*“ im *Springer-Verlag* Wien/New York veröffentlicht.

Bazon Brock wurde am 21. November 1992 der *Ehrendoktor* der Technischen Wissenschaften von der *Eidgenössischen Technischen Hochschule Zürich* verliehen. Er ist Mitglied im *P.E.N.-Club Liechtenstein*, einem Zentrum der internationalen Schriftstellervereinigung *P.E.N.*

## 12 Neuronale Ästhetik

Im Oktober 1978 präsentierte Bazon Brock im Rahmen des *Steirischen Herbstes in Graz* „*Die neurophysiologischen Grundlagen jeder Ästhetik*“. 1993 fand in *Bonn* das von *Olaf Breidbach*, Bazon Brock und *Detlef B. Linke* organisierte Symposium „*Neuronale Ästhetik – Hirnbilder und Menschenbilder*“ statt.

„Mit der ‚*Neuronalen Ästhetik*‘ soll der Versuch gekennzeichnet werden, die begriffliche Fassung neuronaler Prozesse selber als ästhetische Operation zu entfalten und über korrespondierende Analogien zwischen ‚*natürlichen*‘, alltäglichen, jedermann von Natur aus beherrschbaren Aktivierungen seines Weltbildapparates und den weltbildkonstituierenden Operationen der Wissenschaftler und Künstler, die ja auch nur über denselben Apparat wie jedermann verfügen, erweiterte und modifizierte Konfrontationen des Geistes und des Prinzips *Leben* mit ihren Verkörperungsformen zu schaffen.“

– Bazon Brock[10][11]

### 12.1.1 Mathematics and Art

The wikipedia article gives a quite lengthy and thorough overview of the connection of Mathematics and Art. I believe that this is a way of doing mathematics that would be to the liking of many people who are mathematically inclined, but they don't care less about the formalisms and idiosyncracies of present-day *Akademik Mathematics*. I would say that if humanity had developed a more art-like kind of mathematics then we would not need any more any professor's of mathematics. Because everyone would be able to do higher level visual transformational ana-grammatics and polynomics and topology of mathematics just by visualizing it. And the worst perpetrators of the present-day quagmire of mathematics were, of course, Descartes and Leibniz. And then come the close second-places: Newton and Galileo and finally the good Euklid who had started all that nonsense. One should have never alpha-bêtize'd (like the bêtise in French) the mathematics. And all this is because the mathematicians have a special taste for what they call "elegant" formalisms, or even the "beauty" of mathematical formalisms. I have the intuition that those folks would also call the Bavarian "Wolpertinger" as the highest ideal of representing "Natural Beauty in its Purest Form". Such is the state of *Mathematical Aisthaetiks* (derives from *Ais-Thaesis*).

See also:

<http://www.noologie.de/noo04.htm#Heading234>

<http://www.noologie.de/noo04.htm#Heading236>

<http://www.noologie.de/noo04.htm#Heading237>

<http://www.noologie.de/noo04.htm#Heading238>

## 12.1.2 Wikipedia: Mathematics and Art

[https://en.wikipedia.org/wiki/Mathematics\\_and\\_art](https://en.wikipedia.org/wiki/Mathematics_and_art)

**Mathematics and art** are related in a variety of ways. **Mathematics** has itself been described as an **art motivated by beauty**. Mathematics can be discerned in arts such as **music**, **dance**, **painting**, **architecture**, **sculpture**, and **textiles**. This article focuses, however, on mathematics in the visual arts.

Mathematics and art have a long historical relationship. **Artists have used mathematics** since the 4th century BC when the Greek **sculptor Polykleitos** wrote his *Canon*, prescribing proportions based on the ratio  $1:\sqrt{2}$  for the ideal male nude. Persistent popular claims have been made for the use of the **golden ratio** in ancient art and architecture, without reliable evidence. In the Italian **Renaissance**, **Luca Pacioli** wrote the influential treatise *De Divina Proportione* (1509), illustrated with woodcuts by **Leonardo da Vinci**, on the use of the golden ratio in art. Another Italian painter, **Piero della Francesca**, developed **Euclid's** ideas on **perspective** in treatises such as *De Prospectiva Pingendi*, and in his paintings. The engraver **Albrecht Dürer** made many references to mathematics in his work *Melencolia I*. In modern times, the **graphic artist M. C. Escher** made intensive use of **tessellation** and **hyperbolic geometry**, with the help of the mathematician **H. S. M. Coxeter**, while the **De Stijl** movement led by **Theo van Doesburg** and **Piet Mondrian** explicitly embraced geometrical forms. Mathematics has inspired textile arts such as **quilting**, **knitting**, **cross-stitch**, **crochet**, **embroidery**, **weaving**, **Turkish** and other **carpet-making**, as well as **kilim**. In **Islamic art**, symmetries are evident in forms as varied as Persian **girih** and Moroccan **zellige** tilework, **Mughal jali** pierced stone screens, and widespread **muqarnas** vaulting.

Mathematics has directly influenced art with conceptual tools such as **linear perspective**, the analysis of **symmetry**, and mathematical objects such as **polyhedra** and the **Möbius strip**. **Magnus Wenninger** creates colourful **stellated polyhedra**, originally as models for teaching. Mathematical concepts such as **recursion** and logical paradox can be seen in paintings by **Rene Magritte** and in engravings by M. C. Escher. **Computer art** often makes use of **fractals** including the **Mandelbrot set**, and sometimes explores other mathematical objects such as **cellular automata**. Controversially, the artist **David Hockney** has argued that artists from the Renaissance onwards made use of the **camera lucida** to draw precise representations of scenes; the architect Philip Steadman similarly argued that **Vermeer** used the **camera obscura** in his distinctively observed paintings.

Other relationships include the algorithmic analysis of artworks by **X-ray fluorescence spectroscopy**, the finding that traditional **batiks** from different regions of **Java** have distinct **fractal dimensions**, and stimuli to mathematics research, especially **Filippo Brunelleschi's** theory of perspective, which eventually led to **Girard Desargues's projective geometry**. A persistent view, based ultimately on the **Pythagorean** notion of harmony in music, holds that everything was arranged by Number, that God is the geometer of the world, and that therefore the world's **geometry is sacred**, as seen in artworks such as **William Blake's** *The Ancient of Days*.

...

As early as the 15th century, **curvilinear perspective** found its way into paintings by artists interested in image distortions. **Jan van Eyck's** 1434 *Arnolfini Portrait* contains a convex mirror with reflections of the people in the scene,<sup>[36]</sup> while **Parmigianino's** *Self-portrait in a Convex Mirror*, c. 1523–1524, shows the artist's largely undistorted face at the centre, with a strongly curved background and artist's hand around the edge.<sup>[37]</sup>

Three-dimensional space can be represented convincingly in art, as in **technical drawing**, by means other than perspective. **Oblique projections**, including cavalier perspective (used by French military artists to depict fortifications in the 18th century), were used continuously and ubiquitously by Chinese artists from the first or second centuries until the 18th century. The Chinese acquired the technique from India, which acquired it from Ancient Rome. Oblique projection is seen in Japanese art, such as in the **Ukiyo-e** paintings of **Torii Kiyonaga** (1752–1815).<sup>[38]</sup>

...

The **Platonic solids** and other **polyhedra** are a recurring theme in Western art. They are found, for instance, in a marble mosaic featuring the **small stellated dodecahedron**, attributed to Paolo Uccello, in the floor of the **San Marco Basilica** in Venice;<sup>[13]</sup> in Leonardo da Vinci's diagrams of regular polyhedra drawn as illustrations for **Luca Pacioli's** 1509 book *The Divine Proportion*;<sup>[13]</sup> as a glass **rhombicuboctahedron** in Jacopo de Barbari's portrait of Pacioli, painted in 1495;<sup>[13]</sup> in the truncated polyhedron (and various other mathematical objects) in **Albrecht Dürer's** engraving *Melencolia I*;<sup>[13]</sup> and in **Salvador Dalí's** painting *The Last Supper* in which Christ and his disciples are pictured inside a giant **dodecahedron**.

**Albrecht Dürer** (1471–1528) was a **German Renaissance printmaker** who made important contributions to polyhedral literature in his 1525 book, *Underweysung der Messung (Education on Measurement)*, meant to

teach the subjects of [linear perspective](#), [geometry in architecture](#), [Platonic solids](#), and [regular polygons](#). Dürer was likely influenced by the works of [Luca Pacioli](#) and [Piero della Francesca](#) during his trips to [Italy](#).<sup>[75]</sup> While the examples of perspective in *Underweysung der Messung* are underdeveloped and contain inaccuracies, there is a detailed discussion of polyhedra. Dürer is also the first to introduce in text the idea of [polyhedral nets](#), polyhedra unfolded to lie flat for printing.<sup>[76]</sup> Dürer published another influential book on [human proportions](#) called *Vier Bücher von Menschlicher Proportion (Four Books on Human Proportion)* in 1528.<sup>[77]</sup>

## 12.2 Noologie: A Comparison with Peter Sloterdijk's Morphology

In his work Sphären I, II, and III (1998-2004), Peter Sloterdijk had developed an approach to morphology that is in some ways similar to the *Meta-Morphology* of the present project. I had developed my own version of morphology from about 1990 onwards in the project "Noologie" and related works. I didn't know of Sloterdijk's Sphären project until about 2010. So we were at the same time developing some similar ideas without knowing of each other's work. In my dissertation (1999) I gave a general outline of the morphological method that I was developing.

### **Design Und Zeit: Kultur Im Spannungsfeld Von Entropie, Transmission, Und Gestaltung**

<http://www.bib.uni-wuppertal.de/elpub/fb05/diss1999/goppold/>

<http://www.noologie.de/desn.htm>

<http://www.noologie.de/ag-dis.pdf>

The Dissertation project was intended from the beginning as a dual-form project:

- 1) In form of a printable book, and
- 2) in form of a www-Hypertext with many links into the www.

It also has an automatically generated Hypertext-index to give a complete reference of all basic points with the direct Hypertext jumps to the appropriate text passages. The inspiration for this form was the idea of the "Pyramidal Book" by Robert Darnton. The morphology of Noologie was developed mainly along the lines of Goethe's work, then Spengler, Nietzsche, Ruth Benedict, and with the German Gestalt Psychology and Ethnologie developments between Adolf Bastian and Hertha v. Dechend. There is also some additional material from Gregory Bateson, Whitehead and Buddhist Tradition.

<http://www.noologie.de/desn09.htm>

<http://www.noologie.de/desn13.htm>

<http://www.noologie.de/desn17.htm>

The similarities between "Design Und Zeit" and "Sphären" can be summed up with the references to Goethe and Spengler, whom Sloterdijk mentions in a few passages in "Blasen", like p. 77 - 79. There he comments shortly on Spengler: P. 78: "Der erste Versuch, nach dem Scheitern von Oswald Spenglers sogenannter Morphologie... wieder einem Formbegriff eine höchstrangige Stellung in einer... kulturtheoretischen Untersuchung zuzuweisen". But many of the concepts presented in the "Sphären" can be originally traced back to Spengler, and are only re-worded slightly: P. 58: "Ethnotechniken, die Generationen überspannen", p. 59: "Ethnopoietische Prozesse", p. 60: "Die Semiosphärische Glocke". These concepts were also developed in "Design Und Zeit". Especially the issue of Trans-Generational Continuity, or Innovation vs. Preservation vs. Stability and Stasis of a culture. It may also be noted that Sloterdijk's work was criticised for leaning heavily on Spengler's ideas, meaning some kind of pseudo-fascist ideology. Morphology is today not deemed worthy as a scholarly or akademik subject. Also it should be noted that Sloterdijk writes in a style of novel [aka. Bildungsroman], with many quite extravagant metaphors [eine sehr blumige Sprache], and very little bibliographical information. An index is completely missing. These are reasons for a scholarly critique. But it has to be noted that the lack of an index is mostly for economic reasons of the publishing houses. An index just costs too much for a book that is aimed at a non-scholarly readership who would never consult an index at all. As a positive aspect of Sloterdijk's work it is to be noted that his rich illustrations included in his books clarify many of the ideas presented there. As an Art historian he makes good use of the principle that a picture is (sometimes) better than 1000 words.

### 12.2.1 Sloterdijk's Habit of Name-Dropping

Something quite disconcerting is Sloterdijk's habit of name-dropping of the most diverse philosophical and spiritual traditions. In "Eurotao", he mentions on p. 91 all the traditions of Asia, as if he were an accomplished expert of those. This kind of cursory short shrift treatment smacks of a "Überflieger" in the German expression. I seriously doubt that he has understood these traditions down to the necessary depth and backgrounds. Especially revealing is his remark on p. 83 of Eurotao that Japan had committed a

"formvollendete Selbstliquidierung ... und ein Seppuku zugunsten von Industrie und Geschichte", and further: "Wahrscheinlich wird das alte Asien im Zuge einer epochalen Selbstkolonisation eines Tages vom Erdboden verschwunden sein". Since Eurotao appeared first in 1989, Sloterdijk can be excused that he could not foresee the almost irresistible rise of Asian mentality in the form of the awaking giant China to global power in the last 30 years. The ancient (Confucian) Asian mentalities are just doing their own Meta-Morphosis in ways that the Western intelligenzia could not have dreamed of. And the Shinto traditions in Japan are also quite alive and kicking. In the present work on dynamic cultural traditions

(<http://www.noologie.de/extra-verb.htm> / <http://www.noologie.de/extra-verb.pdf> )

it is to show that Thomas Immoos and his successors had a grasp of an essence that the Western intelligenzia just was not able to understand because of their logocentrism. And this logocentrism is based on a quite distorted understanding of the "Logos", as was discussed by Heidegger in WHD. The "Logos" of Heraklitos is quite different from the "Ratio" of the Latin Roman tradition of philosophy.

As I am expounding in the work on dynamic cultural traditions, the kineticism or Movement Gestalt (Kata) of the Japanese Shinto movement rituals is to be understood in quite a different way. Meaning completely different from what Sloterdijk writes about Kinetiks in Eurotao. And I make it very clear there that there is a "world beyond words" in the Asiatic traditions. And there it is understood very well, that words are more or less vexing verbal shells, that change in a Protean manner, or as I express it in Morphological terms: Words and Concepts are doing a Meta-Morphosis all the time. There is no solid ground on which verbal concepts can rest. One reason for this different understanding is the Chinese writing which neatly separates the verbal concept and the visual "idea" or the mental image behind the graphical symbol. But this is not an idea in the Platonic sense. Ideas don't have an existence in some metaphysical heaven, but they are entities of the Semiosphere, as I have expounded in "Design und Zeit". They "live" in the semantic sphere of a "culture". This is what Sloterdijk calls "Die Semiosphärische Glocke" above. Unfortunately I have not found any other reference of this concept in his works, for lack of an index. The Semiosphere is a concept developed by Lotman and other Semioticians, and they all refer to the works of Vernadsky. We should also remember that Platon in his Phaidros used a subtle distinction between *grammata* for written words and *stoichaea* for spoken (only) words. This was rarely noticed by the translators of this work. And this distinction is well understood not only in Asia but also in all world-wide intellectual traditions that are not so completely based on verbal written alphabetic language. This was expounded very expertly by Platon in Phaidros and his 7th letter. And Western Philosophy is based on a specific kind of logocentrism, meaning that everything can adequately be expressed and described in words. [In anthropology this is considered a parochial opinion/ position/ myopia.] And this idea of an "idea" is a fallacy. Therefore an adequate criticism of Sloterdijk's work should not be made on the grounds of Western Philosophy. And so my criticism of Sloterdijk is extra-philosophical.

So the Morphology of Project "Noologie" and the work on dynamic cultural traditions is also quite different from that of Sloterdijk. The crucial deviation from "Sphären" is the interpretation of the morphological aspects of Foam (Schäume) in Vol III of the "Sphären" (p. 13-71). These are taken up in the project Noologie Vol III especially in:

<http://www.noologie.de/diadenk.htm>

Here the morphological issue of Foam is developed along a completely different avenue of thought: The Mathematical Fractal. The Self-Similarity of Foam and Fractals is another morphological method which is further developed in Noologie Vol III.

[http://www.noologie.de/diadenk.htm#foam\\_universal](http://www.noologie.de/diadenk.htm#foam_universal)

[http://www.noologie.de/diadenk.htm#hermeneut\\_selbst](http://www.noologie.de/diadenk.htm#hermeneut_selbst)

[http://www.noologie.de/diadenk.htm#morpho\\_sloterdijk](http://www.noologie.de/diadenk.htm#morpho_sloterdijk)

[http://www.noologie.de/diadenk.htm#morpho\\_wirbel](http://www.noologie.de/diadenk.htm#morpho_wirbel)

[http://www.noologie.de/diadenk.htm#hermeneut\\_selbst](http://www.noologie.de/diadenk.htm#hermeneut_selbst)

[http://www.noologie.de/diadenk.htm#fraktal\\_prinzip](http://www.noologie.de/diadenk.htm#fraktal_prinzip)

[http://www.noologie.de/diadenk.htm#fraktal\\_schnee](http://www.noologie.de/diadenk.htm#fraktal_schnee)

[http://www.noologie.de/diadenk.htm#fraktal\\_denk\\_prinzip](http://www.noologie.de/diadenk.htm#fraktal_denk_prinzip)

<http://www.noologie.de/morph.htm>

The project on dynamic cultural traditions seeks to lay an entirely new groundwork for the concepts of "Form" and "Inhalt" that orients itself heavily on the work of Nagarjuna, and the ancient Greek understanding of "Morphae", "Meta-Morphology", "Meta-Noia/Noiaesis", "Tropäe", "Strophae", "Kata-

Strophae" and "Polytropos", "Kenoma" and "Pleroma". The words "Polytropos" and "Polymechanos" are also discussed by Sloterdijk who gives it some interesting treatment in "20JH". This is his discussion of Odysseus as the prototypical "Polytropos" and "Polymechanos" in pages 253-290. It is needless to say that my treatment in Meta-Morphology goes into a totally different direction than Sloterdijk. The ability to lie (Lügen = Herein-Legen) is one of the most important foundations of intelligence [or vice versa], or inter-ligence, which can also mean Legere-Between-The-Lines. And Legere and Legein are completely different "ideas" even if they sound so much alike. The Logos has nothing at all to do with the most common meaning of legere = reading. See the famous dictum of Augustinus: "Tolle lege!" It means: Take it and read. He had never said anything about "understanding it". This is not what he had on his mind.

<http://latindictionary.wikidot.com/verb:legere>

<https://en.wiktionary.org/wiki/legere>

<https://www.wordhippo.com/what-is/the-meaning-of/latin-word-cdd7906424f7a69a45fdeb07f0ede0badcf8997c.html>

- 1) to read
- 2) understand, interpret, explain, translate, expound
- 3) intercept, recite, quote, forestall, gather untimely

## 13 Ode to the Honor and the Memory of the Tax Collector

I will place some succinct notes on top, to do a Meta-Morphology of the history of all the states and all the Tax Collectors in all of human history. From the very beginning, the states could not have come into existence at all, if there had been no taxes. So Statehood is Morphologically equivalent to Taxe-hood. [Somehow when I gave this word to the Google translator it always came up with Robin Hood.]

I have just invented this word since It doesn't apparently exist in the dictionary of the English language. Or in other words: Rulership is equivalent to Taxation-Ship.

[The google translator gave me back the nice word "Steuerschiff" in German which is also a quite humorous contribution by our nice friends from the google.]

One may also note that there has been quite some Neurolinguistic Reframing of the word Tax Collection between the German and English languages. The German word "Steuern Eintreiben" and the English to "Collect Taxes" contains quite a bit of Semantic Cognitive Dissonance. The German word "Eintreiben" means to get some taxes by at least threatening to apply some force if not using force directly. And it is well known in all the civilized lands that when you don't pay your taxes, this is a quite sure way to land in prison. Now to "Collect Taxes" is really a nice kind of Neurolinguistic Reframing, as if the taxes were just lying around in the open and the nice Tax Collector just came around and picked them up. Which had probably never been the occurrence in all the history of Statehood and of Taxation-hood. Whenever if give the Google Translator the word Taxation-hood, it faithfully comes up with Robin Hood. I have no idea how it does this. (This is a joke).

### 13.1.1 About Tribes and Tributes

In the Beginning of Hu-man-ity there was Egalitarianism. Until some-one who was quite smart, invented the nice Neurolinguistic Reframing Trick to invent the "more egalitarian than the egalitarian's. Meaning the advent of stratified political power structure. And this is the very moment when his-story began as a serious business of rulership.

In those earlier times of statehood, the taxes were called tributes. Because the tribes were tribus in Latin. And the Tribal System and later the Feudal System always worked in a similar manner. It was structured in a Top-Down Hierarchy. Each tribe had its own Head-Honcho (and some time even a Head-Honcha). Or sometimes there was just a Head-Honcho who was only elected for some period of time in an emergency, when the need arose for communal action for the whole tribe to form a unity, like in a war or a catastrophe. Those were the more egalitarian tribes like the Gallics and the Nordics, er I mean the Germanics. When there was a permanent power structure, there were the Head-Honchos and they had their Sub-Head-Honchos in every village. This was about the tribal structure of the Indians of the plains in North America. And of course the definition of power was quite varied as you compare different tribes. The Head-Honchos of the North American Indians were very limited in their powers. They were mostly leaders when an emergency arose. As I recall, the North Eastern tribes even were quite democratic and they had a general assembly of the representatives of the Sub-Tribes who made all the important political decisions. And the ceremonial Head-Honcho was more or less like the Speaker of the House in the English parliament. So the social political structures of the tribes was very varied. So there came the times and the locations where the states consolidated. Then there was a Super Head-Honcho, who put him self on top of the Head-Honcho's of many different tribes, and he became their Over-Lord. This was the Feudal Structure of almost all of the so-called Antiquity. And to maintain that Super-Structure with the Over-Lord Head-Honcho, one had to ensure that the logistical structure of that motley collection of many-tribes didn't just pull itself apart. Because all those sub-tribes mostly didn't like each other because of Competition Reasons. Such was the incessant warfare of all the Amerind tribes in the vastness of the USA plains. It was not at all love and peace in those times of the Indians of the Plains. As Karl May would be very kind to tell you all about it. Of course Winnetou was his favorite Hero and all the others were just the bad guys. In reality it was quite a bit otherwise.

So to come back to the Feudal Power and Politics Structure. The tributes were necessary to manage the upkeep of this motely bag of not-so-united single tribes. And therefore the tributes had to be invented. So the local Head-Honcho collected some tributes from his local area of rule, then he kept some of these tributes for himself, and he sent what was left over from this, to the Super-Head-Honcho or the Over-Lord. Such was the structure everywhere. And a pretty good example of this was ancient Japan.

<https://www.lexico.com/en/definition/tribute>

historical mass noun Payment made periodically by one state or ruler to another, especially as a sign of dependence.

'the king had at his disposal plunder and tribute amassed through warfare'

3 historical A proportion of ore or its equivalent, paid to a miner for his work, or to the

### Origin

Late Middle English (in [tribute](#) (sense 2)): from Latin tributum, neuter past participle (used as a noun) of tribuere 'assign' (originally 'divide between tribes'), from tribus 'tribe'.

### 13.1.2 The Evolution of the Taxes

So it came to pass that the first Empires arose, with their Super-Super Head-Honcho's. A good example is the King of Kings of Persia who had coined this very good political expression. Then there arose the need for a special administrator class of Tribute Supervisors, who at the start were the Priests, since they had invented some form of book-keeping and even writing. So they were the experts at tributes, and the tributes did a slow morphing into taxes. And this process took place in the areas of the first Empires. China, Egypt, Mesopotamia, some time later in Persia, and in the Americas the precursors of the Inca, the Mayans and the Aztecs. Apparently the North Amerinds never got around to form Empires for one reason or another.

Now these power structures were very delicate and difficult to maintain. The change of ownership of the title of Super-Super Head-Honcho was often sudden and surprising. This was also the story that the good Lev Gumilev told when he described his parable of those Astronaut observers of the Empires on planet Earth that constantly did the most egregious Meta-Morphoses. Just that Gumilev didn't call it Meta-Morphoses. But it can be rightly called such, because the change of Power Structure is a sort of Meta-Morphosis. A simple Morphosis is when a power structure just evolves over time and differentiates a bit or does some fossilization and some de-generation, as always happens with such Power Structures. The Meta-Morphosis is when there will be fundamental changes in the power structure. So mostly this is war, conquest, genocide, and rebellion and revolution. And some times widespread Kata-Strophae, like big floods, desiccation, over-salination, rivers that change their course into where there was just a big city in the way, a rise of sea level, erratic patterns of the Monsoon, or the Nile floods. There are many kinds and sizes of Kata-Strophae, of which Jared Diamond did some writing about. The Ecological history of Civilizations, which means more often than not, that they did their own undoing by ruining their Ecology. The prime example is Mesopotamia. They just over-salted their arable land because of heavy irrigation which left a few megatons of salt on the land over the period of a couple millennia. He described this more in-depth in: Collapse.

[https://en.wikipedia.org/wiki/Collapse:\\_How\\_Societies\\_Choose\\_to\\_Fail\\_or\\_Succeed](https://en.wikipedia.org/wiki/Collapse:_How_Societies_Choose_to_Fail_or_Succeed)

[https://en.wikipedia.org/wiki/Collapse:\\_How\\_Societies\\_Choose\\_to\\_Fail\\_or\\_Succeed#Synopsis](https://en.wikipedia.org/wiki/Collapse:_How_Societies_Choose_to_Fail_or_Succeed#Synopsis)

So there always was a see-saw of power structures in Ancient Times. And Mesopotamia was one of the worst see-saw's. In Mesopotamia, there were ALWAYS some Outside Invaders. These were appropriately called the Hill people. The ancient Sumerian Script was exactly a picture of a mountain to symbolize the Hill People. Most of the times the Hill People were a reservoir of slaves. For this the ancient Sumerian Script had the same symbol for slaves, the same mountain. But at other times the Hill People thought that it was their turn to invade the plains, and so they did. Thus came to pass the succession of so many Over-Lord'ships in about 7000 years of Mesopotamian rulers. And this hasn't stopped ever since, because the war in Mesopotamia is the rule, and not the exception. So the invaders and there were quite a few of them, one way they succeeded with their Invasions, was mostly because the local peasants had had enough of their present Overlords, and they just wanted a little change of Overlords. But they knew full well, that the next Generation of Overlords was not so much better than their present ones, whom they already knew, and they had always devised some ways to evade the Taxes or to bribe the Tax Collectors. It is always the same with the taxes. One intelligent man had said: There are two things in life which are inevitable: Death and Taxes. So it came to pass, at some time in deep Antiquity, there came a new Generation of Overlords, and they brought with them a very hideous device, for the Tax Collectors to facilitate their Business of Tax Collection. And this was called Accounting. We know all this from the studies of Ancient Mesopotamia. These were Clay tablets engraved with a stylus that produced characteristic marks called Cuneiform. So after a few hundred years or so of so much more effective Tax Collection, and some more effective Oppression and Extraction of Wealth from the Local Populace, one bright mInd came up with the bright Idea, that those cuneiform were also usable for other things than just accounting. So it came to pass that the invention of writing, one of the most important inventions of humanity besides the wheel, was given to us by the Tax Collectors. So we are forever indebted to the Tax Collectors of humanity and when we build the Monuments for the Great Kings and Emperors about 10 meters high, then we should construct an even Greater

Monument, of about 30-100 meters high, for the unknown Tax Collectors of humanity, who had come up with this idea in the First Place. Because all those Great Empires would have never existed if it had not been for the Tax Collectors. Honor to who Deserves Honor. Thankfulness for those to whom thanks are due. Taxes for those to whom Taxes are due.!!!

See my special material on the Cun(n)eiform Script:

<http://www.noologie.de/cunni.htm>

[https://en.wikipedia.org/wiki/Death\\_and\\_taxes\\_\(idiom\)](https://en.wikipedia.org/wiki/Death_and_taxes_(idiom))

**Death and taxes** is a common reference to the famous quotation:<sup>[1]</sup>

Our new Constitution is now established, and has an appearance that promises permanency; but in this world nothing can be said to be certain, except **death and taxes**.

— *Benjamin Franklin*, in a letter to Jean-Baptiste Leroy, 1789

However, Franklin's letter is not the origin of the phrase, which appeared earlier in Daniel Defoe's *The Political History of the Devil*.<sup>[2]</sup>

Things as certain as **death and taxes**, can be more firmly believ'd.

— *Daniel Defoe, The Political History of the Devil*, 1726.

And in *The Cobbler of Preston* by Christopher Bullock (1716)

'Tis impossible to be sure of any thing but **Death and Taxes**

[https://en.wikipedia.org/wiki/Paradise\\_garden](https://en.wikipedia.org/wiki/Paradise_garden)

The Paradise garden

The **paradise garden** is a form of garden of Old Iranian origin, specifically Achaemenid. Originally denominated by a single noun denoting "a walled-in compound or garden", from "*pairi*" ("around") and "*daeza*" or "*diz*" ("wall", "brick", or "shape"), Xenophon Grecized the Persian phrase "*pairi-daeza*" into "*paradeisos*".<sup>[1]</sup> The idea of the enclosed garden is often referred to as the paradise garden because of additional Indo-European connotations of "paradise".<sup>[which?]</sup>

Qualities

The essential qualities of the paradise garden derive from its original, arid or semi-arid homeland. The fundamental quality is enclosure of the cultivated area, which excludes the wildness of nature and includes cultivated and irrigated greenery, providing privacy and security. The most common design of the perimeter walls is that of a rectangle, and this forms one of its primary qualities.

Another common quality is the elaborate use of water, often in canals, ponds, or rills, sometimes in fountains, and less often in waterfalls. The rectangular or rectilinear design is often extended to the water features, which typically quarter the garden. This design derives from or is echoed in that of the Garden of Eden, which in *Genesis* is described as having a central spring that feeds four rivers, which each flow out into the world beyond.

Much of the use and symbolism of the paradise garden is derived from the Garden of Eden. It was designed to symbolize eternal life. A tree with a spring issuing from its roots especially symbolises this. Additionally, the contrast of a formal garden design with the informality of freely growing plants is a recurring theme in many paradise gardens. Odor and fruit are important elements of this garden.

[https://en.wikipedia.org/wiki/Yellow\\_River](https://en.wikipedia.org/wiki/Yellow_River)

The **Yellow River** or **Huang He** (Huang Ho) is the second longest river in China, after the Yangtze River, and the sixth longest river system in the world at the estimated length of 5,464 km (3,395 mi).<sup>[1]</sup> Originating in the Bayan Har Mountains in Qinghai province of Western China, it flows through nine provinces, and it empties into the Bohai Sea near the city of Dongying in Shandong province. The Yellow River basin has an east–west extent of about 1,900 kilometers (1,180 mi) and a north–south extent of about 1,100 km (680 mi). Its total drainage area is about 752,546 square kilometers (290,560 sq mi).

Its basin was the birthplace of ancient Chinese civilization, and it was the most prosperous region in early Chinese history. There are frequent devastating floods and course changes produced by the continual elevation of the river bed, sometimes above the level of its surrounding farm fields.

<https://en.wikipedia.org/wiki/Yangtze>

The **Yangtze** or **Yangzi** (English: /'jæŋtsi/ or /'jɑːŋtsi/) is the longest river in Asia, the third-longest in the world and the longest in the world to flow entirely within one country. Its source is in the northern part of the Tibetan Plateau and it flows 6,300 km (3,900 mi) in a generally eastern direction to the East China Sea. It is the sixth-largest river by discharge volume in the world. Its drainage basin comprises one-fifth of the land area of China, and is home to nearly one-third of the country's population.<sup>[7]</sup>

The Yangtze has played a major role in the [history, culture and economy of China](#). For thousands of years, the river has been used for water, irrigation, sanitation, transportation, industry, boundary-marking and war. The prosperous [Yangtze River Delta](#) generates as much as 20% of the PRC's GDP. The [Three Gorges Dam](#) on the Yangtze is the [largest hydro-electric power station in the world](#).<sup>[8][9]</sup> In mid-2014, the Chinese government announced it was building a multi-tier [transport network](#), comprising [railways, roads and airports](#), to create a new economic belt alongside the river.<sup>[10]</sup>

The Yangtze flows through a wide array of ecosystems and is habitat to several [endemic](#) and endangered species including the [Chinese alligator](#), the [narrow-ridged finless porpoise](#), the [Chinese paddlefish](#), the (extinct) [Yangtze River dolphin](#) or *baiji*, and the [Yangtze sturgeon](#). In recent years, the river has suffered from industrial pollution, plastic pollution,<sup>[11]</sup> agricultural run-off, [siltation](#), and loss of wetland and lakes, which exacerbates seasonal flooding. Some sections of the river are now protected as [nature reserves](#). A stretch of the upstream Yangtze flowing through deep gorges in western [Yunnan](#) is part of the [Three Parallel Rivers of Yunnan Protected Areas](#), a [UNESCO World Heritage Site](#).

<https://www.christiantruthcenter.com/nebuchadnezzars-dream/>

But there is a God in heaven that reveals secrets, and makes known to the king Nebuchadnezzar what shall be in the latter days (Dan 2:28).

We can look and see what has already being fulfilled and what has not. Here is the dream;

Dan 2:31-35: Thou, O king, saw, and behold a great image. This great image, whose brightness was excellent, stood before thee; and the form thereof was terrible. This image's head was of fine gold, his breast and his arms of silver, his belly and his thighs of brass, His legs of iron, his feet part of iron and part of clay. Thou saw till that a stone was cut out without hands, which smote the image upon his feet that were of iron and clay, and broke them to pieces. Then was the iron, the clay, the brass, the silver, and the gold, broken to pieces together, and became like the chaff of the summer threshing-floors; and the wind carried them away, that no place was found for them: and the stone that smote the image became a great mountain, and filled the whole earth.

King Nebuchadnezzar dream image

The image represents the world time-line entirely from that time of King Nebuchadnezzar of Babylon to the coming of Jesus Christ (the last coming of Christ to judge the world). The four metals in the image are regressing or diminishing in value; gold is valuable than silver, silver than brass, brass than iron and iron than clay.

These four metals speak of four kingdoms, governments or empires who will rule the world in their order respectively. Know that the four kingdoms, governments or empires are those who have or had a direct bearing to the Nation of Israel. Apart from having a direct impart to the Nation of Israel, the four governments rule the entire world in their times.

The power, strength and glory of the four governments diminish from the first to the last accordingly as seeing in the diminishing in value of the four metals from gold to clay. Their power, strength and glory diminishes in comparison with the latter power not in comparison to any world power at their times.

In times of their reign, the four governments rule the entire world and they are the most powerful, strongest with the highest glory as compared to any other world governments but not as powerful as the latter mentioned government.

Daniel interpretation of King Nebuchadnezzar

The head of Gold

Dan 2:37-38: Thou, O king, art a king of kings: for the God of heaven has given you a kingdom, power, and strength, and glory. And where-so-ever the children of men dwell, the beasts of the field and the fowls of the heaven has he given into your hand, and has made you ruler over them all. Thou art this head of gold.

Nebuchadnezzar was the ruler, the king, of the Babylon Empire. The Babylon Empire was an absolute monarchy and the most powerful, strong, superior empire there ever was in the world. It had an absolute effect and rule on the entire world than any other empire there ever was in the world and Nebuchadnezzar was the ruler of the empire thus the head of gold.

Breast and arms of silver

Dan 2:39: And after you shall arise another kingdom inferior to you,...

In 530 BC the Medes and the Persians overthrew the Babylon Empire. Reason there are two arms of silver in the image; one arm representing Medes and the other representing the Persians. The Empire of Medes and Persians was inferior to the Babylon Empire but they overthrew the Babylon Empire.

They were not as great as the Empire of Babylon neither in scope nor rulers, and they were a constitutional monarchy not an absolute monarchy as the Babylon Empire.

The vision of overthrow of the Babylon Empire and giving it to the Medes and the Persians was also presented to King Belshazzar who was a son of the former Babylon king, King Nebuchadnezzar, and we see this in Daniel chapter 5. A hand wrote on the plaster of the wall of the king's palace, 'MENE, MENE, TEKEL and UPHARSIN'.

In interpreting the writings of the hand to the wall to King Belshazzar, Daniel told him, 'Thy kingdom is divided, and given to the Medes and Persians' (Dan 5:28). It is during the reign of King Belshazzar when Babylon Empire was given to the Medes and Persians. The Medes and Persians were not as powerful and strong as the Babylon Empire thus being of silver as seeing in the image.

### **Belly and thighs of brass**

...and another third kingdom of brass (Dan 2:39)

The Medes and Persians were overthrown in 330 BC by the Grecians (Greece). Alexander the great conquered the whole world including the Medes and Persians when He was [about 33 years old](#). After conquering the whole world, Alexander the great cried and said, 'is *there are no more worlds for me to conquer*'.

The Grecians, led by Alexander the great, were less powerful and strong than the Babylon Empire and the Medes and Persians thus being the belly of brass in the image. Brass is less in value than silver and gold.

### **Legs of iron**

Dan 2:40: *And the fourth kingdom shall be strong as iron: forasmuch as iron breaks in pieces and subdues all things: and as iron that breaks all these, shall it break in pieces and bruise.*

The Grecian Empire was overthrown by the Roman Empire being represented by the two legs of iron in the image. Two legs because the Roman Empire split into two; East and west Rome. Iron because it was a brutal empire which crashed every person and government to submission even the Grecian Empire.

The empire was less powerful and strong than the Grecian Empire, the Medes and Persians and the Babylon Empire thus being of iron as seeing from the image. Iron is less in value than brass, silver and gold.

In the reign of the Roman Empire, in 70 AD the Romans come down into Israel, destroyed the temple, slaughtered many people, raped women, wiped out everything and every person and all Jews were scattered all over the world.

This was a fulfillment of Jesus [prophecy](#) holding the Jews accountable for not knowing prophecies as you have seeing in [the fulfilled weeks of Daniel seventy weeks](#) and [ignorance of prophecies](#).

Israel is God's time piece as revealed in the article; [the church in Daniel 70 weeks](#). After the Romans come down, destroyed and wiped out the Jews, Israel ceased to be a sovereign nation and God clock stopped.

In 1948 AD, immediately after the end of world war 11 a miracle happened. Israel was proclaimed a nation and in May 19<sup>th</sup> 1948 AD, Israel became a sovereign nation.

See that Israel ceased to be a nation in 70 AD until 1948 AD.

### **Feet part of iron and part of clay**

Dan 2:41: *And whereas you saw the feet and toes, part of potters' clay, and part of iron, the kingdom shall be divided; but there shall be in it of the strength of the iron, forasmuch as thou saw the iron mixed with miry clay. And as the toes of the feet were part of iron, and part of clay, so the kingdom shall be partly strong, and partly broken. And whereas thou saw iron mixed with miry clay, they shall mingle themselves with the seed of men: but they shall not cleave one to another, even as iron is not mixed with clay.*

The foot of the image has ten toes partly of iron and partly of clay. Immediately Israel became a nation in May 19<sup>th</sup> 1948 AD, in May 9<sup>th</sup> 1950 AD, six nations come together in the City of Rome, formed the Treaty of Rome and started a new resurrected Roman empire.

## **13.2 Statistics and one more Ode to the Honor of the Tax Collector**

It has been said quite rightly so, that the French administrators and especially the tax collectors were at all times much better at collecting taxes than doing some work to improve in the first place the ability of the people to pay the taxes, ie. to generate some income in the first place so that the people could live off the money that was left after they had paid their taxes. This has always since times immemorial been a problem for the administration of the state, since the Tax Ministry (Finanzministerium) and the Ministry to increase the Income-Generating capability of the populace (Wirtschaftsministerium) traditionally knew nothing about each other. They might as well be on different planets.

Some of the greatest scientists of La Belle France had been Tax Collectors who had become rich enough to pay for all their laboratory and equipment and all the staff to work the equipment. Like Lavoisier. And mind you, no proper French Scientist would ever touch his laboratory equipment with a 1-meter long stick. This was there for all his staff for the work of the equipment. We even find some of this in Goethe's Faust. The good Dottore Faustus would also never touch such a dirty piece like Laboratory Equipment. And in the Great Britain of those Merry Olden Ages, it was just the other way 'round. Because the Great Newton was also Head of the Royal Mint. This is the Inverse of the Taxes, even though it is the same, if you can think the Inverse, and at the same time, the Real Royal Thing. Because who has the Royal Mint has so much money as one can print. Therefore The Mint is in the Print. Er, the Bank of England, which is the Royal Bank of the Rothschild's. It makes no Difference at all, as the good Jacques Derrida would have said.

Now it is quite logical that when the Economy was good, meaning there was a lot of income in the populace, there would also be a proportionally high potential for generating tax revenue, so that the state could re-invest

that into infrastructure, schools, universities and so on, and so on. This is a system that every Theorist of National Economy would try to implement as good as possible if this Theorist of National Economy would ever be invited by both those abovementioned Ministeries. Unfortunately that happened only very rarely in the Financial History of humanity. Only the British'ers in the heyday of their Victorian Empire managed to come up with such a thing. That was the Great Innovation of the British'ers which was their foundation of the Rule of the World.

[https://en.wikipedia.org/wiki/History\\_of\\_taxation\\_in\\_the\\_United\\_Kingdom](https://en.wikipedia.org/wiki/History_of_taxation_in_the_United_Kingdom)

History of taxation in the United Kingdom includes the history of all collections by governments under law, in money or in kind, including collections by monarchs and lesser feudal lords, levied on persons or property subject to the government, with the primary purpose of raising revenue.

19th century

Pitt's income tax was levied from 1799 to 1802, when it was abolished by Henry Addington during the Peace of Amiens. Addington had taken over as prime minister in 1801, after Pitt's resignation over Catholic Emancipation. The income tax was reintroduced by Addington in 1803 when hostilities recommenced, but it was again abolished in 1816, one year after the Battle of Waterloo.

Addington's Act for a 'contribution of the profits arising from property, professions, trades and offices' (the words 'income tax' were deliberately avoided) introduced two significant changes. First, it allowed taxation at the source; for instance, the Bank of England would deduct an amount, to be paid as tax, from interest paid to gilt holders. Secondly, it introduced schedules:

Schedule A (tax on income from UK land)

Schedule B (tax on commercial occupation of land)

Schedule C (tax on income from public securities)

Schedule D (tax on trading income, income from professions and vocations, interest, overseas income and casual income)

Schedule E (tax on employment income)

Income not falling within those schedules was not taxed. (Later a sixth Schedule, Schedule F (tax on UK dividend income) was added.)

Although the maximum tax rate under Addington's Act was 5% – only one-half of the 10% allowed under Pitt's – the other changes resulted in a 50% increase in revenue, largely because it doubled the number of persons liable for the tax and somewhat expanded the scope.[10]

Pitt in opposition had argued against Addington's innovations: he adopted them largely unchanged, however, when he returned to office in 1805. The one major change he made was to raise the maximum rate back to the 10%, the rate in his original bill, in 1806. Income tax changed little for the duration of the Napoleonic Wars, despite changes in government.[11]

Nicholas Vansittart was Chancellor in 1815, at the time of the Battle of Waterloo. He was inclined to maintain the income tax, but public sentiment was heavily against it, and predictably, the opposition championed its abolition. It was thus repealed in 1816 'with a thundering peal of applause'. In fact, the tax was so unpopular that Parliament ordered the destruction of all documents connected with it. This was more show than substance, as the King's Remembrancer had made duplicates and retained them.[11]

### 13.2.1 The German Superiority of Tax Collection

Only in recent years since about 1989 or so, did the Germans surpass the French in the business of Tax Collection, since the German Tax Collectors i.e. the ministr(y/ies) of finances and the ministr(y/ies) of Social Services were so good at collecting taxes and social security contributions that the first time in the history of hu-mankind the German citizens lived for about 3/4 of their productive lives for the tax collector only. Because all those nice statisticians of Germany who did the accounting of all that load of taxes, they consistently forgot that on top of the official income taxes and social security contributions, there was the value added tax or VAT. And since this was on top of it all, it also hit the poorer people the hardest. And there were some additional taxes like the energy tax which also hit the poorer people the hardest. So it came to pass that the Germans were in a pretty sad state of mInd. But instead of revolting, like their French common sufferers, the movement vestes jaunes, the Germans chose to vote for the Green Party, which had been mostly responsible for all those taxes in the first place. Like the energy sur-taxes. Such was the mental derangement of the poor Germans. There is very little hope that the poor Germans will ever get their wits together at all. One may say that as individuals, there are some quite smart Germans around. Like Peter Sloterdijk. But as a mass, especially the voters of the political parties, and even more especially the consumers of the German High-Quality media like the German national television... They are as dumb as Bernd das Brot. I have no idea how Thomas Krappweis got this in-depth psycho-analysis of the German National Character. And it is really and exactly right to the point. In another diction I have called them the Troglodytes, and the good Nietzsche always liked to call the Germans "Die letzten Menschen". If there was

anything in his philosophy that he was so absolutely correct about, it was his analysis of the German National Character.

### **13.3 Slotderdijk and the Honorable Taxes**

Now since we are already at the subject of taxes we come to one of the most advanced ideas about taxes that anyone had come up with since quite a long time. And this is of course again our good Peter Slotderdijk. And he always has some interesting ideas up his sleeve: It is the system of honorable taxes or the taxes of honor. He came up with the splendid idea that one should introduce a honor system of paying the taxes. Actually this would also involve a complete Neurolinguistic Reframing of the concept of honor.

#### **13.3.1 The Japanese Concept of Hara as Seat of the Vital-Soul**

To better explain the system of honor that I have introduced in the above passage I have to expound a little more the Anthropology of Honor. Therefore I will have to make a little detour into the Japanese Samurai concept of Honor where it was considered to be the most honorable when a Samurai committed Sepukku. And by the terminology of Morphology, the Sepukku actually means to turn one's intestines from the inside to the outside, which would be also a Meta-Morphology of the Intestines. And the Abdomen or Hara was in the Ancient Japanese thought the seat of the Vital-Soul. This was the meaning of the Anima in the original pre-Christian sense of the word. Because in Antiquity there existed no such concept like the Immortal Soul. That was just grafted by the early Christian thinkers upon the more ancient of the anima. Anima just means to be animated, which means living. And it also means breathing. The Spiritus derived from A-Spirare. So there was a little bit of Meta-Morphology done by the early Christian Church Fathers, who just liked to turn all the venerable concepts of the Ancient Metaphysics topsy-turvy, inside- out and then some more. It was a really pretty complete Meta-Morphology of the Ancient thought systems. And only by referring to the ancient Shinto Japanese thought system, we can get to the deep structure of them. The Japanese had been wise enough to keep all their ancient Shinto thought systems together not to be tainted by some Christian thoughts. So I must make a little correction to the work that is described in "Das Gold im Wachs" about which I report in Part I. The nice present-day Christian Theologians who wrote the book "Das Gold im Wachs" probably were not aware what a kind of Spiritual Minefield they had gotten themselves into. As the saying goes: Some things are easier to get into, than to get out of. And especially when dealing with Shinto Not-So-Philosophy because it has no connection at all with Western Philosophy and especially not with Western Theology. One could say that they are In-Commensurable. Mensura means measure, but it also means Mens, which is the mInd or the Verstand or the Vernunft, or the Logos or the Ratio or the Rationality. And as Heidegger had expounded it in WHD, there exists quite a confusion about what all those concepts really mean in present-day Philosophical Usage, and what they had possibly had some quite different meaning and usage in those the olden days before the nice Christian Church Fathers turned everything around and topsy-turvy as one might say. So the deeper meaning of those ancient concepts or ideas, as we may call them, had done some quite strange Meta-Morphoses throughout the last 2500 years of Christian Philosophy and Theology.

#### **13.3.2 The Meta-Morphology of the Christian Church Fathers**

There was also an Animus, which was called a Daimonos in Greek, and Sokrates mentioned his Daimonos quite a few times. The Daimonos was a sort of Spiritual Guide, in Latin there is a word Spiritus Rector, which gives some related meaning. But today that just means a human teacher or professor who leads onto some path of thinking, like Schopenhauer was (a little bit) a Spiritus Rector for Nietzsche [who liked to refer to "Schopenhauer als Lehrer"].

Also and likewise as Nietzsche was (sort of and a little bit) a Spiritus Rector for Oswald Spengler and probably also for Peter Slotderdijk. So it was by no means a bad Daemon, and this was only because of the Creative Thinking of the early Christian Church Fathers. Because they just liked it so very much to convert those ancient mythological ideas into their polar opposites. This was also a very early exercise of Dis-Information, and Political Correctness, how to corrupt something that was very old and very venerable into something that was very sinister and very bad. And the early Christian Church Fathers succeeded quite nicely in turning around and about everything from the Antiquity into something very sinister. So this was also a very good Example of a Meta-Morphology of the most awful kind. We just take the English word awe, and when we turn it into awful it also becomes very sinister. Awe means in German Respekt, even Reverence in English. But it also has its sinister side: shyness, fear, awe, timidity, inhibition, timidness. So there is this nice US Army expression of Shock and Awe, which was expounded in the Irak wars. This is also a very good example of the Neurolinguistic Reframing. And the Church Fathers were masters of this kind of Sinister Thinking. So they had turned the whole of Metaphysical Thinking and the Mythology of Antiquity into

something Demonical. When we today complain about some Dis-Information in the good Quality Mainstream Media, especially in the German National TV like ARD and ZDF, we should be aware where the REAL DIS-INFORMATION is hiding in PLAIN SIGHT or not so plain sight at all. So it needs quite a heavy work of Double- and Triple- Thinking of Reflexology or Meta-Morphology to get to the Nooks of Granny, as I some- times call it.

See:

<https://www.thefreedictionary.com/sepukku>

ha•ra•ki•ri ('hɑr ə'krɪ i, 'hæər ə-, 'hæər i-) / also hari-kari *n.*

1. ceremonial suicide by ripping open the abdomen with a dagger or knife: formerly practiced in Japan by members of the warrior class when disgraced or sentenced to death.

2. any suicidal action; a self-destructive act: political hara-kiri.

[1855–60; < Japanese, = *hara* belly + *kiri* cut]

But there is a morphological similarity between committing sepukku, and paying taxes. Since for a Samurai, his intestines literally meant "the seat of the soul", because the Japanese believe that this is the Hara.

[https://en.wikipedia.org/wiki/Hara\\_\(tanden\)](https://en.wikipedia.org/wiki/Hara_(tanden))

**Hara** (Japanese: 腹: **abdomen**, should not be translated as "stomach" to avoid confusing it with the organ). In the Japanese medical tradition and in **Japanese martial arts** traditions, the word Hara is used as a technical term for a specific area (physical/anatomical) or energy field (physiological/energetic) of the body.

In the martial arts

In the martial arts, Hara is sometimes considered as equivalent to, the lower of the three dantian (tanden in Japanese). Various styles of martial arts describe this as being just below or directly behind the umbilicus.<sup>[21]</sup>

In Traditional Chinese Medicine (TCM) the by-name Dantian is given alternatively to three acupuncture points: the "Gate of Origin" (Ren 4), and the "Sea of Qi" (Ren 6),<sup>[22]</sup> and, by some, also to the "Stone Gate" (Ren 5).<sup>[23]</sup> All three points are situated on the midline (centre of the linea alba) of the lower abdomen (i.e. below the navel). They constitute part of the Ren Mai, usually translated as Conception Vessel (CV), which is one of the Qi Jing Ba Mai, the Eight Extraordinary Vessels or eminent energy pathways of the body.

Dantian is often translated as "elixir field", indicating that the needling points called "Sea of Qi", "Gate of Origin" and "Stone Gate" are not really sitting on the Ren Mai like dots on a line. Rather they represent a place from which the "Sea of Qi" etc. can be reached and influenced – either via the energy flow along the Ren Mai (Conception Vessel) or by penetrating deeper into the abdomen (the level to be determined by the length of the needle and the depth of its insertion, in the case of palpation, by the depth of penetration and Qi projection, in the case of breathing or movement exercises by the use of muscle tonus and combination, direction of connective tissue engagement etc.). Hence, as the point names indicate, the lower Dantian, which ever point it is associated with, ought to be seen as a three dimensional area of varying size inside the abdomen, not as a point on the abdomen. In that sense it is identical with the "small hara" or the "small abdomen", terms used in some Chinese classical texts and commentaries that discuss the origin and location of the Qi Jing Ba Mai (Eight Extraordinary Vessels) to which the Ren Mai belongs and is connected.

<sup>[24]</sup> Modern commentators believe that the terms refer to "the kidney reflex area below the umbilicus".<sup>[25]</sup>

The Hara or lower Dantian, as conceptualised by the Chinese and Japanese **martial arts**, is important for their practice, because it is seen, as the term "Sea of Qi" indicates, as the reservoir of vital or source energy (Yuan Qi). It is, in other words, the vital centre of the body as well as the centre of gravity. For many martial arts, the extension of energy or force from this centre is a common concept.<sup>[26]</sup> Many martial art styles, amongst them Aikido, emphasise the importance of "moving from the hara",<sup>[27]</sup> i.e. moving from the centre of one's very being – body and mind. There are a large number of breathing exercises in traditional Japanese and Chinese martial arts where attention is always kept on the **dantian** or hara to strengthen the "Sea of Qi".

]

Now the highest ever possible achievement of honor would be, that the one who paid the most taxes in the whole of the land, he also was celebrated as the "most honorable" person in the whole of the land. So he would receive all the medals of honor, the Bundesverdienstkreuz am Hosenband (on the garter) and he would be invited to all those parties with his very honorable Bundespräsident... and so on. So it might just come to pass that there would be developed a finely structured system of gradation of honor. The "most supreme honorable" one would be the one who paid the most taxes in the land. So, he might also be called the King of Honor. Then would come the nobility of honor: The upper echelon would be called the "very honorable" people. So there we might find some film stars and other celebrities of the German High Quality Mainstream media, like also all the directors and highly paid functionaries of the German High Quality National Television ARD and ZDF.

He may even be invited to some parties where he met also those the very honorable people, like the very honorable Boris Becker, and then the very honorable Dieter Bohlen, and the just likely very honorable Verona Feldbusch, and then and then... I believe that very honorable Master Taxpayer would be in Taxpayer Heaven, and he would go on and earn so much more money, to be able to pay so much more taxes. This would be the Finanzminister's Heaven on Earth, and everyone would be happy forever after without an end, and the finances of the State would not only bloom, but they would quite explode. And then, you may have guessed it by now, all the ministers in the country would cry out loud and say: With so much money to administrate we direly need some more high-paying administrator's (er, bureaucrat's) positions to administrate all that money for the better good of the public. Er, I am just having a very bad night-mare right now as I am day-dreaming. This will not happen in my lifetime at all.

[https://de.wikipedia.org/wiki/Dieter\\_Bohlen](https://de.wikipedia.org/wiki/Dieter_Bohlen)

[https://de.wikipedia.org/wiki/Verona\\_Pooth](https://de.wikipedia.org/wiki/Verona_Pooth)

[https://de.wikipedia.org/wiki/Boris\\_Becker](https://de.wikipedia.org/wiki/Boris_Becker)

There was quite a good joke about the successful implementation of communism that goes about like this: I will abbreviate this a little bit. The leaders of the communist parties of Europe decided to make some reunion in heaven after they had died. And God himself did the hosting of the party because it was such a high-importance affair. So one after the other did his spiel how successful he was at realizing true communism in his land. And god always nodded and said: It will not come to pass, neither in your sucesors life time nor his sucesor's sucesor. At last the Polish General Secretary of the Polish Communist Party gave his spiel how successful his implementation of communism had been. God again nodded and after some deliberation he said: This will not come to pass in even in my own life-time at all. End of joke.

## 14 The Work of Aby Warburg and then Some Cryptology

The work of Aby Warburg can be viewed in direct connection with the work of Semiotics and Umberto Eco, which I will present in the next chapter. There is one point to notice and this is that most of the Semioticians are or were Literature scholars, dealing mostly with novels and fantasy stories. And I have the impression that the work of the Semioticians including Umberto Eco was pretty much oblivious of the fact that Aby Warburg had developed a complete theory of Semiotics in the 1920's which was almost repeated to a word by the Semioticians of the 1960's to 1990's. The Semioticians probably didn't know the *Secret Structure of the Warburg Library*. So we can heap just another mystery on the already quite large heap of mysteries of the *Name of the Rose*.

[http://www.nologie.de/diadenk.htm#eco\\_sein](http://www.nologie.de/diadenk.htm#eco_sein)

[http://www.nologie.de/diadenk.htm#eco\\_cognitive](http://www.nologie.de/diadenk.htm#eco_cognitive)

[http://www.nologie.de/diadenk.htm#eco\\_struktur](http://www.nologie.de/diadenk.htm#eco_struktur)

[http://www.nologie.de/diadenk.htm#eco\\_mythologik](http://www.nologie.de/diadenk.htm#eco_mythologik)

[http://www.nologie.de/diadenk.htm#peirce\\_triad](http://www.nologie.de/diadenk.htm#peirce_triad)

[http://www.nologie.de/diadenk.htm#plato\\_kratylos](http://www.nologie.de/diadenk.htm#plato_kratylos)

[http://www.nologie.de/diadenk.htm#plato\\_stoicheia](http://www.nologie.de/diadenk.htm#plato_stoicheia)

[http://www.nologie.de/diadenk.htm#struktur\\_semiosphere](http://www.nologie.de/diadenk.htm#struktur_semiosphere)

[http://www.nologie.de/diadenk.htm#lotman\\_semio](http://www.nologie.de/diadenk.htm#lotman_semio)

But there is also a Semiotics of the Real Thing, and this is what I call Meta-Morphology. And Meta-Morphology is about the Super-Position of Meaning, in exactly the sense that the Semioticians define it. There are super-imposed levels of meaning and each level pre-supposes that all the levels below it are intact, there is nothing that disturbs the lower levels. And the Super-Position of Meaning that I am referring to is also what some people call the Kabbalah. And it is not just a kind of Jewish interpretation of the Talmud, but it is a generic mode of Codification Or En-Cryption that is used in all the so-called Esoteric writings. They are called Esoteric only because the normal people cannot decrypt them. So there are some levels of En- and De-coding or En- and De-encrypting to go through, which are also called Initiations. To reach a certain level of De-Coding and De-Crypting is equivalent with the appropriate level of Initiation. And we then come to the Arch-Meta-Morphosis of them All: Because in ancient Greek, the Crypting is equivalent with the Kalypso, and the De-Crypting is equivalent with the Apo-Kalypsis. And in the Heideggerian terminology, the Apo-Kalypsis means: Die Ent-Bergung. Then we come to the A-Laetheia, and then some. [We can also find some traces of that in Sloterdijk 20JH, p. 257+]. But I have a quite different and I hope also deeper connection here:

[http://www.noologie.de/diadenk.htm#noo\\_spfl](http://www.noologie.de/diadenk.htm#noo_spfl)

### 14.1 The Abbot Abbo of Fossanova

As I am discussing this, it seems quite strange to me that neither Umberto Eco nor all his interpreters seem to know about the Warburg Library. Because the good Aby Warburg would also fit very well into that fabulous monastery of Umberto's vivid phantasy. [We could also call him the *Wahr-Berg* or the *Zauber-Berg*, or the *Mystical Mountain*, and then some...] Maybe we can even find a similar name: The Abbot Abbo of Fossanova. *Fossa Nova* of course means the *New Well-Spring*. Like in: dike, fosse / ditch, trench, canal / moat / a pit, groove, cavity, or depression.

<https://en.wiktionary.org/wiki/fossa>

We can enlarge the speculation a little bit when we make a slight *Neurolinguistic Reframing* of the Fossa Nova. Because in those olden times there was much talk about the *Fon-Secca* meaning Fonte or *Fuente Secca*. This means the dried-up well-spring of the older knowledge from the Roman and Greek times. And the *Fuente Nova* was of course found by the *Knights Templar* who had dug some archeological expeditions into the ancient *Jerusalem Temple Mount*. So go all the legends that the Knights Templar had found this Fuente Nova, and it was somehow connected with the Name of the Rose. What that was exactly is still waiting to be found out. And the Knights Templar had some superior knowledge, or as I call it: The Superior Intelligence. And of course that Superior Intelligence had by needs to be destroyed by King Philip IV of France. This is the official story. And of course there is a hidden agenda. Because none of the treasures of the Knights Templar were ever found by the French, and this is a good indication that the Knights Templar had known what was in store for them, and they had long ago made their preparations for such a case. At least this is what I would do, when I were confronted with the historically inevitable destruction of *my own Holy Order*. Since when *I have the Superior Intelligence*, I also must do a little prophesy here and there. And one doesn't need a crystal ball for that. It is just the age-old law of the battle of the *Inferior Intelligence* against the *Supreme Intelligence*. Outwardly, the Supreme Intelligence must be defeated by the Agents of the Matrix (as they are called in the appropriate movie by the Wachowski's). Because it is also an eternal law that the Superior Intelligence can and may not use the same base and brutal methods and machinations of the Eternal Foe. [See the poly-mechanae of Odysseus, see Sloterdijk 20JH, p. 281+]. It is impossible for the Superior Intelligence to engage the same kind of machination of the Lesser Intelligence. Naturally, since we know the laws of history, we have made our preparations.

So we found another dis-guise (*Bernardo Gui* is just such a dis-guise), and we did what all the *Secret Holy Orders* do when they are threatened. So we know the Meta-Morphology in and out, and we all know that the Holy Sacrament of *Trans-Substantiation* is a particular interesting kind of Meta-Morphology. Meta-Morphae means the changing of form. But if the whole thing is completely empty, then there is no Trans-Substantiation possible at all. This turns some very old philosophy on its head, the old classical dualism of Form and Substance (Morphae and Hylae). Again as we state it. When there is no substance, and the whole thing is Emptiness, like in *Kenoma*, or in *Shunyata*, then the whole business of Trans-Substantiation is just senseless. And of course the Holy Roman Kat-holik Church would not have liked it very much if such a rumor would reach the masses. Then the Holy Roman Rites would be senseless, and the Holy Communion equally. So when we are good Knights Templar's we know this already. Anyone here who has some doubts about this speculation? The Knights Templar went to Portugal and flourished there in *The Name of the Rose*, of course. And some time later there were the Rosicrucians who had liked the name, but had no idea what was behind that name, of the *Rosy Cross*. Because they had forgotten that the Forma (Morphae) of the Rose is impossible to incorporate into a cross. *The Rose is Penta- and Hepta-Symmetric* and no cross can be found there. *A cross is always Axial-Symmetric*, and it is the *Duplicity or Duplication of Dualism*. And the more you *Duplicate the Dualism*, the less will come out of it. Because it is just a Meta-Morphology of the Original Dualism. And the Cross can in no way be Meta-Morph'ed or Transcend'ed into a Triad or Trinity. (Which is again a theme from the Matrix Movie).

<http://www.noologie.de/diadenk.htm#nootriade>

<https://en.wikipedia.org/wiki/Transubstantiation>

**Transubstantiation** (Latin: *transsubstantiatio*; Greek: μετασώωσις *metousiosis*) is, according to the teaching of the **Roman Catholic Church**, the change of **substance** or **essence** by which the bread and wine offered in the sacrifice of the **sacrament** of the **Eucharist** during the Mass, become, in **reality**, the body and blood of **Jesus Christ**. In this teaching, the notions of substance and transubstantiation are not linked with any particular theory of **metaphysics**.<sup>[1]</sup>

The Roman Catholic Church teaches that in the Eucharistic offering bread and wine are changed into the body and blood of Christ.<sup>[2]</sup> The reaffirmation of this doctrine was expressed, using the word "transubstantiate", by the [Fourth Council of the Lateran](#) in 1215.<sup>[3][4]</sup> It was later challenged by various 14th-century reformers, [John Wycliffe](#) in particular.<sup>[5]</sup>

The manner in which the change occurs, the Roman Catholic Church teaches, is a mystery: "The signs of bread and wine become, in a way surpassing understanding, the Body and Blood of Christ."<sup>[6]:1333</sup> The precise terminology to be used to refer to the nature of the Eucharist and its theological implications has a contentious history, especially in the [Protestant Reformation](#).<sup>[7]</sup>

In the [Greek Orthodox Church](#), the doctrine has been discussed under the term of *metousiosis*, coined as a direct loan-translation of *transsubstantiatio* in the 17th century. In [Eastern Orthodoxy](#) in general, the [Sacred Mystery](#) (Sacrament) of the Eucharist is more commonly discussed using alternative terms such as "trans-elementation" (μεταστοιχειωσις, *metastoicheiosis*), "re-ordination" (μεταρρύθμισις, *metarrhythmisis*), or simply "change" (μεταβολή, *metabole*).

### 14.1.1 The Knights Templar and The Rose Cross

[https://www.google.com/search?](https://www.google.com/search?q=knights+templar+rose+croix&tbm=isch&source=univ&sa=X&ved=2ahUKewi29YyeluLjAhXTwsQBHefvBu0QsAR6BAGEEAE&biw=1208&bih=696)

[q=knights+templar+rose+croix&tbm=isch&source=univ&sa=X&ved=2ahUKewi29YyeluLjAhXTwsQBHefvBu0QsAR6BAGEEAE&biw=1208&bih=696](https://en.wikipedia.org/wiki/Rosicrucianism)

<https://en.wikipedia.org/wiki/Rosicrucianism>

... an unknown [esoteric](#) order to the world and made seeking its knowledge attractive to many.<sup>[1][2]</sup> The mysterious doctrine of the order is "built on esoteric truths of the ancient past", which "concealed from the average man, provide insight into nature, the [physical universe](#), and the spiritual realm."<sup>[3]</sup> The manifestos do not elaborate extensively on the matter, but clearly combine references to [Kabbalah](#), [Hermeticism](#), [alchemy](#), and [mystical Christianity](#).<sup>[4]</sup>

<https://www.history.com/topics/middle-ages/the-knights-templar>

[https://en.wikipedia.org/wiki/Knights\\_Templar\\_in\\_England](https://en.wikipedia.org/wiki/Knights_Templar_in_England)

<https://www.theguardian.com/uk/the-northerner/2011/jun/27/whatever-happened-to-the-knights-templar>

...

In response to these critics, the influential Bernard of Clairvaux, wrote a multi-page treatise entitled *De Laude Novae Militiae* ("In Praise of the New Knighthood"), in which he championed their mission and defended the idea of a military religious order by appealing to the long-held Christian theory of a 'just war', which legitimised "taking up the sword" to defend the innocent and the Church from violent attack.

[https://en.wikipedia.org/wiki/Trials\\_of\\_the\\_Knights\\_Templar](https://en.wikipedia.org/wiki/Trials_of_the_Knights_Templar)

The Knights Templar trace their beginnings to the [Latin Kingdom of Jerusalem](#) in c. 1120 when nine Christian knights, under the auspices of King [Baldwin II](#) and the Patriarch [Warmund](#), were given the task of protecting pilgrims on the roads to Jerusalem, which they did for nine years until elevated to a [military order](#) at the [Council of Troyes](#) in 1129. They became an elite fighting force in the [Crusades](#) known for their propensity not to retreat or surrender.

Eventually, their rules of secrecy, their power, privileges and their wealth,<sup>[a]</sup> made them vulnerable to the King of France's accusations, and with the Pope's unsuccessful attempts to prevent it, their destruction. The Templar leader, Master [Jacques de Molay](#) had recently come to France for meetings with the pope. In 1307, members of the Templar order in France were suddenly charged with [heresy](#) and arrested. In France, many ultimately, including their leader, were burned at the stake while others were sentenced to perpetual imprisonment. The events in France led to a series of trials in other locations, not all of which had the same outcome.

Plan and the arrest

On 14 September 1307 all bailiffs and seneschals<sup>[b]</sup> in the kingdom of France were sent secret orders from King Philip IV ordering preparations to be made for the arrest and imprisonment of all members of the Order of Templars; the actual arrests were to be executed a month later.<sup>[25]</sup> At dawn on October 13, 1307, the soldiers of King Philip IV then captured all Templars found in France.<sup>[26]</sup> Clement V, initially incensed at this flagrant disregard for his authority nonetheless relented and on November 22, 1307, issued a [papal decree](#), ordering all [monarchs](#) of the Christian faith to arrest all Templars and confiscate their lands in the name of the Pope and the [Church](#).<sup>[27]</sup> The order went out to [England](#), [Iberia](#), [Germany](#), [Italy](#) and [Cyprus](#). The leader, Templar Grand Master [Jacques de Molay](#), and Hughes de Pairaud, a Templar, referred to in various documents as "the visitor of France", who was the collector of all of the royal revenues of France owing to the Order, were both arrested, as were many other Templars in France.<sup>[28]</sup>

## 14.2 Information about the Warburg Institute Library

The complete Article on the Warburg Library with all the information is now in these files:

<http://www.noologie.de/aby.pdf>

<http://www.noologie.de/aby.htm>

<http://www.noologie.de/warburg-class.html>

<https://wdl.warburg.sas.ac.uk/>

Warburg Digital Library Collections

<http://warburg.libguides.com/classification>

**Ex Libris Aby Warburg: Magic and Science**

<https://wdl.warburg.sas.ac.uk/islandora/object/islandora%3A3969>

Ex Libris Aby Warburg: Magic and Science

The Warburg Institute Library holds a collection

<https://warburg.sas.ac.uk/library-collections/library>

A video guide is available.

**Our Research Guides provide a practical in-depth guide to the Library's collections.**

**Contact the Library**

Email: [Warburg.Library@sas.ac.uk](mailto:Warburg.Library@sas.ac.uk)

Tel: +44 (0)

20

7862

8935/6

Twitter:

[@Warburg\\_Library](#)

Facebook: [@WarburgLibrary](#)

Subject View

<https://wdl.warburg.sas.ac.uk/browse/subject>

Grid View of the **Library**

<https://wdl.warburg.sas.ac.uk/islandora/object/islandora%3A3969?page=1&display=grid>

<https://wdl.warburg.sas.ac.uk/browse/classmark>

Some history of the Warburg Library

Nietzsche: <sup>[515]</sup>

"Man muss noch Chaos in sich haben, um einen tanzenden Stern gebären zu können."

[https://en.wikipedia.org/wiki/Aby\\_Warburg](https://en.wikipedia.org/wiki/Aby_Warburg)

## 15 Notes about Eco's The Name of the Rose

I discuss this quite well-known book with some hopefully novel tracks of thought. I have read almost all of Umberto Eco's books, mostly his semiotic works. I also found "Name of the Rose" quite good, but mostly for semiotic reasons, which may be a little bit unusual. His "Foucault Pendulum" was almost as good. But the later novels, like Baudolino and so on were quite boring for me, they were only rehashes of some odd pieces of literature. This is what mostly occurs when a writer has some success initially and then wants to cash in on that success with some sequels. See also Jared Diamond for another example. And I like Eco as a scientist and historian as well as a novelist. He ranks for me as quite on a par with Giordano Bruno. With the exception that Umberto had a lot of humor, and Giordano Bruno had none whatsoever of that. I also like a quite good genius with humor better than a much greater genius without humor. Like Isaac Newton. He was probably the most sourly character in the whole history of human geniusness. Next to Platon and Aristoteles, I would say.

[[Bruno had been a Domenican, and Domenicans are not known for their sense of humor. For example they had *invented the inquisition*. Quite to the contrary of the *Franciscans who had a lot of humor*, like the good *William of Baskerville* of our story.]]

So now I will repeat some text from the introduction of Meta-Morphology to get us back on track with that story:

### 15.1 The Tri-Polarity is not Oppositional but Complementary

*The Tri-Polarity is not oppositional but complementary.* The logics behind this is that *there cannot be an opposition in a Tri-Polarity at all*. So there are some deep mysteries behind this mode of imaging / imagining which was also expounded by the complete exegesis of Tri-Polarity by Giordano Bruno. I have never found any literature that even mentioned this besides all those other great works of Giordano Bruno. Now there is a logical progression by prime numbers. When you do this, you get to the Penta-Gramma(ton). And then the Hepta-Gramma(ton). Why is this so? It is one of the Laws of Nature. The Penta-Gramma(ton) is present in many flowering plants. And it is also called the Law of the Golden Section.

<http://www.maths.surrey.ac.uk/hosted-sites/R.Knott/Fibonacci/phi2DGeomTrig.html>

<https://www.mathsisfun.com/geometry/pentagram.html>

<http://jaced.com/2009/12/15/the-golden-ratio-in-a-pentagram/>

<https://en.wikipedia.org/wiki/Pentagram>

A **pentagram** (sometimes known as a **pentalpha**, **pentangle** or **star pentagon**) is the shape of a five-pointed star.

Pentagrams were used symbolically in [ancient Greece](#) and [Babylonia](#), and are used today as a symbol of faith by many [Wiccans](#), akin to the use of the [cross](#) by Christians and the [Star of David](#) by the Jews. The pentagram has [magical](#) associations. Many people who practice [Neopagan](#) faiths wear jewelry incorporating the symbol. [Christians](#) once commonly used the pentagram to represent the [five wounds of Jesus](#).<sup>[1][2]</sup> The pentagram is also used as a symbol by other belief systems, and is associated with [Freemasonry](#).

The word *pentagram* comes from the [Greek](#) word πεντάγραμμον (*pentagrammon*),<sup>[3]</sup> from πέντε (*pentē*), "five" + γραμμή (*grammē*), "line".<sup>[4]</sup> The word "[pentacle](#)" is sometimes used synonymously with "pentagram".

<sup>[5]</sup> The word *pentalpha* is a learned modern (17th-century) revival of a post-classical Greek name of the shape.<sup>[6]</sup>

Early history

In early ([Ur I](#)) [monumental Sumerian script](#), or [cuneiform](#), a pentagram glyph served as a [logogram](#) for the word *ub*, meaning "corner, angle, nook; a small room, cavity, hole; pitfall" (this later gave rise to the

cuneiform sign UB , composed of five wedges, further reduced to four in Assyrian cuneiform).<sup>[citation needed]</sup>

The word *Pentemychos* (πεντέμυχος lit. "five corners" or "five recesses")<sup>[7]</sup> was the title of the [cosmogony](#) of [Pherecydes of Syros](#).<sup>[8]</sup> Here, the "five corners" are where the seeds of [Chronos](#) are placed within the Earth in order for the [cosmos](#) to appear.<sup>[9][clarification needed]</sup>

### 15.2 Tres and Tria

And the Tri-Polarity or the Tri-Gonikos (gonos) is almost completely absent in living Nature except for some sea snails whose shells are constructed in Tri-Gonos(ikos) manner.

[https://en.wikipedia.org/wiki/Syntomodrillia\\_triangulos](https://en.wikipedia.org/wiki/Syntomodrillia_triangulos)

The Drilliidae are a taxonomic family of small predatory sea snails with high-spired shells. They are classified as marine gastropod mollusks in the superfamily Conoidea.[2]

This family has no subfamilies.

[http://www.gastropods.com/5/Shell\\_77165.shtml](http://www.gastropods.com/5/Shell_77165.shtml)

But the Tri-Polarity or the Tri-Gonikos is superbly present in the Crystal Structure (or crystal lattice) of the Diamond. And this has its own mythology. There is a quite misleading mis-nomer of the Tetra-Eder, which means the 4-Cornered One. But it is actually the most simple of the Platonic Solids, and it is constructed out of Tri-Angles, which means Tri-Angulos or Tri-Gonikos. So the logical progression of Tri- in 2-D goes into Tetra- in 3-D.

I have written something about this in my work Noologie III: "Der Diamantweg der Noologie: Eine Ody-See-Reise in die Grenz- und Rand-Bereiche des Denkens". We have heard a lot about Odysseus, and we will hear much more about him.

<http://www.noologie.de/diamant.htm>

[http://www.noologie.de/diamant.htm#\\_Toc348694834](http://www.noologie.de/diamant.htm#_Toc348694834)

[http://www.noologie.de/diamant.htm#\\_Toc348694836](http://www.noologie.de/diamant.htm#_Toc348694836)

[http://www.noologie.de/diamant.htm#\\_Toc348694848](http://www.noologie.de/diamant.htm#_Toc348694848)

[http://www.noologie.de/diamant.htm#\\_Toc348694851](http://www.noologie.de/diamant.htm#_Toc348694851)

<http://www.noologie.de/cunni.htm>

<http://www.noologie.de/cunni06.htm>

<http://www.noologie.de/cunni06.htm#Heading27>

*Tres* and *Tria* are some very old words in almost all the Indo-European languages. Tri-Murti is the Indian name for the Most Holy Triad of the Gods: Brahma, Vishnu and Shiva. The English words are:

trey / triad / trine / trinity / trio / troika

Therefore the Tri-Polarity is also the way out of the Dualistic thinking and especially the dualistic theology of the Abrahamitic Religions. The Dualism originated [more or less] with Zoroaster, then was amplified out of all proportions by the Manichaeans, and the Hl. St. Augustinus had been a staunch Manichaean, and had remained that ever since, even after his (outwardly) conversion to Christianity. It was mainly because of the Hl. St. Augustinus that Western Roman Christianity became so dualistic. The Orthodox Christianity was much less radical in this respect because they still had the HAGIA SOPHIA, WHICH WAS NOT AT ALL THE VIRGIN MARY. The Gnostics were also very dualistic, as were their Kathar successors in the middle ages. Kat-har-sis is a Greek word, and therefore I write it in the Greek spelling, not the Latinized one. We should stick as close as we can to the originals, and not the Roman Latin fakes.

### 15.3 Umberto Eco and a Novel about Rose Flowers

Why would one call a mystery novel by the *Name of the Rose* ? Because of the *Rosicrucians* ??, or the *Rosalyn Chapel* ???, or because of the *Secret Name of the Vulva* ?????? At least one artist had gotten the hint: Vouba, is Vouwa, and then it is the Baubo, and then you quite get it... [I have put the 5 question marks there for a very good reason.]

<http://vouba.com/geometry-of-rose>

Now we also get a mathematical hint: Because there is a rare case of transforming the penta- into hepta-symmetry in mathematical functions. There are two kinds of symmetry: Axial and Radial. Axial meaning that you have a multiple of 2, 4, 6, 8, and so on. They are all dividable by 2. Radial symmetry doesn't bother with such mathematical finesses. It cannot be divided by 2. So it is 3, 5, 7, and so on in the order of prime numbers. The botanic scientists have found a quite arcane name for this kind of symmetry. They call it the *Actinomorphic flower*. But higher prime numbers are not so much in use by nature. It probably ends with 11 and 13. And a Rose flower can do the higher mathematics of 5- and 7- symmetry quite well.

[https://en.wikipedia.org/wiki/Rose\\_\(mathematics\)](https://en.wikipedia.org/wiki/Rose_(mathematics))

<https://www.vectorstock.com/royalty-free-vectors/geometric-roses-vectors>

<http://www.flowersociety.org/hidden-geometry.html>

The writer of this work is Keith Critchlow. He is also well known for other, less mystical works about Sacred Geometry.

[https://www.google.com/search?](https://www.google.com/search?q=geometry+in+flowers&sa=X&ved=2ahUKEwiSocielNvjAhVNIIAKHR07DJJoQ1QIoAHoECAkQAQ&biw=1208&bih=696)

[q=geometry+in+flowers&sa=X&ved=2ahUKEwiSocielNvjAhVNIIAKHR07DJJoQ1QIoAHoECAkQAQ&biw=1208&bih=696](https://www.google.com/search?q=geometry+in+flowers&sa=X&ved=2ahUKEwiSocielNvjAhVNIIAKHR07DJJoQ1QIoAHoECAkQAQ&biw=1208&bih=696)

There is a speciality about Rose flowers since they have the ability of this abovementioned penta-gramma symmetry. So what makes a Rose so special? When we look at a picture of a rose it is quite visually comprehensible: The arrangement of the rose petals is an incredibly *complicated superposition* (or mathematically called) a recursion with variant parameters of the *pentagrammatical Ur-Pattern*. It is very

difficult to describe this in a mathematical function, but it looks very easy when we see the flower. Now we should also understand that the kind of Rose that we admire today is totally a product of human cultivation. There are no manifold interleaved structures of petals in Nature like this because they would have been selected by Darwinism out of the Genotype.

[https://en.wikipedia.org/wiki/Floral\\_symmetry](https://en.wikipedia.org/wiki/Floral_symmetry)

<https://www.maximumyield.com/definition/840/actinomorphic-flower>

[https://www.google.com/search?](https://www.google.com/search?q=rose+flower+actinomorphic&tbm=isch&source=univ&sa=X&ved=2ahUKEwiJ5cbIm9vjAhVSKFAKHfgKBmkQsAR6BAgCEAE&biw=1208&bih=696)

[q=rose+flower+actinomorphic&tbm=isch&source=univ&sa=X&ved=2ahUKEwiJ5cbIm9vjAhVSKFAKHfgKBmkQsAR6BAgCEAE&biw=1208&bih=696](https://www.google.com/search?q=rose+flower+actinomorphic&tbm=isch&source=univ&sa=X&ved=2ahUKEwiJ5cbIm9vjAhVSKFAKHfgKBmkQsAR6BAgCEAE&biw=1208&bih=696)

[https://www.google.com/search?](https://www.google.com/search?q=rose+flower+geomet&tbm=isch&source=hp&sa=X&ved=2ahUKEwiyhOaymtvjAhWGPFAKHbiwC5wQsAR6BAgJEAE&biw=1208&bih=696)

[q=rose+flower+geomet&tbm=isch&source=hp&sa=X&ved=2ahUKEwiyhOaymtvjAhWGPFAKHbiwC5wQsAR6BAgJEAE&biw=1208&bih=696](https://www.google.com/search?q=rose+flower+geomet&tbm=isch&source=hp&sa=X&ved=2ahUKEwiyhOaymtvjAhWGPFAKHbiwC5wQsAR6BAgJEAE&biw=1208&bih=696)

[https://en.wikipedia.org/wiki/Patterns\\_in\\_nature](https://en.wikipedia.org/wiki/Patterns_in_nature)

... Pliny the Elder (23–79 AD) noted their patterned circular arrangement.<sup>[3]</sup> Centuries later, Leonardo da Vinci (1452–1519) noted the spiral arrangement of leaf patterns, that tree trunks gain successive rings as they age, and proposed a rule purportedly satisfied by the cross-sectional areas of tree-branches.<sup>[4][3]</sup> Johannes Kepler (1571–1630) pointed out the presence of the Fibonacci sequence in nature, using it to explain the pentagonal form of some flowers.<sup>[3]</sup> In 1754, Charles Bonnet observed that the spiral phyllotaxis of plants were frequently expressed in both clockwise and counter-clockwise golden ratio series.<sup>[3]</sup> Mathematical observations of phyllotaxis followed with Karl Friedrich Schimper and his friend Alexander Braun's 1830 and 1830 work, respectively; Auguste Bravais and his brother Louis connected phyllotaxis ratios to the Fibonacci sequence in 1837, also noting its appearance in pinecones and pineapples.<sup>[3]</sup> In his 1854 book, German psychologist Adolf Zeising explored the golden ratio expressed in the arrangement of plant parts, the skeletons of animals and the branching patterns of their veins and nerves, as well as in crystals.<sup>[5][6][7]</sup> A. H. Church studied the patterns of phyllotaxis in his 1904 book.<sup>[8]</sup> In 1917, D'Arcy Thompson published *On Growth and Form*; his description of phyllotaxis and the Fibonacci sequence, the mathematical relationships in the spiral growth patterns of plants showed that simple equations could describe the spiral growth patterns of animal horns and mollusc shells.<sup>[9]</sup>

## 15.4 About the Novel Baudolino

### 15.4.1 wikipedia

<https://en.wikipedia.org/wiki/Baudolino>

In the year of 1204, Baudolino of Alessandria enters Constantinople, unaware of the Fourth Crusade that has thrown the city into chaos. In the confusion, he meets Niketas Choniates and saves his life. Niketas is amazed by his language genius, speaking many languages he has never heard, and on the question: if he is not part of the crusade, who is he? Baudolino begins to recount his life story to Niketas.

His story begins in 1155, when Baudolino – a highly talented Italian peasant boy – is sold to and adopted by the emperor Frederick I. At court and on the battlefield, he is educated in reading and writing Latin and learns about the power struggles and battles of northern Italy at the time. He is sent to Paris to become a scholar.

In Paris, he gains friends (such as the Archpoet, Abdul, Robert de Boron and Kyot, the purported source of Wolfram von Eschenbach's *Parzival*) and learns about the legendary kingdom of Prester John. From this event onward, Baudolino dreams of reaching this fabled land.

### 15.4.2 Baudolino

<https://en.wikipedia.org/wiki/Baudolino>

**Baudolino** is a 2000 novel by Umberto Eco about the adventures of a man named Baudolino in the known and mythical Christian world of the 12th century.

*Baudolino* was translated into English in 2001 by William Weaver. The novel presented a number of particular difficulties in translation, not the least of which is that there are ten or so pages written in a made-up language that is a mixture of Latin, medieval Italian and other languages (intended to reconstruct how a barely-literate Italian peasant boy of the 12th century would have tried to write in the vernacular).

### 15.4.3 Contents of Baudolino

<https://libros-gratis.com/ebooks/audolino-umberto-eco/>

En una zona del bajo Piamonte donde años después se fundaría la ciudad de Alessandria, el fantasioso y embustero Baudolino conquista a Federico Barbarroja y se convierte en su hijo adoptivo. Baudolino inventa

historias que se transforman en Historia y, empujado por la imaginación de su ahijado, Federico emprende una cruzada por restituir al Preste Juan las más prestigiosa reliquia de la cristiandad, el Santo Grial. Federico muere en el intento, y será Baudolino quien continúe el viaje hacia tierras lejanas, desafiando monstruos y enamorando a la más singular de las hijas de Eva. Aventura picaresca, novela histórica, relato de un delito imposible, teatro de invenciones lingüísticas hilarantes, esta obra es una celebración del mito y la utopía..

### 15.5 And now with two Ketzer Monks in the Monastery

The German work *Ketzer* derives from the Kathars, and Umberto Eco did his nice little novel around this theme, with the two Ketzer monks in the monastery.

[https://en.wikipedia.org/wiki/The\\_Name\\_of\\_the\\_Rose](https://en.wikipedia.org/wiki/The_Name_of_the_Rose)

[http://www.cathar.info/cathar\\_legacy.htm](http://www.cathar.info/cathar_legacy.htm)

[http://www.cathar.info/cathar\\_origins.htm](http://www.cathar.info/cathar_origins.htm)

<https://en.wikipedia.org/wiki/Catharism>

[http://www.badnewsaboutchristianity.com/gbe\\_cathars.htm](http://www.badnewsaboutchristianity.com/gbe_cathars.htm)

[https://www.jstor.org/stable/20081845?seq=1#page\\_scan\\_tab\\_contents](https://www.jstor.org/stable/20081845?seq=1#page_scan_tab_contents)

<https://www.h-net.org/reviews/showpdf.php?id=5235>

<https://www.britannica.com/topic/The-Name-of-the-Rose-novel-by-Eco>

<https://www.academia.edu/2306538/>

[The\\_Cathar\\_Mary\\_Magdalene\\_and\\_the\\_Sacred\\_Feminine\\_Pop\\_Culture\\_Legend\\_vs\\_Medieval\\_Doctrine](#)

### 15.6 A Few more Names in the Name of the Rose

We can get some hints from the geometry of the petals of the rose, and transform it into the names of the characters in the novel. All the names in the novel by Umberto Eco are of course a little bit ana-grammed from some other well known characters. *William of Baskerville is of course Sherlock Holmes*, as in the Hound of Baskerville. Adso(n) of Melk is Dr. Watson, but as a young apprentice. *Jorge of Burgos* is named after the famous *library of Burgos in Spain*. Actually it was the *library of Toledo*, one of the main centers of scholarship in Medieval Castilia. *Castilia means Castle land*.

[Another interpretation mentions that Jorge of Burgos is an anagram for *Jorge Luis Borges* which fits equally well. There is a striking similarity between the characters of *Jorge Luis Borges* and *Aby Warburg*, for those who want to know a few more secrets.]

[https://en.wikipedia.org/wiki/Jorge\\_Luis\\_Borges](https://en.wikipedia.org/wiki/Jorge_Luis_Borges)

The name of the Rose leads us to *Miraflores* and the *Rosicrucians and Rosalyn Chapel in Scotland*. For *Miraflores* see the *Miraflores Charterhouse* in the wikipedia article on *Monasterio de las Huelgas*. Of course Dan Brown had concocted his own story from all those bits and pieces of Mythology and Mystery. The name of Burgos probably derives from the { Burgen / Burg / Berg / Bergen / Ver-Bergen / Ent-Bergen / Burrow } since there were quite a few *Teutonic Crusaders* during the many hundred years of the *Re-Conquista* which was about *the longest protracted war in the history of humanity*. It lasted about 780 years until 1492, when the *Alhambra and Granada* finally fell back to the Christians. So we have the *Rolland Mythos* also wrapped into the story. Which was the story when the Moors were decisively defeated at Tours by the *Frankish army*. And now-a-days no-one knows who these Franks really were. Were they the original French or the original Teutonic? The his-torians can never get their mInds together about this question. And the good Patrice Ayme' also has his special idea about that.

<https://en.wikipedia.org/wiki/Roland>

**Roland** (Frankish: "Hrōþiland"; Latin: "Hruodlandus", "Rotholandus"; Italian: "Orlando", "Rolando"; died 15 August 778) was a Frankish military leader under Charlemagne who became one of the principal figures in the literary cycle known as the Matter of France. The historical Roland was military governor of the Breton March, responsible for defending Francia's frontier against the Bretons. His only historical attestation is in Einhard's *Vita Karoli Magni*, which notes he was part of the Frankish rearguard killed by rebellious Basques in Iberia at the Battle of Roncevaux Pass.

The story of Roland's death at Roncevaux Pass was embellished in later medieval and Renaissance literature. The first and most famous of these epic treatments was the Old French *Chanson de Roland* of the 11th century.

Two masterpieces of Italian Renaissance poetry, the *Orlando Innamorato* and *Orlando Furioso* (by Matteo Maria Boiardo and Ludovico Ariosto), are further detached from history than the earlier *Chansons*, similarly to the later *Morgante* by Luigi Pulci. Roland is poetically associated with his sword Durendal, his horse Veillantif, and his oliphant horn.

Roland was evidently the first official appointed to direct Frankish policy in Breton affairs, as local Franks under the Merovingian dynasty had not previously pursued any specific relationship with the Bretons. Their frontier castle districts such as Vitré, Ille-et-Vilaine, south of Mont Saint-Michel, are now divided between Normandy and Brittany. The distinctive culture of this region preserves the present-day Gallo language and legends of local heroes such as Roland. Roland's successor in *Brittania Nova* was Guy of Nantes, who like Roland, was unable to exert Frankish expansion over Brittany and merely sustained a Breton presence in the Carolingian Empire.

According to legend, Roland was laid to rest in the basilica at Blaye, near Bordeaux, on the site of the citadel.

[https://en.wikipedia.org/wiki/Battle\\_of\\_Tours](https://en.wikipedia.org/wiki/Battle_of_Tours)

The **Battle of Tours** (10 October 732)<sup>[8]</sup> – also called the **Battle of Poitiers** and, by Arab sources, the **Battle of the Highway of the Martyrs** (Arabic: معركة بلاط الشهداء, romanized: *Ma'arakat Balāṭ ash-Shuhadā'*)<sup>[9]</sup> – was an important victory of the Frankish and Burgundian<sup>[10][11]</sup> forces under Charles Martel over the raiding parties of the Umayyad Caliphate led by Abdul Rahman Al Ghafiqi, Governor-General of al-Andalus. It was fought in an area between the cities of Poitiers and Tours, in the Aquitaine of west-central France, near the village of Moussais-la-Bataille, about 20 kilometres (12 mi) northeast of Poitiers. The location of the battle was close to the border between the Frankish realm and the then-independent Duchy of Aquitaine under Odo the Great.

The Franks were victorious. Abdul Rahman Al Ghafiqi was killed, and Charles subsequently extended his authority in the south. Details of the battle, including its exact location and the number of combatants, cannot be determined from accounts that have survived. Notably, the Frankish troops won the battle without cavalry.<sup>[12]</sup>

The battle helped lay the foundations of the Carolingian Empire and Frankish domination of Europe for the next century. Most historians agree that "the establishment of Frankish power in western Europe shaped that continent's destiny and the Battle of Tours confirmed that power."<sup>[13]</sup>

[https://en.wikipedia.org/wiki/History\\_of\\_Toledo,\\_Spain](https://en.wikipedia.org/wiki/History_of_Toledo,_Spain)

[https://en.wikipedia.org/wiki/History\\_of\\_Toledo,\\_Spain#Medieval\\_Toledo\\_after\\_the\\_Reconquest](https://en.wikipedia.org/wiki/History_of_Toledo,_Spain#Medieval_Toledo_after_the_Reconquest)

<https://en.wikipedia.org/wiki/Reconquista>

## 15.7 Maria Magdalena and the Son of Jesus

I know that in English it is written "Mary Magdalene" but I have my own idiosyncrasies of spelling things in a more original way. The last contribution is a quite mythical / mystical account by which *Maria Magdalena* was a "sort of" *wife of Jesus Christos* [or Chrestos, from Chresma, or Charisma, as I sometimes call him by his pseudonym], and she was pregnant with *a child of Jesus*, when he was crucified. This story was at some time told by the authors *Baigent and Leigh*, and later by *Dan Brown*. And this was probably a plagiarism of some old Kathar stories, and of the *Ste. Maries de la Mer*, the holiest of the pilgrimage sites of the Gypsies.

[It is to be noted that there are TWO Ste. Maries, one of course being Maria the Mother of Christ, and the other... well er, I don't know this. But Baigent and Leigh, and Dan Brown know it all: This must have been Maria Magdalena.]

And of course, we could have guessed it by now, the Knights Templar are also knee-deep involved in this "his-"story. I have written some more about this story, which is quite a nice one, if one wants to believe this. Because as the legend goes, the Child of Maria Magdalena and Jesus Christos, founded a lineage that some few 100 years later, led to the *Merovingian Dynasty of France*. Also the good Patrice Ayme' had concocted his own version of this story, although not as far-out as the Dan Brown version of it. See also the *Matrix Trilogy, Part II*, where we meet the *Merovingian* in some other disguise. And his wife is *Persephoneae* (Per-Se-phonae, Proserpina, and Mother Kali), all in all this is shock-full of mythology of the finest kind. I have no idea how the Wachowski brothers (later sisters) could have ever thought up such a *tall story*. At least it is more intelligent than the really *dumb story of a super duper computer program* that likes to play "the world". Even Umberto Eco knew these jokes long before the Wachowski's came up with the idea.

[https://en.wikipedia.org/wiki/Michael\\_Baigent](https://en.wikipedia.org/wiki/Michael_Baigent)

[https://en.wikipedia.org/wiki/The\\_Holy\\_Blood\\_and\\_the\\_Holy\\_Grail](https://en.wikipedia.org/wiki/The_Holy_Blood_and_the_Holy_Grail)

<https://www.youtube.com/watch?v=PK12LkSN3ss>

<https://www.youtube.com/watch?v=SR9gBOidq6c>

<https://www.theguardian.com/books/2013/jun/30/michael-baigent>

[https://freimaurer-wiki.de/index.php/En:\\_Michael\\_Baigent](https://freimaurer-wiki.de/index.php/En:_Michael_Baigent)

## 15.8 More on the Name of the Rose

[https://en.wikipedia.org/wiki/The\\_Name\\_of\\_the\\_Rose](https://en.wikipedia.org/wiki/The_Name_of_the_Rose)

In 1327, Franciscan friar William of Baskerville and Adso of Melk, a Benedictine novice travelling under his protection, arrive at a Benedictine monastery in Northern Italy to attend a theological disputation. This abbey is being used as neutral ground in a dispute between Pope John XXII, and the Friars Minor, who are suspected of heresy.

The monastery is disturbed by the death of Adelmo of Otranto, an illuminator revered for his illustrations.

Adelmo was skilled at comical artwork, especially concerning religious matters. William is tasked by the monastery's abbot, Abo of Fossanova, to investigate the death, and he has a debate with one of the oldest monks in the abbey, Jorge of Burgos, about the theological meaning of laughter, which Jorge despises.

The next day, a scholar of Aristotle and translator of Greek and Arabic, Venantius of Salvemec, is found dead in a vat of pig's blood. Previously, William and Adso had been prohibited from entering the labyrinthine library by the librarian Malachi of Hildesheim, so they penetrate the labyrinth, discovering that there must be a hidden room, entitled the *finis Africae*. Benno of Uppsala, a rhetoric scholar, reveals to William that Malachi, and his assistant Berengar of Arundel, had a homosexual relationship, until Berengar seduced Adelmo, who committed suicide out of conflicting religious shame. The only other monks who knew about the indiscretions were Jorge and Venantius.

By the day after, Berengar has gone missing, which puts pressure onto William. William learns of how Salvatore of Montferrat, and Remigio of Varagine, two cellarer monks, had a history with the Dulcian heretics. Meanwhile, Adso is seduced by a peasant girl, with whom he has his first sexual experience. After confessing to William, Adso is absolved, although he still feels guilty. Severinus of Sankt Wendel, the herbalist, tells William that Venantius's body had black stains on the tongue and fingers, which suggests poison. William and Adso penetrate the library once more, discovering that Venantius had a book stolen from him, which they pursue.

On the fourth day, Berengar is found drowned in a bath, although he bears stains similar to those of Venantius. Bernard Gui, a member of the Inquisition, arrives to search for the murderer via papal deduction. Due to this arrival, Gui arrests the peasant girl Adso loved, as well as Salvatore, accusing them both of heresy.

Remigio is interrogated by Gui, who scares him into revealing his heretic past, as well as falsely confessing to the crimes of the Abbey. Severinus then is found dead in his room, to which Jorge responds by leading a sermon about the coming of the Antichrist.

Malachi returns to the early sermon that day near death, and his final words concern scorpions. Nicholas of Morimondo, the glazier, tells William that whoever is the librarian would then become the Abbot, and with new light, William goes to the library to search for evidence. The Abbot is distraught that William has not solved the crime, and that the Inquisition is undermining him, so he fires William. That night, William and Adso penetrate the library once more in search of the *finis Africae*.

William and Adso discover Jorge waiting for them in the forbidden room. He says that he has been masterminding the Abbey for years, and his last victim is the Abbot himself, who has been trapped in a secret passage of the library. The Abbot suffocates, and Jorge tells them that Venantius's hidden book was *Aristotle's Second Poetics*, which speaks of the virtues of laughter, something Jorge despises. Jorge put poison on the pages on the book, knowing that a reader would have to lick his fingers to turn them. Venantius was translating the book and died. Berengar found the body and disposed of it in pig's blood, fearing exposure, before reading the book himself and dying. Malachi was convinced by Jorge to retrieve the book, which was stashed with Severinus, so he kills Severinus and retrieves the book, before getting curious and dying as well.

All of the murders time out with the Seven Trumpets, which call for objects falling from the sky (Adelmo threw himself from a tower), pools of blood, poison from water, bashing of the stars (Severinus was killed with his head bashed in with a celestial orb), scorpions, locusts, and fire. Jorge consumes the book's poisoned pages and uses Adso's lantern to start a fire, which burns down the library. As the fire spreads to the rest of the abbey, William laments his failure. Confused and defeated, William and Adso escape the abbey. Years later, Adso, now aged, returns to the ruins of the abbey and collects books that were salvaged from the fire, creating a lesser library.

## 15.9 Book Review: The Name of the Rose by Umberto Eco

<https://medium.com/@dsfish/book-review-the-name-of-the-rose-by-umberto-eco-265be0c09e79>

The hook couldn't be more obvious. When a string of strange deaths plagues a wealthy Italian abbey, Brother William of Baskerville is called to unravel the mystery. In this 14th-century thriller, every death exposes a new piece of an age-old conspiracy. Dangerous knowledge and the future of the Catholic Church hang in the balance. Follow along as William races against time to crack the case!

...

The Name of the Rose is plodding and complex. It does not have the pace of a murder mystery and that's because it's actually much more of a historical novel than anything else. Its first priority — far above entertaining the reader or advancing the plot — is to situate itself perfectly in history, to merge so cleanly with the past that the reader can't see the seams. The Name of the Rose is obsessive in a lot of ways, beginning with its own credibility.

Your typical murder mystery starts with a bang, but this one starts with a fake history lesson. In the opening pages we learn that The Name of the Rose is not actually a novel written by Umberto Eco. Eco has merely translated and titled a book given to him in 1968 by someone named Abbé Vallet. This book was *Le Manuscrit de Dom Adso de Melk*, Vallet's 1842 French translation of a Latin text written by an aging monk, Adso of Melk, in 14th-century Italy. Adso's original text is the story itself: the mysterious saga of seven deaths in 1327, which he witnessed firsthand in his youth while shadowing his master — our detective — William of Baskerville. To recap: you're reading a (fictitious) Latin 14th-century eyewitness account, translated into French by (the fictitious) Abbé Vallet in 1842, translated again (but not actually) into Italian by Umberto Eco in 1980, and if you're reading the English version, you can add yet another layer for William Weaver's (fantastic) 1983 English translation.

With its own origins settled, the book spends the subsequent 500 pages weaving itself as tightly into the fabric of history as possible. The Name of the Rose is part of that special breed of historical fiction that doesn't merely fork off of recorded events but integrates so completely with them that it becomes difficult to separate fact from fiction. I certainly struggled with this, so if you're going to read the book I highly recommend brushing up on the medieval history of the Catholic Church. Key actors and topics include [Michael of Cesena](#), [Louis IV](#), [William of Ockham](#), [popes of that time period](#), and [evangelical poverty](#). You may also wish to learn Latin.

Here's the background I wish I'd had before I started reading. The Name of the Rose pivots on a doctrine known as evangelical (or apostolic) poverty, which was particularly divisive in the 14th century and which calls for Christians to live without holding any property. The belief stems from [Luke 10](#), in which Jesus sends his 70 disciples on a mission without any supplies: "Go away; lo, I send you forth as lambs in the midst of wolves; carry no bag, no scrip, nor sandals." Thus a small subset of Catholics began to equate not having any property with being holy. For obvious reasons this idea appealed to the impoverished masses, who had a head start on not owning anything, and the movement picked up steam. In the early 14th century, Pope John XXII made every attempt to block its progression, in fear that it would cast a negative light on the Church and ultimately threaten its wealth and land ownership, and the widespread control they offered. He condemned it as heretical in 1323 but that didn't stop the Spiritual Franciscans, so named for their devotion to Saint Francis of Assisi, from continuing to live by this contentious doctrine. The Spiritual Franciscans were supported by Louis IV, then king of the Romans and of Italy, and led by Michael of Cesena. In 1327, Pope John would summon Michael to Avignon to answer for his order's "heretical" behavior, an event that would lead to Michael's excommunication.

So where does The Name of the Rose fit in? Eco's story takes place just before Michael's arrival in Avignon, somewhere along his journey through Italy, in an abbey tucked into the mountains. Here, the story goes, Michael and his order would stop to meet with some of the pope's men so that they might resolve their differences peacefully and privately. Presiding over the meeting would be William of Baskerville, a Franciscan loyalist who might enable the Franciscans to absolve themselves of heresy before it was too late — before Michael would be forced to walk right into the pope's hands at Avignon.

The story begins with William and Adso traveling to the abbey a few days early to prepare for the meeting. But upon their arrival they learn some troubling news. One night earlier, a monk plummeted to his death from the tallest building in the abbey. Over the next several days more strange and horrible deaths transpire and so the stakes become clear: William must solve this mystery before the pope's delegation arrives. Otherwise, foul play will be suspected and the meeting will be for naught. The future of the Franciscan order depends on William's mystery-solving skills.

It is an absolute pleasure to follow William as he uncovers the abbey's darkest secrets, often by making forbidden trips to the abbey's labyrinth of a library, and edges closer to solving the puzzle. But this is no free ride. Much is demanded of the reader; I found it impossible to keep track of everything without taking notes. The Name of the Rose is not only obsessed with situating itself in history but with ensconcing the reader in that rich historical context as well. You will learn more about religious sects and Biblical interpretation than you ever cared to know. You will be invited to ponder the political aspirations of the Church and its relation to various European rulers. The text indulges in erudite discussions of philosophy and semiotics. A central plot device hinges on how certain geographical locations produce — or should produce — certain manners of thinking. Nothing is easy.

Even the most foundational part of the story, its characters, proves challenging. The reader is responsible for tracking a dense list of characters, both real and fictional, that never stops expanding. There are two Williams and two Berengars. There's Abo and Adso and Adelmo. There are characters introduced early who never reappear and characters introduced late who are essential to the plot. I took notes on twenty-two of them, not counting the historical figures who don't appear in the story, and I'm probably missing a lot more.

The question isn't Does Eco pull it off? — he does, spectacularly — but Is it worth the effort? Some books are worth reading simply because they're hard. Does *The Name of the Rose* fit that bill or is it somehow also enjoyable? Can it be difficult and fun?

I won't lie to you. It is absolutely a slog at times. A friend of mine who recently read the book complained to me about a chapter in which Adso spends six pages describing a door. Adso loves to catalog things, almost to the point of hilarity. At one point he gains entry to the abbey's vault and describes the treasures within — "Gold vestments, golden crowns, studded with gems, coffer of various metals engraved with figures, works in niello and ivory. [...] I saw, wonder of wonders, under a glass bell, on a red cushion embroidered with pearls, a piece of the manger of Bethlehem, and a hand's length of the purple tunic of Saint John the Evangelist, two links of the chains that bound the ankles of the apostle Peter in Rome..." — and it's amazing he doesn't run out of commas.

So, sure, there are moments when *The Name of the Rose* feels more like work than play. But it does reward the reader with some wonderful scenes of sleuthing. Put simply, it is fun in the way you want a detective novel to be. William of Baskerville is a great character: cunning, moral, independent, and always a step ahead. You never tire of watching him solve mysteries. The reader is first exposed to his brilliance during his and Adso's initial ascent to the abbey. When the pair is approached by a band of monks, William immediately intuits that they are searching for a lost horse. He tells the monks where the horse has been and where it has gone, and describes its appearance in great detail:

"Brunellus, the abbot's favorite horse, fifteen hands, the fastest in your stables, with a dark coat, a full tail, small round hoofs, but a very steady gait; small head, sharp ears, big eyes."

This bewilders the monks and Adso, too, because, as William says, " 'We haven't seen him at all.' " A few moments later the horse is found exactly where William said he would be. When Adso asks William how he was able to deduce so much without ever seeing the horse, William's response is perfect:

"During our whole journey I have been teaching you to recognize the evidence through which the world speaks to us like a great book. [...] I am almost embarrassed to repeat to you what you should know. At the crossroads, on the still-fresh snow, a horse's hoofprints stood out very neatly, heading for the path to our left. Neatly spaced, those marks said that the hoof was small and round, and the gallop quite regular — and so I deduced the nature of the horse, and the fact that it was not running wildly like a crazed animal. At the point where the pines formed a natural roof, some twigs had been freshly broken off at a height of five feet. One of the blackberry bushes where the animal must have turned to take the path to his right, proudly switching his handsome tail, still held some long black horsehairs in its brambles...."

And so on, until every last detail has been explained. There aren't a lot of these Sherlock Holmes-esque reveals but each is more imaginative than the last, making for a deeply satisfying read.

A good murder mystery is clever when it needs to be, but this one is clever whenever it can be. Eco prefers his humor arid, and I can only assume that for every joke I understood there were about a hundred more that sailed straight over my head. Join the fun — find the joke in this passage:

*"But those were times when, to forget an evil world, grammarians took pleasure in abstruse questions. I was told that in that period, for fifteen days and fifteen nights, the rhetoricians Gabundus and Terentius argued on the vocative of 'ego,' and in the end they attacked each other, with weapons."*

No? Your Latin is in need of a good dusting. The joke is that the rhetoricians were arguing over the vocative of *ego*, which is the Latin word for "I." In Latin, nouns are expressed in [cases](#), with each case serving a particular function. The genitive case, for example, is used to show ownership over something: it's the Latin version of an apostrophe. The vocative case referred to above is used when directly addressing someone else. If you wanted to say hello to your friend Marcus, you'd say "Salve Marce"; the name "Marcus" changes to "Marce" in the vocative case. The rhetoricians were arguing over the vocative of "I," which is funny because one never addresses another person with "I," and so the argument is pointless. Well, at least until weapons get involved.

But silly me. I didn't realize that this pun isn't Eco's own invention but an allusion to a text by the 7th-century author [Virgil the Grammarian](#). *The Name of the Rose* is many things, but accessible is not one of them.

Occasionally Eco tosses the reader a bone. During William and Adso's visit to the abbey's vault, Adso gets stary-eyed over the rare religious artifacts, such as a fragment of the [True Cross](#), and William cautions him not to pay them too much heed:

*"I have seen many other fragments of the cross, in other churches. If all were genuine, our Lord's torment could not have been on a couple of planks nailed together, but on an entire forest."*

You're not alone if this humor isn't your cup of tea. Adso has trouble with it, too:

*I never understood when he was jesting. In my country, when you joke you say something and then you laugh very noisily, so everyone shares in the joke. But William laughed only when he said serious things, and remained very serious when he was presumably joking.*

The front cover of my copy of *The Name of the Rose* features a snippet from the [New York Times review](#) written by Franco Ferrucci: "Explodes with pyrotechnic inventions, literally as well as figuratively. Hold on till the end." I happen to agree with Ferrucci, not because of the story's climactic finale but for a different reason: the 30-page postscript that Eco wrote three years after his novel's publication. (Apparently his

obsession with contextualization didn't stop after he finished writing.) Within, Eco addresses a number of questions that the book raised, as well as what his goals were in telling this particular story and what he was thinking about as he wrote.

I should probably mention that his postscript isn't a cheat sheet or a guide to interpretation. On the contrary, Eco carefully avoids giving anything away. "The author should die once he has finished writing," he explains. "So as not to trouble the path of the text." Eco appears to be tapping into the same stuff that Roland Barthes proposed in his 1967 essay, "[The Death of the Author](#)," which argues that "to give an Author to a text is to impose upon that text a stop clause, to furnish it with a final signification, to close the writing." Eco pursues the idea a little further and implies that if an author's mere existence is enough to handicap a novel, then explaining a novel would undermine its *raison d'être*:

*A narrator should not supply interpretations of his work; otherwise he would not have written a novel, which is a machine for generating interpretations.*

So you won't find any explanations in this postscript. What you'll find instead is a bounty of observations and tidbits that contextualize the writing process much more than the text itself. The best part of any detective novel is climbing into the head of the mastermind, so it's a total joy to climb into the head of the mastermind behind the mastermind. Where did the idea for this story come from? How did he make choices in narration and tone? What regrets does he have? It's all there, and it's all fascinating.

Let me give you an example. It ruins very little about the novel to give away one of its gory deaths: that one character was discovered dead, "thrust head down into" a jar of pigs' blood. This is the kind of detail that makes quite an impression on the reader — and on the monks who discovered the dead man, to be sure — for obvious reasons, and the symbolism of the gesture serves a larger plot point that I won't go into. But I'll admit that I never pondered why exactly there would be a vat of fresh pigs' blood available. I kind of just accepted it. But Eco did not include this detail on a whim; he organized the story around it:

*But why does everything take place at the end of November 1327? Because by December, Michael of Cesena is already in Avignon. [...] But November is too early. I also needed to have a pig slaughtered. Why? The answer is simple: so that the corpse could be thrust, head down, into a great jar of blood. [...] Now, it so happens (I made inquiries) that pigs are not slaughtered until cold weather comes, and November might be too early — unless I situated the abbey in the mountains, so there would already be snow.*

The commitment to historicity — what Eco calls "furnishing a world in a historical novel" — is astonishing. There are other reveals in his postscript that I am dying to include but can't without spoiling the story. Eco's original motivation for writing this novel? Hilarious. The secrets behind the labyrinthine library, which he spent three months designing? Unfathomable. Forgive the apparent hyperbole: the man is simply that good. In addition to revealing a few of the magician's secrets, the postscript serves to validate the reader's journey. I felt rather self-conscious about finding the story slow-going until I discovered that Eco had made it crawl on purpose:

*After reading the manuscript, my friends and editors suggested I abbreviate the first hundred pages, which they found very difficult and demanding. Without thinking twice, I refused, because, as I insisted, if somebody wanted to enter the abbey and live there for seven days, he had to accept the abbey's own pace. If he could not, he would never manage to read the whole book. Therefore those first hundred pages are like a penance or an initiation, and if someone does not like them, so much the worse for him. He can stay at the foot of the hill.*

The concept of pace — what Eco calls "breathing" — is only one example of the many ways that the author has considered his reader. Eco has labored over the title, setting, historicity, voice, religious history, humor, emotion, entertainment value, and practically everything else one could consider about a book. The result is exceptional, and almost nauseating when you realize that this was Eco's first novel.

Recall that when Adso and William first climbed the hill to the abbey, William implored Adso "to recognize the evidence through which the world speaks to us like a great book." Eco, who died last year, was a trained semiotician and dedicated much of his life to understanding how the world's symbols speak to us. He has written much of himself into William, a character who excels at detective work because of his commitment to interpreting symbols, symbols that he knows are not limited but infinite in their expression, and that therefore speak differently to different people. Likewise, Eco remarks in his postscript that he wanted every reader of his book to emerge with a different interpretation, and I expect that he has succeeded. For if it is true that the world speaks to us like a great book, then perhaps it is also true that a great book can speak to us like the world, and that like the world it can provide a unique and transformative experience for everyone involved. Umberto Eco has left us with a world waiting to be discovered, tucked away in history, in language, in the cold Italian mountains... Climb the hill.

## 15.10 What Is The Name of the Rose About?

<https://www.patheos.com/blogs/kateohare/2019/05/name-rose-sundance-umberto-eco/>

What Is The Name of the Rose About?

Published in 1980 in Italian, and in 1983 in English, Eco's debut novel is a strange mix of medieval history, fiction, literary references, Catholicism and classic murder mystery, with dollops of sex and violence.

It centers on Franciscan friar William of Baskerville (played by Turturro, and, yes, that is a Sherlock Holmes reference, if it hadn't already hit you over the head), a man of faith and reason — and before you ask, he never loses either — but also a wise man of the world.

With Benedictine novice Adso of Melk (Damian Hardung) in tow, he arrives at a Benedictine monastery in northern Italy in 1327 to attend a theological disputation. Here's how **Wikipedia** describes that:

In the **scholastic** system of education of the **Middle Ages**, **disputations** (in **Latin**: *disputationes*, singular: *disputatio*) offered a formalized method of debate designed to uncover and establish truths in **theology** and in **sciences**. Fixed rules governed the process: they demanded dependence on traditional written **authorities** and the thorough understanding of each argument on each side.

Among the questions up for dispute is the wealth of the Church versus the radical poverty preached by the Fraticelli (Little Brethren), aka the **Spiritual Franciscans**. Declared heretical in 1296 by Pope Boniface VIII, they took St. Francis' devotion to Lady Poverty to an extreme, seeing the Church holding any property as scandalous. There were other, similar heretical Fraticelli sects that popped up in the 14th (that would be the 1300s, if you're keeping score) and 15th centuries, mostly in Italy, that broke off from the main Franciscan order and sometimes set themselves against it.

William of Baskerville is a Franciscan but not a Fraticelli. He's also a former Inquisitor, imprisoned and tortured after refusing to carry out fellow Inquisitor Bernard Gui's (Everett) condemnation of a man for heresy. He's fictional, and so is Adso and the abbey, but Gui was real. The novel, the 1986 movie made of it (starring Sean Connery as William), and the new miniseries freely mix fact and fiction.

A series of gruesome murders of monks test William's investigative skills, as he unwinds both the killings and the secrets of the abbey's huge library.

(BTW, for those who think the Middle Ages was a lost era of ignorance and superstition, first, they're wrong, and second, the modern world has monks, **especially Irish monks**, to thank for dedicating their lives to preserving many books, including the Greek pagan classics. You're welcome.)

Is *The Name of the Rose* Anti-Catholic?

For sensible Catholics, the idea that remote monasteries contained a variety of people, some of them wicked, and others peculiar, including some with physical and emotional handicaps, should not come as a surprise. That clerics (or novices) stray from their vows of celibacy and chastity is also not news.

That some Inquisitors were men of justice but others may have been cruel, sadistic or corrupted should also not raise eyebrows.

But having people like these in the book has earned Eco's novel the reputation of being anti-Catholic. I've always disagreed. Human weakness and depravity are there, but also nobility and faith. And, as I said, William and Adso remain men both of faith and reason, until the end.

What I Didn't Like About It

I am a fan of the 1986 movie and enjoyed all eight episodes of the Sundance version — with two glaring exceptions.

In the interest of inclusion or diversity or whatever, this version has increased the role of an illiterate peasant girl that catches Adso's interest, including making her literate.

In 1327, unless she was a nun or aristocratic/royal (and often not even then), the odds of a woman being literate were pretty slim, but not much more slim than the odds of any peasant of either sex being literate. And, the miniseries adds a female character with a sword, a Joan of Arc bob and revenge in her heart. As a woman, I continue to find this shoehorning of women into stories where they don't naturally belong or originally belonged — or to alter the characters of real historical women into something they're not, just to make a feminist point (looking at you, **The Spanish Princess**) — to be condescending and patronizing.

Other than this unwarranted alteration, this new *The Name of the Rose* is fairly faithful to the original. If you find it hard to follow, that's because the novel is hard to follow (read **here** to learn the length some folks go to, to understand it).

The Very Catholic Both/And of the Middle Ages

The Middle Ages were a complicated time, both suffering terrible wars, persecution and disease, and also producing sublime works of art, architecture and literature. The Church both fought against heresy and protected the wisdom of pagan authors and promoted education. There were both great, serious saints like Thomas Aquinas, and gentle Francis of Assisi, who had the soul of a preacher and the heart of a singing troubadour.

[http://www.postmodernmystery.com/name\\_of\\_the\\_rose.html](http://www.postmodernmystery.com/name_of_the_rose.html)

**Essay by Ted Gioia**

On any list of unlikely bestsellers from the last century, *The Name of the Rose* must hold a special place of distinction. Nothing is rarer than for a novel translated from Italian to reach the top of the *New York Times* bestseller list—unless it is, of course, a megahit book written by an academic whose best-known previous work was *A Theory of Semiotics*.

And did I mention that the plot revolves around medieval theology?

Even after it was translated into English (and numerous other languages), *The Name of the Rose* still had intimidating chunks of Latin on almost every page, and a smattering of other defunct languages scattered hither and thither. I took four years of high school Latin, yet I still would have been lost while reading this book if I hadn't had a copy of [The Key to 'The Name of the Rose'](#) (by Haft, White & White) by my side. Yet despite these obstacles, small and large, this arcane novel sold a reported fifty million copies, which puts it in the league of Harry Potter, and ahead of *Gone With the Wind*, *Roget's Thesaurus* and *To Kill a Mockingbird*. But not all is foreboding and recondite in *The Name of the Rose*.

The book also follows the familiar genre patterns of the mystery—think of it as a cross between Agatha Christie's *And Then There Were None* and Aquinas's *Summa Theologica*. Monks are dying under curious circumstances, and the detective (okay, he's just a monk too, but a very smart one) William of Baskerville is asked by the abbot to get to the bottom of it. Baskerville is assisted by Adso of Melk, who is sort of a tonsured Dr. Watson. In fact, I kept waiting for William to interject: "Eleemosynary, my dear novice Adso."

In the background, Eco constructs a labyrinth of supporting plots (including one involving a labyrinth). William has arrived at the Abbey as a representative of Emperor Louis IV in order to participate in negotiations also involving emissaries from the Pope, who is in heated conflict with the Emperor, and the Franciscan order, then caught in the crossfire between secular and ecclesiastical agendas. This part of the story draws the reader into further subplots involving heretical and rebellious church movements, and the various inquisitions and repressive actions employed in combating them.

And all these elements draw in aspects of theology, philosophy and history, that constantly linger in the background of *The Name of the Rose*, and sometimes dominate the foreground as well.

This may sound dry and academic, but Eco builds his polemics around forceful personalities.

Like any good mystery writer, he knows that it is essential to populate his story with many likely suspects, a plethora of possible murderers.

Here we encounter Salvatore, the secretive and gluttonous monk who speaks in a strange composite jargon—made up of bits and pieces of contemporary and ancient languages—and who is disturbingly vague when asked about certain particulars in his past. Malachi, the librarian, also arouses our suspicions: he never allows anyone into the third floor of the Aedificum, the fortress where the abbey's rare collection of manuscripts and books are held, yet mysterious lights can be seen through the windows at night. Severinus the doctor and herbalist might also be a murderer—he knows an uncanny amount about rare poisons. Jorge of Brugos, the blind man, seems to know even darker secrets and shows up quietly and stealthily at the least expected moments. Even Abo the Abbot is not above reproach, and comes across as far more concerned with worldly riches and power than is befitting for a Benedictine monk.

But the most compelling character is our detective William of Baskerville. Have you encountered mysteries where the private investigator was once a policeman, but left the force after encountering too much corruption?

Well, the same is true of William, except the organization he left behind wasn't the L.A.P.D, but the Inquisition. (Fill in your own wisecrack here.) He didn't like the *modus operandi*, and now operates as a free agent, but—unlike your typical private eye—he has the benefit of an Oxford education, and mentoring by Roger Bacon and William of Ockham, whose approach to natural philosophy proves to be a good medieval substitute for a degree in criminology.

Much has changed in the world since the late Middle Ages, but there are some constants.

The seven deadly sins are still around, and if you have any doubts over how deadly they might be, *The Name of the Rose* will settle the argument.

Eco also adds a convincing love story, with just the right dose of concupiscence for the modern reader—not easy for a story set in a monastery, but our author is a master of plotting, so such obstacles are deftly overcome. All in all, *The Name of the Rose* combines the best elements of a historical romance, a thriller, and a novel of ideas.

Yet our author would not be Umberto Eco, if the book wasn't full of intertextual, intratextual, and countertextual twists. For Eco, another turn of the screw means another book within a book, and Eco gives us several additional turns here. Not only does the story involve texts, as well as texts that relate to other texts; not only do manuscripts figure as possible clues, motives and weapons in *The Name of the Rose*; but even the narrative itself is reportedly drawn from a book the author found in 1968 that contained a 14th century text from a Benedictine monk, Adso of Melk. I can't say much more without giving

away the plot, but I will tell you that, after reading *The Name of the Rose*, you won't ever again look at the library as just a clean, well-lighted place for books.

Umberto Eco's *The Name of the Rose* is a brilliant mystery set in a fictitious medieval monastery. The text is rich with literary, historical, and theoretical references that make it eminently re-readable. *The Key* makes each reading fuller and more meaningful by helping the interested reader not merely to read but also to understand Eco's masterful work. Inspired by pleas from friends and strangers, the authors, each trained in Classics, undertook to translate and explain the Latin phrases that pepper the story. They have produced an approachable, informative guide to the book and its setting--the middle ages. *The Key* includes an introduction to the book, the middle ages, Umberto Eco, and philosophical and literary theories; a useful chronology; and reference notes to historical people and events.

The clear explanations of the historical setting and players will be useful to anyone interested in a general introduction to medieval history.

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### 15.11 Naming the Rose: Readers and Codes in Umberto Eco's Novel

Naming the Rose: Readers and Codes in Umberto Eco's Novel

Steven Sallis

[http://people.ds.cam.ac.uk/paa25/Pierpaolo%20Antonello/It6\\_files/sallis-eco.pdf](http://people.ds.cam.ac.uk/paa25/Pierpaolo%20Antonello/It6_files/sallis-eco.pdf)

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Umberto Eco's theory of semiotics has taken an evolutionary path of development. A Theory of Semiotics, the first English edition of Eco's semiotics theory, was a detailed explanation of his theory of signs.(1) The major criticism of this work, a lack of references to specific literary texts to elucidate the theory, led to *The Role of the Reader*.(2) This book repeated the theoretical basis of the first book, but it also included a major section of specific literary texts such as Sue's *Les myste' res de Paris* and Allais's *Un drame bien parisien*. Eco reaches the most recent stage of his theoretical work with *The Name of the Rose*, a novel which was published in Italy in 1980 and translated into English in 1983.(3) In this novel, as one critic suggests, Eco has moved from semiotic theory to "semiotic fiction."(4) As Eco himself says in the closing line of his introduction to *The Role of the Reader*: "after having to let semiotics speak abundantly about texts, it is correct to let a text speak by itself about its semiotic strategy" (RR, 40).

In "The Theory of Signs and the Role of the Reader" Eco explains the evolution of semiotics during the past twenty years.(5) During the sixties, semiotics focused on the theoretical foundation of signs or sign-tradition. During the seventies, "there occurred a violent shift from signs to texts"; the emphasis in semiotic theory shifted from considering what constituted a sign to the formation of the text. The third stage (from the end of the seventies to the present) does not center on the "generation of texts but their reading." Eco believes that current semiotic theory is concerned with "the recognition of the reader's response as a possibility built into the textual strategy" (TS, 35).

According to Eco, the reader "plays an active role in textual interpretation because signs are constructed according to an inferential model. . . ." Signs are the beginning of a process that leads a reader to an "infinite series of progressive consequences" (TS, 44) and are "open devices" that evoke meaning for the reader. This open quality of signs "postulates an active role on the part of their interpreter" (TS, 45). By defining this vital theory of signs as moving the reader to an infinite number of possibilities for interpreting a text, Eco argues that semiotics has moved beyond simply listing elaborate patterns for understanding signs and texts (a frequent criticism of semiotic theories) to the importance of the reader in understanding the signs found in the text.

In *The Role of the Reader* Eco identifies the possible reader as the "Model Reader," who deals interpretatively with the codes within a text just as the author deals generatively with the codes. The Model Reader and author thus co-

[Steven Sallis 3] operate in discovering the codes of a text (RR, 7). The author can create for the reader two kinds of texts, closed or open. A closed text is designed by the author to elicit a specific response from the reader. However, Eco maintains, the closed text is actually open to several possible interpretations. The text is considered closed precisely because it does not adequately take the reader's ability to interpret a variety of readings into account (RR, 8). The reader of the open text, on the other hand, feels comfortable with "the maze-like structure of the text." A reader can use the open text, however, only as the open text wants to be used. Eco adds the caution that no matter how open a text is it "cannot afford whatever interpretation" a reader might try to force on the text (RR, 9). Thus the Model Reader for an open text must be open to a multitude of codes and their interpretations. The open text can be read in two ways: naively and critically. The textual strategy for a particular text dictates whether a naive reader, a critical one, or both will be required. The naive reader is unable to perceive the maze-like structure of the open text and, therefore, is unable to appreciate the text fully. The critical reader succeeds only by overcoming the naive reading and discovering the textual strategy which will help explain the codes of the text. Both the naive and the critical reader approach a metatext, a text which is both closed and open. Requiring such exactness makes the task of the reader of the metatext, such as *The Name of the Rose*, an exercise in freedom. If the reader is to enjoy a text, all the "paths of [the text's] reading" must be explored (RR, 10).

A reader could explore *The Name of the Rose* on several levels. Descriptions of monastic and civic rivalry, the troubled history of the papacy in the fourteenth century, and lists of medieval herbs, beasts, and favorite books would captivate a reader with interests in the Renaissance. The unusual murders, clues to the murderer's identity, and the narrator's observations would lead the adept mystery-reader to the text in order to try to solve the mystery of the novel's intrigue. The exposition of Eco's semiotic theory would lead the reader interested in literary criticism to yet another level of reading, the examination of the role of the reader in interpreting a text.

As far as I have been able to determine, no one has yet attempted to explain Eco's use of the naive and the critical reader within his novel.(6) Eco reveals the two kinds of readers through two characters in the novel who explore the world within the text by discovering the meaning of signs just as a naive or a critical reader outside the text could discover the meaning of the metatext. Adso, the narrator, represents the naive reader. Writing the story as an old Benedictine monk, Adso describes the events that took place years earlier when he was a young novice. Although Adso has a gift for observation, which he uses throughout his story to describe such details as the physical features of the people he meets and the art and architecture of the great abbey, his description is merely a collection of surface details with little or no reflection on their significance or meaning. Being unable to see beyond the immediate situation, Adso is incapable of understanding the real meaning of the clues presented to him.

The critical reader is reflected in William of Baskerville, a fourteenth-century Franciscan version of Sherlock Holmes.(7) William is sent to various abbeys on official church business because of his reputation as a shrewd observer of life. Adso describes William's ability to deduce truth from facts as follows: He not only knew how to read the great book of nature, but also knew the way monks read the books of Scripture, and how they thought through them. A gift that, as we shall see, was to prove useful to him in the days to follow. (NR, 24-25)

William represents the critical reader who recognizes various levels of signs in the universe (the great book of nature) and in books. Just as a critical reader is able to find a way through the maze-like structure of a text, so William is able to find his way through the maze of clues in order to solve the mystery he has been asked to solve.

According to Eco, both the naive and the critical reader can approach an open text (RR, 10). In *The Name of the Rose* Eco allows both types of readers to be represented in both Adso and William. Both characters help to explain the significance of the readers of a text by helping the reader of the novel to find a path through the text's maze. Eco has helped the reader to develop a textual strategy by showing how the text can be "read" by the naive reader and the critical reader.

In *The Role of the Reader* Eco offers a critical reading of the metatext *Un drame bien parisien*. He states that the critical reading not only assumes that the first (naive) reading has already occurred but that the critical reading undergoes "the analysis of its own interpretative procedures" while it goes beyond the naive reading (RR, 205). *The Name of the Rose* is also a metatext: it is closed "in its uniqueness as a balanced organic whole," and it is open "on account of its susceptibility to countless different interpretations which do not impinge on its unadulterable specificity" (RR, 49). As a metatext, *The Name of the Rose* can be seen to have several stories to tell (as Eco suggests for the metatext *Un drame bien parisien*):

the story of what happens to its *dramatis personae*; the story of what happens to its naive reader; the story of what happens to itself as a text (this third story being potentially the same as the story of what happens to the critical reader). (RR, 205)

*The Name of the Rose* is seen in its simplest form as the story of the characters themselves. William of Baskerville, a Franciscan, is on a visitation at a Benedictine abbey. Upon arriving at the abbey, William is asked by the abbot to investigate the strange death of one of the monks. In the course of William's visit, [Steven Sallis 5]

four other monks are murdered. William, with the help of his traveling companion, Adso, eventually discovers the murderer, who commits suicide. The murderer's death leads to a fire, which burns down the great abbey. This very brief summary captures the essence of the first level of the story.

The second and third levels of the story cannot be seen apart from their codes. In brief, codes are the keys which unlock the signs of a-text. The code contains elements which are present in the expression of the story and also refers to elements which are absent because they are part of another system. (8) This presence/absence component of codes allows for the richness of intertextuality by which "a text could generate, by further semantic disclosures, every other text" (RR, 24). This intertextual element is extremely important in *The Name of the Rose*, as the dust jacket of the first Italian edition of the novel suggests: "this text is a textile of other texts, a 'whodunit' of quotations, a book built upon books" (Stephens, 51).

Eco skillfully interlaces his text with allusions to a wide spectrum of religious texts, philosophy, and literature. In several passages in the novel, he uses *The Rule of St. Benedict* as a text within his text. William and Adso enjoy a meal with the abbot which illustrates Eco's use of the Rule by discussing that passage in the Rule where the holy founder observed that wine, to be sure, is not proper for monks, but since monks of our time cannot be persuaded not to drink, they should at least not drink their fill, because wine induces even the wise to apostasy, as Ecclesiastes reminds us. Benedict said 'of our time' referring to his own day, now very remote. . . . (NR, 94)

A comparison of this passage with Chapter 40, in the Rule "The Proper Amount of Drink," reveals that Eco has used the text well by pointing out Benedict's admonition to the abbot to take local needs into consideration in

such matters as food and drink.(9) Texts from the Bible also find frequent use in Eco's novel. The murders are patterned after the Apocalypse, and Adso frequently makes scriptural references a part of his descriptions. References are also made to Aristotle, William of Occam, Thomas Aquinas, and Roger Bacon, who represent some of the authors of philosophical texts which find their way into the novel.

Walter Stephens suggests that the character of Jorge of Burgos is patterned after Jorge Luis Borges. Stephens says that *The Name of the Rose* "owes its heaviest literary debt to the fiction and essays of Borges, and explicates much of Eco's semiotics as Borgesian." Indeed, according to Stephens, Borges's idea of the library as "a semantic cosmos, a specular inversion of the medieval idea of *liber mundi*, of the cosmos as a book" is reflected in the abbey library in Eco's novel. The many similarities between Burgos and Borges, (e.g., both are interested in literature) point to the skillful use of intertextuality by Eco in his novel (Stephens, 58).(10)

Naming the Rose 6 The importance of intertextuality emerges especially in the final chapter when Adso describes events after the fire has consumed the abbey. He returns to his monastery at Melk to become a monk. Years later Adso's abbot sends Adso to Italy, and he cannot resist a visit to the abbey's ruins. He collects scraps of books which he finds scattered about the ruins and upon his return to Melk describes the restoration process of the remnants as follows:

I spent many, many hours trying to decipher those remains. Often from a word or a surviving image I could recognize what the work had been. When I found, in time, other copies of these books, I studied them with love, as if destiny had left me this bequest, as if having identified the destroyed copy were a clear sign from heaven that said to me: *Tolle et lege*. At the end of my patient reconstruction, I had before me a kind of lesser library, a symbol of the greater, vanished one: a library made up of fragments, quotations, unfinished sentences, amputated stumps of books. (NR, 500).

Adso has preserved some of the texts for posterity in his own way by compiling a collection of the fragments; he has created his own intertext which will be saved for future generations.

That the novel is a book built upon books is particularly important when one considers that the main occupation of the monks is related to books. The abbey has one of the greatest libraries in Europe and prides itself on the library's reputation. Some of the abbey's books, in fact, are found nowhere else in the world. Yet in addition to serving as a repository for the world's great books, the abbey library carries on the literary tradition by helping the monks copy the older manuscripts to preserve their contents. (Actually, the monks do not simply copy the manuscripts but engage in adorning the text with marginalia, notes, figures, and other artistic embellishments.) The monks who work in the scriptorium begin to identify themselves with the manuscripts they are copying and consider themselves guardians of the great learning of the world.

What is most remarkable about the abbey library is not its extensive collection, however, nor the amount of time the monks spend in preserving its contents but its physical arrangement. The abbey library is a labyrinth to which only the abbey librarian and his assistant know the solution. The knowledge found in the library must be mediated through someone who is able to understand the mystery of its secret (code). Even when William is given permission by the abbot to conduct an investigation about the murders, he is not allowed to see the library. He must be content, like other patrons, to find the listing for a book in the great catalog and ask the librarian to bring the requested book. The monks have become so possessive of their books that they have forgotten the very purpose for which they are kept: to allow others to share in the knowledge contained therein. The library has become a stagnant entity rather than a vital force for the members of the abbey or for any other potential patrons.

[Steven Sallis 7]

As William continues his investigation, he is certain that the solution to the murders lies within the labyrinth/library. All of the murdered monks had direct contact with the library, and all the clues that William is able to deduce are related to the library. He is determined that the solution to the library must be found in order to continue his investigation. One night William takes Adso with him to investigate the library. The results are disastrous. They lose their way several times and almost give up hope of finding their way out before they accidentally discover an exit.

The story at this point remains on the second level of the naive reading. Here again, through the events in the story Eco suggests something about naive and critical readings. Entering the library for the single purpose of solving the murders, William does not take into account the other possible codes or secrets which the library might have to offer. As a result of this narrow possibility for interpretation, William remains with Adso on the naive level of interpretation. As a reader William excludes certain available interpretations, and thus the library and its codes are a source of confusion-the maze is unintelligible. As a naive reader William creates a closed interpretation. It is only when William gives up trying to force his own preconceived interpretation on the library that he and Adso are able to find their way out of it. Similarly, only when a reader truly responds to a text as the text wishes to be responded to will a reader find its true meanings.

The heading of the chapter in which William finally discovers the secret of the library's maze states that "William has some astounding ideas for deciphering the riddle of the labyrinth and succeeds in the most rational way" (NR, 210). The story begins to move toward the third level of critical reading.

William knows certain things about the labyrinth from the experience of being inside the library when he and Adso were lost. Yet it is impossible to try to solve the maze from inside the library because the possibilities are too limited; as one moves within it, one is constantly changing directions and therefore cannot visualize the whole maze. William tells Adso, "we must find, from the outside, a way of describing the Aedificium as it is inside . . ." (NR, 215). Using logic and mathematics, William is able to figure out the general plan of the maze from looking at the outside of the Aedificium, the number of windows, the placement of windows in certain walls, and other details. By looking at the outside structure (the known), William is able to understand the inside (the not-immediately-apparent meaning) of the library. Similarly, the reader of the novel receives more information on the codes within the text by William's discovery. After Adso's preliminary drawing of the library based on their observations outside the Aedificium, William and Adso once again venture into the library and succeed this time in discovering the secret (code) of the library. Two patterns of organization for the labyrinth/library emerge: one according to the first letter of a passage from the Apocalypse which appears on the wall of each Naming the Rose 8 room and the second according to a map of the world. The answer has required William's knowledge of the books of Scripture as well as the book of nature. If interpreting the code of the library were enough to solve the mystery behind the murders, Eco would have created a closed text instead of an open one. But William still must discover what the library holds that would merit murder. He returns to books for his answer because, as he tells Adso, "Often books speak of other books" (NR, 286). William pores over the catalog of books, analyzes handwriting, and tries to uncover the code for a secret message written by Venantius, one of the murdered monks. He is able finally to decode the secret message but ends up with another riddle: there is a particular book in the library which holds the secrets of the mystery. Eco constantly reminds the reader that codes are very complex in a metatext and require many levels of interpretation; naming the rose is not an easy task to accomplish.

William, with the help of the ravings of the semi-mad monk Alinardo, be-

believes that the murders follow the pattern of the images in the book of the Apocalypse. For example, the second trumpet heralds blood; Venantius is found drowned in a vat of pig's blood. William discovers the murderer's identity, however, because he remains open to the clues; he no longer tries to force the clues to suit his own needs as he did earlier in the library when he and Adso were lost. Moving from the Apocalypse to the details surrounding the acquisition of certain manuscripts of the Apocalypse which also contain the secret book, William identifies the murderer, the old blind librarian, Jorge of Burgos, and the secret book, the second part of Aristotle's Poetics, which discusses laughter.

This passage points out the necessity of both a naive and a critical reader for a metatext. Although William at this point of the story has become a critical reader, Adso remains a naive reader. William has looked so intently at the clues that he is unable to see the obvious clue pointing to Jorge's identity as the murderer. While William and Adso are in the stables discussing the clues, Adso suggests to William the identity of the murderer. It takes Adso's less reflective, indeed impulsive, suggestion to lead William to the murderer's identity.

Because of Adso's suggestion, William is now able to find the *finis Africae*, a secret room within the library which he has been trying to find. He is able to locate the secret passageway and finds Jorge, who explains his reasons for protecting Aristotle's Poetics. Jorge believes that if the world discovers Aristotle's book which is devoted to laughter, then the world will be damned. Jorge has constantly been admonishing the monks not to laugh and to choose their words wisely; he frequently has been quoting the Rule which contains an admonition to the monks that they should never laugh (see the Rule, chapter 7). Jorge further believes that Jesus never laughed and that it is strictly forbidden by the Christian tradition to engage in the frivolity of laughter. Falling into the monastic temptation of "seduction of knowledge" (NR, 185), the blind Jorge is [Steven Sallis 9]

unable to see beyond his own narrow vision. Fallen so deeply into the snares of the devil that he is seen as the anti-Christ of the Apocalypse, Jorge is blind to any other possible interpretation for the Poetics. William tells Jorge how he discovered his identity:

Naturally, as the idea of this book and its venomous power gradually began to take shape, the idea of an apocalyptic pattern began to collapse, though I couldn't understand how both the book and the sequence of the trumpets pointed to you. But I understood the story of the book better because, directed by the apocalyptic pattern, I was forced more and more to think of you, and your debates about laughter. So that this evening, when I no longer believed in the apocalyptic pattern, I insisted on watching the stables, and in the stables, by pure chance, Adso gave me the key to entering the *finis Africae*. (hTR, 470-71)

Jorge tells William that he made the later murders appear to be modeled after apocalyptic images because that is what William expected to happen. Jorge, however, feels no remorse for the deaths. He is sure that God is directing his activities as he tells William, "I became convinced that a divine plan was directing these deaths, for which I was not responsible" (NR, 470). Jorge has merely orchestrated the deaths of the monks rather than directly murdering them.

Having been fooled once, William refuses to be taken in a second time by Jorge's plot and realizes that he must take the book away from Jorge. Jorge, however, decides that in order to save the world he must destroy the Poetics. He chooses to eat the pages of the book, which he had covered with poison to safeguard his secret from possible readers. This eating of the poisoned book recalls the action of John in the Book of the Apocalypse and by repeating the bibliophagy of St. John and the 'consummation' of the *Liber mundi* in the Book of Revelations (the Apocalypse), which finally makes Eco's *fabula* an effective repetition of the Apocalypse, . . . Jorge's suicide indirectly sparks the *ecpyrosis* which incinerates the Library and the entire monastery. It is only through

Jorge's mimetic suicide that the Apocalypse and the liturgy finally structure Eco's novel in a meaningful sense. (Stephens, 58)

As the monastery burns, there is great confusion. No one is able to organize the monks and servants into an effective force to put out the fire. Everything is lost; all the monks abandon the abbey. Formerly the greatest center of learning in Europe, the monastery is now reduced to ruins.

As Adso finishes his account (and the novel ends), he reflects, "I no longer know what [the manuscript of his story] is about: stat rosapristina nomine, nomina nuda tenemus" (NR, 502). (A translation would be: the rose stands with its former name, we hold on to the bare names.") Adso realizes that he must remain open to the text; as a reader he can no longer allow for a "closed semiotic project like that which Jorge vainly attempted . . ." (Stephens, 63). At the end of his story Adso thus takes on the role of the critical reader. Like William, Adso in *The Name of the Rose* also must overcome the naive reading of the events at the abbey. He must search for the deeper meanings of the texts which he saved from the abbey ruins; he can only accomplish his task as a critical reader.

Thus as the reader comes to the end of Eco's novel, the question of whether Eco succeeds in his piece of "semiotic fiction" can be asked. If Eco had wanted explicitly to demonstrate a thesis, he could have written more theory. Instead, he wrote a novel, which can only be narrated.<sup>12</sup> Furthermore, Eco refuses to admit ownership of the novel by identifying a "manuscript" that he fabricates as the source for the novel (NR, 15). Eco's semiotic journey moves beyond theory to narrative. As Teresa de Lauretis claims, Eco advances the idea of sign to a universal significance beyond a mere theoretical foundation.<sup>13</sup> This universal aspect of sign opens up the world of a text available to a reader.

Eco thus places one focus in *The Name of the Rose* on the reader. Both the naive and the critical reader find reflections in the novel in Adso and William, respectively. The movement of these two characters toward encountering the maze-like quality of the library helps the reader interested in literary criticism to see the novel as exploring the role of the reader. Like Adso, the naive reader (the beginning student of literary criticism?) comes to the novel without much critical background but goes away with a new appreciation that allows for further exploration of literary texts. Like William, the critical reader (the seasoned literary critic?) brings his extensive background to the novel and goes away with the realization that even critical readers make mistakes but should be able to enjoy a literary text nonetheless. For the reader of his novel, Eco has made the task of understanding an easy one if the reader is willing to name the rose as "semiotic fiction" which explores the value of signs in literature.

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Notes

1. Umberto Eco, *A Theory of Semiotics* (Bloomington: Indiana UP, 1976).
2. Umberto Eco, *The Role of the Reader: Explorations in the Semiotics of Texts* (Bloomington: Indiana UP, 1979). This work will be referred to parenthetically in the text as RR.
3. Umberto Eco, *The Name of the Rose*, trans. William Weaver (New York: Harcourt Brace Jovanovich, 1983). This work will be referred to parenthetically in the text as NR.
4. Walter E. Stephens, "Ec[h]o in Fabula," rev. of *Il nome della rosa*, *Diacritics*, 13, No. 2 (1983), 55. This work will be referred to parenthetically in the text as Stephens.
5. Umberto Eco, "The Theory of Signs and the Role of the Reader," *Bulletin of the Midwest Modern Language Association*, 14, No. 1 (1981), 35-45. This work will be referred to parenthetically in the text as TS.
6. A source unavailable to me which might contain the discussion of the naive and critical readers in *The Name of the Rose* is an Italian publication, Teresa de Lauretis, Umberto Eco, *Il Castoro*, No. 179 (Florence: La Nuova Italia, 1981) as quoted in Stephens, 51. [Steven Sallis 11]
7. Stephens, page 55 also describes William as Sherlock Holmes.
8. For a detailed explanation of Eco's definition of code, see Umberto Eco, "The Code: Metaphor or Interdisciplinary Category," *Yale Italian Studies*, 1 (1977), 24-52.

9. RB 1980: *The Rule of St. Benedict in Latin and English with Notes*, ed., Timothy Fry (Collegeville, Minn.: The Liturgical Press, 1981), 240-41.
  10. Stephens's entire essay is a fascinating exploration of Eco's skill in using intertextuality and especially of his use of Borges, but the discussion goes beyond the scope of this paper.
  11. The quotation is reflected in "that which we call a rose / By any other name would smell as sweet?" (*Romeo and Juliet*, 11, ii, 43-44).
  12. On dust jacket of first Italian edition of *The Name of the Rose* as quoted in Stephens, 51.
  13. Teresa de Lauretis, "Response [to Eco]," *Bulletin of the Midwest Modern Language Association*, 14, No. 1 (1981), 46.
- 12 Naming the Rose

## 15.12 The Reconquista

The **Reconquista**<sup>[note 1]</sup> (Portuguese and Spanish for "reconquest") was the period in the history of the Iberian Peninsula of about 780 years between the Umayyad conquest of Hispania in 711 and the fall of the Nasrid kingdom of Granada to the expanding Christian kingdoms in 1492. The completed conquest of Granada was the context of the Spanish voyages of discovery and conquest (Columbus got royal support in Granada in 1492, months after its conquest), and the Americas—the "New World"—ushered in the era of the Spanish and Portuguese colonial empires.

Traditional historiography has marked the beginning of the *Reconquista* with the *Battle of Covadonga* (718 or 722), the first known victory in Hispania by Christian military forces since the 711 military invasion undertaken by combined Arab-Berber forces. In that small battle, a group led by the nobleman Pelagius defeated a Muslim patrol in the mountains of northern Iberia and established the independent Christian Kingdom of Asturias. In the late 10th century, the Umayyad vizier Almanzor waged military campaigns for 30 years to subjugate the northern Christian kingdoms. His armies, mostly composed of Slavic and African Mamluks (slave soldiers), ravaged the north, even sacking the great shrine of Santiago de Compostela. When the government of Córdoba disintegrated in the early 11th century, a series of petty successor states known as *taifas* emerged. The northern kingdoms took advantage of this situation and struck deep into Al-Andalus; they fostered civil war, intimidated the weakened *taifas*, and made them pay large tributes (*parias*) for protection. After a Muslim resurgence in the 12th century the great Moorish strongholds in the south fell to Christian forces in the 13th century—Córdoba in 1236 and Seville in 1248—leaving only the Muslim enclave of Granada as a tributary state in the south.

### 15.12.1 History of Toledo

[https://en.wikipedia.org/wiki/History\\_of\\_Toledo,\\_Spain#Medieval\\_Toledo\\_after\\_the\\_Reconquest](https://en.wikipedia.org/wiki/History_of_Toledo,_Spain#Medieval_Toledo_after_the_Reconquest)

On May 25, 1085, Alfonso VI of Castile took Toledo and established direct personal control over the Moorish city from which he had been exacting tribute, ending the medieval Taifa's Kingdom of Toledo. This was the first concrete step taken by the combined kingdom of Leon-Castile in the Reconquista by Christian forces. After Castilian conquest, Toledo continued to be a major cultural centre; its Arab libraries were not pillaged, and a tag-team translation centre was established in which books in Arabic or Hebrew would be translated into Castilian by Muslim and Jewish scholars, and from Castilian into Latin by Castilian scholars, thus letting long-lost knowledge spread through Christian Europe again. Toledo served as the capital city of Castile intermittently (Castile did not have a permanent capital) from 1085, and the city flourished. Charles I of Spain's court was set in Toledo, serving as the imperial capital.<sup>[106]</sup> However, in 1561, in the first years of his son Philip II of Spain reign, the Spanish court was moved to Madrid, thus letting the city's importance dwindle until the late 20th century, when it became the capital of the autonomous community of Castile-La Mancha. Nevertheless, the economic decline of the city helped to preserve its cultural and architectural heritage. Today, because of this rich heritage, Toledo is one of Spain's foremost cities, receiving thousands of visitors yearly. Under the Roman Catholic Archdiocese of Toledo multiple persecutions (633, 653, 693) and stake burnings of Jews (638 CE) occurred; the Kingdom of Toledo followed up on this tradition (1368, 1391, 1449, 1486–1490 CE) including forced conversions and mass murder and the rioting and blood bath against the Jews of Toledo (1212 CE).<sup>[107][108]</sup>

#### Background

Traditionally Toledo was a center of multilingual culture and had prior importance as a center of learning and translation, beginning in its era under Muslim rule. Numerous classical works of ancient philosophers and scientists that had been translated into Arabic during the Islamic Golden Age "back east" were well known in al-Andalus (Islamic-era Spain) such as those from the Neoplatonism school, Aristotle, Hippocrates, Galen, Ptolemy, etc., as well as the works of ancient philosophers and scientists from Persia, India, and China;<sup>[1]</sup> these enabled Arabic-speaking populations at the time (both in the east and in "the west," or North Africa and the Iberian peninsula) to learn about many

ancient classical disciplines that were generally inaccessible to the Christian parts of western Europe, and Arabic-speaking scientists in the eastern Muslim lands such as **Ibn Sina**, **al-Kindi**, **al-Razi**, and others, had added significant works to that ancient body of thought.

### 15.12.2 Toledo School of Translators

[https://en.wikipedia.org/wiki/History\\_of\\_Toledo,\\_Spain](https://en.wikipedia.org/wiki/History_of_Toledo,_Spain)

[https://en.wikipedia.org/wiki/Toledo\\_School\\_of\\_Translators](https://en.wikipedia.org/wiki/Toledo_School_of_Translators)

The **Toledo School of Translators** (Spanish: *Escuela de Traductores de Toledo*) is the group of scholars who worked together in the city of **Toledo** during the 12th and 13th centuries, to translate many of the philosophical and scientific works from **Classical Arabic**.

The School went through two distinct periods separated by a transitional phase. The first was led by Archbishop **Raymond of Toledo** in the 12th century, who promoted the translation of philosophical and religious works, mainly from classical Arabic into Latin. Under King **Alfonso X of Castile** during the 13th century, the translators no longer worked with **Latin** as the final language, but translated into a revised version of **Castilian**. This resulted in establishing the foundations of the modern **Spanish language**.

<https://en.wikipedia.org/wiki/Burgos>

It has many historic landmarks, of particular importance; the **Cathedral of Burgos** (declared **World Heritage Site** by UNESCO in 1984),<sup>[4]</sup> seat of the Metropolitan **Roman Catholic Archdiocese of Burgos**, the **Las Huelgas Reales Monastery** and **Miraflores Charterhouse**. A large number of churches, palaces and other buildings from the **medieval age** remain. The city is surrounded by the Fuentes Blancas and the Paseo de la Isla parks.

Castilian nobleman, military leader and diplomat **El Cid Campeador** is a significant historical figure in the city, as he was born a couple of kilometres north of Burgos and was raised and educated here.

The city forms the principal crossroad of northern Spain along the **Camino de Santiago**, which runs parallel to the **River Arlanzón**.

### 15.13 Monasterio de las Huelgas

Main article: *Las Huelgas*

The Monasterio de las Huelgas Reales (Monastery of the Royal Retreats) on the outskirts of the city, was founded in 1180 by king **Alfonso VIII**, and was begun in a pre-Gothic style, although almost every style has been introduced over many additions. The remarkable cloisters have been described as "unrivalled for beauty both of detail and design, and perhaps unsurpassed by anything in its age and style in any part of Europe" (1911 Encyclopædia Britannica). One cloister has semicircular arches with delicate and varied columns; the other has an ogival style of early Gothic. The interior of the church has enormous columns supporting its magnificent vault; the entrance is modern. This convent historically benefited from extraordinary privileges granted to its abbess by kings and popes.

Miraflores Charterhouse

The **Carthusian** monastery, Miraflores Charterhouse (Cartuja de Miraflores) is situated about four kilometres from the historic city center. Among the treasures of the Charterhouse are the wooden statue of **St. Bruno**, the wooden choir stalls in the church and the tombs of King **Juan II** and of his spouse, Queen **Isabella of Portugal**, constructed of marble and with their **recumbent effigies** sculpted in **alabaster**. Around the top frieze are statues of angels in miniature. The French soldiers in the **Spanish War of Independence** (1814) mutilated this work, cutting off some of the heads and carrying them away to France. King Juan II's daughters by his first wife, heiresses Princesses **Catherine** and **Eleanor of Asturias**, are also buried in the monastery.

AG: The names of Salvatore of Montferrat, and Remigio of Varagine, two cellarer monks, had a history with the Dulcinian heretics. They are styled after the Kathars, Montferrat is Mont Segur. And so on. Umberto Eco really likes to paraphrase all the Christian history of the 1200's [Kathar Wars and Extermination] and then to the 1300's. The Franciscans and Benedictines of course were no friends of the Dominicans, and later the Jesuites. Each one of these monastic orders was only nominally united under the common hierarchy of the Hl. St. Roman Kat-Holik church. In reality they tried as much as they could to differentiate themselves from each other. The variations of the theme of Christian monastic orders were about as richly textured as the Buddhist orders. Since Judaism had no monastic element, there was much less diversity there. But we can still find a lot of Jewish (especially mystic Chassidim) sects. And in the Islamic world there were also the many different schools of Sufism which were quite different from the Sunni Orthodoxy. I have myself been to more Sufi orders and meetings and dances than I had been to Christian monastic ones. Since the Christian monks are not so well-known for their dances, they didn't interest me as much as the Sufis. I even have practiced some of their Zikr or Dhikr meditations, like the Mevlana Whirling Dervish dance. See also the

work of G.I. Gurdjieff in this tradition. He had probably copied some of the Central Asian Sufi methods which he then taught at his Institute near Paris (aka School of Enlightenment).

[https://en.wikipedia.org/wiki/George\\_Gurdjieff](https://en.wikipedia.org/wiki/George_Gurdjieff)

**George Ivanovich Gurdjieff** (Russian: Георгий Иванович Гюрджиев; 31 March 1866/14 January 1872/28 November 1877 – 29 October 1949[3]) was a [mystic](#), [philosopher](#), [spiritual teacher](#), and [composer](#) of [Armenian](#) and [Greek](#) descent, born in [Alexandrapol](#) (now [Gyumri](#)), [Armenia](#).<sup>[4]</sup> Gurdjieff taught that most humans do not possess a unified consciousness and thus live their lives in a state of hypnotic "waking sleep", but that it is possible to awaken to a higher state of consciousness and achieve full human potential. Gurdjieff described a method attempting to do so, calling the discipline "The Work"<sup>[5]</sup> (connoting "work on oneself") or "the System".<sup>[6]</sup> According to his principles and instructions,<sup>[7]</sup> Gurdjieff's method for awakening one's consciousness unites the methods of the [fakir](#), [monk](#) and [yogi](#), and thus he referred to it as the "[Fourth Way](#)".<sup>[8]</sup>

### 15.14 Sufism and Gurdjieff

<http://henrybayman.com/gurdjieff-and-sufism/>

A great deal of information about Sufism has reached the West at various times, some along quite unexpected avenues. George I. Gurdjieff was one of those who acted as a long-unrecognized conveyor of such information, but he was reluctant to reveal his sources.

John G. Bennett devoted most of his life to tracking down the sources of Gurdjieff's wisdom. By the time he wrote *Gurdjieff: Making a New World* (1973), he had identified these as the Masters of Wisdom of Central Asia, the Khwajagan Order that initiated the Naqshbandi branch of the Sufis. Based on information gleaned from the Sufi Master Hasan Shushud of Istanbul, Bennett wrote his last book, *The Masters of Wisdom* (1977). In this book, published posthumously (he died in 1974), he definitively identified the Sufis as Gurdjieff's source—or at least, the source of the essential core of Gurdjieff's multifaceted teachings. To support Bennett's case would require a separate study in itself, so I shall be content to indicate just one of the dead giveaways which demonstrate Gurdjieff's debt to Sufism.

Some time around 1915, Gurdjieff identified three "ways to immortality," these he described as the way of the fakir, the way of the monk, and the way of the yogi. To summarize, the fakir worked on the physical body, the monk chose the path of religious faith and love, and the yogi worked with the mind and knowledge (Gurdjieff must have had the Raja and Jnana modes of Yoga in mind). All three, Gurdjieff added, required retirement from the world and renunciation of worldly life. This requirement would leave the ordinary person in a hopeless situation in terms of spiritual development, were it not for the fact that a "fourth way" existed. This way, he added, did not require seclusion, but could be practiced under the usual conditions of life, work, and social involvement, without having to go into the hills or the desert.<sup>151</sup> Mysteriously, he described the essence of this way as follows: "what substances he needs for his aims...can be introduced into the organism from without if it is known how to do it."<sup>152</sup>

What could this cryptic method be? Gurdjieff leaves few clues as to its nature. We are left in the dark, until we learn from Annemarie Schimmel of the Sufic technique of *rabita*, wherein a "tie" or "connection" is established between master and disciple,<sup>153</sup> enabling the transfer—or download—of spiritual power or *baraka* into the disciple's heart. Establishing "contact" is mentioned as *rabit* in the Koran (3:200), but almost never interpreted—due to lack of knowledge—in the sense described here

### 15.15 Günter Lüling

[https://en.wikipedia.org/wiki/Sana%CA%BDa\\_manuscript](https://en.wikipedia.org/wiki/Sana%CA%BDa_manuscript)

[https://en.wikipedia.org/wiki/Birmingham\\_Quran\\_manuscript](https://en.wikipedia.org/wiki/Birmingham_Quran_manuscript)

<https://www.islamic-awareness.org/quran/text/mss/soth.html>

<http://theconversation.com/discovery-of-oldest-quran-fragments-could-resolve-enigmatic-history-of-holy-text-45066>

The very lonesome exception from this overall pattern was Günter Lüling who had consequently been thoroughly exorcised from German Arabist scholarship. His book could not be published anywhere in Germany, and not even in Europe. So his widow managed to get it published in India by Motilal Benarsidass.

He had had the audacity to make linguistic comparisons between ancient Christian psalms and some verses in the Koran. And it is also quite well-known that most of the ancient Near East and Arabia had some sort of pseudo-Christian religion. They could have been Manichaeans, Zoroastrians, Nestorians, and anything in between.

See also Ernest Gellner:

Plough, Sword, and Book: The Structure of Human History, Ernest Gellner. 1988.

University of Chicago Press, Chicago, IL. ISBN: 0-226-28701-7.

<https://academic.oup.com/jsh/article-abstract/24/2/382/1144229?redirectedFrom=PDF>

<https://www.press.uchicago.edu/ucp/books/book/chicago/P/bo3644789.html>

<https://journals.sagepub.com/doi/abs/10.1177/027046768900900426>

[http://www.noologie.de/diadenk.htm#koran\\_mytho](http://www.noologie.de/diadenk.htm#koran_mytho)

[http://www.noologie.de/diadenk.htm#koran\\_rel\\_geschicht](http://www.noologie.de/diadenk.htm#koran_rel_geschicht)

[http://www.noologie.de/diadenk.htm#koran\\_etymolog](http://www.noologie.de/diadenk.htm#koran_etymolog)

[http://www.noologie.de/diadenk.htm#koran\\_uthman](http://www.noologie.de/diadenk.htm#koran_uthman)

[http://www.noologie.de/diadenk.htm#\\_edn553](http://www.noologie.de/diadenk.htm#_edn553)

[http://www.noologie.de/diadenk.htm#\\_ednref555](http://www.noologie.de/diadenk.htm#_ednref555)

[http://www.noologie.de/diadenk.htm#\\_ednref595](http://www.noologie.de/diadenk.htm#_ednref595)

[https://de.wikipedia.org/wiki/G%C3%BCnter\\_L%C3%BCling](https://de.wikipedia.org/wiki/G%C3%BCnter_L%C3%BCling)

<https://books.google.de/books?id=tqFisOXrUQ8C&printsec=frontcover&hl=de#v=onepage&q&f=false>

[http://de.wikipedia.org/wiki/G%C3%BCnter\\_L%C3%BCling](http://de.wikipedia.org/wiki/G%C3%BCnter_L%C3%BCling)

<http://www.faz.net/aktuell/feuilleton/buecher/rezensionen/2.1715/ueber-christliche-strophen-im-koran-1164079.html>

Ich habe auch hier einiges davon in meinem Archiv aufbewahrt.

Dazu ein Zitat aus dem obigen Artikel:

"Wie geht Lüling vor? Er legt die extrem defektive Schreibung des frühen Arabischen seinen Analysen zugrunde. Wie alle semitischen Sprachen gibt das Arabische in seiner Schrift im allgemeinen nur die Konsonanten und die langen Vokale wieder, die kurzen Vokale werden weggelassen. Der Koran wird allerdings, weil hier jeder Buchstabe wegen der Interpretation besonders wichtig ist, mit Hilfszeichen vokalisiert, die jedoch erst später aufkamen. Dasselbe gilt für jene Punktation, die darüber entscheidet, ob ein Buchstabe ein b, ein t, ein th, ein n, ein s, ein sch, ein z oder r, ein f oder q ist. Die heute gebräuchliche arabische Schrift hat sich von einer nur andeutenden, quasi stenographischen Schreibweise im Laufe von Generationen zu einer mit Hilfe diakritischer Zeichen "vollständigen" Schrift entwickelt, ein Prozeß, wie er auch im Hebräischen unter den Masoreten stattfand. Man kann verstehen, welche Möglichkeiten der Mißlesung angesichts solcher Eindeutigkeitsmängel in der Schreibung denkbar sind."

## **16 On Statistics, Population Dynamics and Some Lies**

### **16.1 Adolphe Quételet, a Master Scientist of Statistics**

The following essay provides a context for the next articles about the works of Jared Diamond and other cultural theorists. We are dealing here with the study of the *psychohistory of humanity* from different viewpoints. Quételet took the method of statistical analysis, which is also being applied by *Gerd Gigerenzer*. I have at various occasion mentioned how one can lie with statistics. But Quételet and Gigerenzer are doing something to use statistics to very useful ends.

#### **16.1.1 The Science Fiction of Isaac Asimov**

The reference to the *Science Fiction* of *Isaac Asimov* is quite useful since *good Science Fiction* is *Macro History in a Laboratory*. The other remarkable work in this vein is "*Dune*" by *Frank Herbert*. Even though the themes of Asimov and Frank Herbert are virtually on opposite ends of a spectrum, they are quite useful to consider the different values given to the determinants of human existence and development. Frank Herbert leans definitely on the *Soteriological Side* which was also the subject of Part I of *Meta-Morphology*. (Not yet published). We can view the *grand events of human destiny* as they are unfolding in a purely statistical way.

This may be the *blind masses* of a sort of *struggle of pure energy and pure entropy* of events in the *planetary biosphere* with something human on top of it, as Quetelet and Asimov interpret it, or the forerunner of Gumilev, and Vernadsky. Then we have Rudolf Steiner who interprets it as a struggle of (the supernatural powers of) *Ahura Mazda against Ahriman*. These are *Gnostic in Origin*, and re-appear in the *Theosophical Literature*. Or we can interpret it in terms of a struggle of the *Promethean Human Spirit*, that rises up against the Gods. (We may find such a theme in the *Wagner Operas*, but also in *Nietzsche's Zarathustra* and *Oswald Spengler's* works). Nietzsche didn't develop a theory of history, but he had coined "*The Will to Power*". Lev Gumilev had "*The Will to Suffer*". His *Passionarnost* is a literal translation of the *Greek Pathe* which is a little different from the *Latin Passion*. But both these words are double-sided. Because *Passion* also means a sort of *spiritual fervor*, like it was described by Giordano Bruno in "*Eroici furori*". And Giordano had wrapped all his passion in his own *martyrdom*.

<http://www.esotericarchives.com/bruno/furori.htm>

### 16.1.2 Spengler and Faustian Spirit

Similarly, *Spengler* had his *Faustian Spirit* which is also a sort of passion, and Goethe had constructed his masterpiece around this *Germanic / Teutonic Version of Passion*. This was also *German Romanticism* wrapped up in a neat parcel. We may compare or rather contrast this kind of passion with the dis-passionate view that the *British Empiricists* had cultivated. And of course, *Romanticism* is not a good foundation to build an Empire upon, as the poor Germans had found out under Emperor Willi II. And of course there was mixed in the *Hegel'ian Delusion of the Objektivation des Geistes* which was a thinly disguised euphemism or *Apologetics of the Prussian State Philosophy or Ideology*. Frank Herbert had concocted a mixture of human powers but they are not supernatural but born out of countless generations of *Genetic Engineering* by the *Bene Gesserit Sisterhood*. These themes re-appear in a quite more crude form in present-day *transhumanism*.

<https://aeon.co/essays/our-behaviour-in-bulk-is-more-predictable-than-we-like-to-imagine>

By Ian Steward

In Isaac Asimov's novel *Foundation* (1951), the mathematician Hari Seldon forecasts the collapse of the Galactic Empire using psychohistory: a calculus of the patterns that occur in the reaction of the mass of humanity to social and economic events. Initially put on trial for treason, on the grounds that his prediction encourages said collapse, Seldon is permitted to set up a research group on a secluded planet. There, he investigates how to minimise the destruction and reduce the subsequent period of anarchy from 30,000 years to a mere 1,000.

Asimov knew that predicting large-scale political events over periods of millennia is not really plausible. But we all do suspend this disbelief when reading fiction. No Jane Austen fan gets upset to be told that Elizabeth Bennet and Mr Darcy didn't actually exist. Asimov was smart enough to know that such forecasting, however accurate it might be, is vulnerable to any large disturbance that hasn't been anticipated, not even in principle. He also understood that readers who happily swallowed psychohistory would realise the same thing. In the second volume of the series, just such a 'black swan' event derails Seldon's plans. However, Seldon has a contingency plan, one that the series later reveals also brings some surprises.

Asimov's *Foundation* series is notable for concentrating on the political machinations of the key groups, instead of churning out page upon page of space battles between vast fleets armed to the teeth. The protagonists receive regular reports of such battles, but the description is far from a Hollywood treatment. The plot, as Asimov himself stated, is modelled on Edward Gibbon's book *The History of the Decline and Fall of the Roman Empire* (1776-89), and a masterclass in planning on an epic scale for uncertainty. Every senior minister and civil servant should be obliged to read it.

Psychohistory, a fictional method for predicting humanity's future, takes a hypothetical mathematical technique to extremes, for dramatic effect. But, for less ambitious tasks, we use the basic idea every day; for example, when a supermarket manager estimates how many bags of flour to put on the shelves, or an architect assesses the likely size of a meeting room when designing a building. The character of Seldon was to some extent inspired by Adolphe Quételet, one of the first to apply mathematics to human behaviour.

Quételet was born in 1796 in Ghent in the Low Countries, now Belgium. Today's obsessions with the promises and dangers of 'big data' and artificial intelligence are direct descendants of Quételet's brainchild. He didn't call it psychohistory, of course. He called it social physics.

The basic tools and techniques of statistics were born in the physical sciences, especially astronomy. They originated in a systematic method to extract information from observations subject to unavoidable errors. As the understanding of probability theory grew, a few pioneers extended the method beyond its original boundaries. Statistics became indispensable in biology, medicine, government, the humanities, even sometimes the arts. So it's fitting that the person who lit the fuse was a pure mathematician turned astronomer, one who succumbed to the siren song of the social sciences.

Quételet bequeathed to posterity the realisation that, despite all the vagaries of free will and circumstance, the behaviour of humanity in bulk is far more predictable than we like to imagine. Not perfectly, by any

means, but, as they say, 'good enough for government work'. He also left us two specific ideas: l'homme moyen, the 'average man', and the ubiquity of the normal probability distribution, better-known as the bell curve. Both are useful tools that opened up new ways of thinking, and that have serious flaws if taken too literally or applied too widely.

Quételet gained the first doctorate awarded by the newly founded University of Ghent. His thesis was on conic sections, a topic that also fascinated Ancient Greek geometers, who constructed important curves – ellipse, parabola, hyperbola – by slicing a cone with a plane. For a time, he taught mathematics, until his election to the Royal Academy of Brussels in 1820 propelled him into a 50-year career in the scholarly stratosphere as the central figure of Belgian science.

Around that time, Quételet joined a movement to found a new observatory. He didn't know much astronomy, but he was a born entrepreneur and he knew his way around the labyrinths of government. His first step was to secure a promise of government funding. Then he took measures to remedy his ignorance of the subject that the observatory was to study. In 1823, at government expense, he headed for Paris to study with leading astronomers, meteorologists and mathematicians. He learned astronomy and meteorology from François Arago and Alexis Bouvard, and probability theory from Joseph Fourier.

One basic number has a strong effect on everything that happens, and will happen, in a country: its population

At that time, astronomers were pioneering the use of probability theory to improve measurements of planetary orbits despite inevitable observational errors. Learning these techniques from the experts sparked a lifelong obsession with the application of probability to statistical data. By 1826, Quételet was a regional correspondent for the statistical bureau of the Kingdom of the Low Countries.

One basic number has a strong effect on everything that happens, and will happen, in a country: its population. If you don't know how many people you've got, it's difficult to plan. You can guesstimate, but you might well end up wasting a lot of money on unnecessary infrastructure, or underestimating demand and causing a crisis. This is a problem that every nation still grapples with.

The natural way to find out how many people live in your country is to count them. Making a census isn't as easy as it might seem, however. People move around, and they hide themselves away to avoid being convicted of crimes or to avoid paying tax. In 1829, the Belgian government was planning a new census and Quételet, who had been working on historical population figures, joined the project. 'The data that we have at present can only be considered provisional, and are in need of correction,' he wrote. A full census is expensive, so it makes sense to estimate population changes between censuses. However, you can't get away with estimates for long, and a census every 10 years is common. Quételet urged the government to carry out a new census, to get an accurate baseline for future estimates. However, he'd come back from Paris with an interesting idea, an idea, he'd got from the great French mathematician Pierre-Simon de Laplace. If it worked, it would save a lot of money.

... [AG: The questions of average people] ...

What about the average woman? Average child? Which country's average man is more likely to be a murderer or a victim? Or be a doctor, devoted to saving lives, rather than a suicide, intent on ending his own? A different average man (or woman or child) is needed for each attribute. As Stephen Stigler put it in *The History of Statistics* (1986), Quételet considered that 'the average man was a device for smoothing away the random variations of society and revealing the regularities that were to be the laws of his "social physics".'

After 1880, the social sciences began to make extensive use of statistics, especially the bell curve. Francis Galton was a pioneer of data analysis in weather forecasting, and discovered the existence of anticyclones. Galton produced the first weather map, published in *The Times* in 1875, and he was fascinated by real-world numerical data and the mathematical patterns hidden within them. When Charles Darwin published *On the Origin of Species* (1859), Galton began a study of human heredity. How does the height of a child relate to that of the parents? What about weight, or intellectual ability? Galton adopted Quételet's bell curve, using it to separate distinct populations. If data showed two peaks, rather than the single peak of the bell curve, Galton argued that the population concerned must be composed of two distinct sub-populations, each following its own bell curve.

Galton grew convinced that desirable human traits are hereditary, a deduction from evolutionary theory but one that Darwin repudiated. For Galton, Quételet's average man was a social imperative, and one to be avoided. His book *Hereditary Genius* (1869) invoked statistics to study the inheritance of genius and greatness, with what today appears a curious mixture of egalitarian aims ('every lad [should have] a chance of showing his abilities, and, if highly gifted, enabled to achieve a first-class education and entrance into professional life') and the encouragement of 'the pride of race'. In his *Inquiries into Human Faculty and its Development* (1883), Galton coined the term 'eugenics', advocating financial rewards to encourage marriage between families of high rank or intellect. He wanted to breed people with allegedly superior abilities. Eugenics had its day in the 1920s and '30s, but rapidly fell from grace because of widespread abuses, the forced sterilisation of mental patients, and the Nazi delusion of a master race, for example. Today, eugenics is considered racist. It contravenes the United Nations Convention on the Prevention and Punishment of the

Crime of Genocide and the European Union's Charter of Fundamental Rights. However, the idea has never completely gone away.

[AG: Viewed this way, the story of "Dune" is pure-bred eugenics. Of course in Dune one reads not so much about those who didn't meet the requirements.]

...

Until recently, pollsters mostly used random samples. The Law of Large Numbers, discovered by Jacob Bernoulli around 1684 and published in his epic *Ars Conjectandi* (1713), or 'The Art of Conjecture', tells us that, if the sample is large enough, the average value of that sample is 'almost surely' as close as we wish to the true average. But this doesn't tell us how big 'large enough' should be. A more sophisticated result, the Central Limit Theorem, uses a bell curve to relate the sample mean to the actual mean, and to calculate the smallest sample size that should work.

...

Polling organisations use a variety of methods to try to minimise these sources of error. Many of these methods are mathematical, but psychological and other factors also come into consideration. Most of us know of stories where polls have confidently indicated the wrong result, and it seems to be happening more often. Special factors are sometimes invoked to 'explain' why, such as a sudden late swing in opinion, or people deliberately lying to make the opposition think it's going to win and become complacent. Nevertheless, when performed competently, polling has a fairly good track-record overall. It provides a useful tool for reducing uncertainty. Exit polls, where people are asked whom they voted for soon after they cast their vote, are often very accurate, giving the correct result long before the official vote count reveals it, and can't influence the result.

Today, the term 'social physics' has acquired a less metaphorical meaning. Rapid progress in information technology has led to the 'big data' revolution, in which gigantic quantities of information can be obtained and processed. Patterns of human behaviour can be extracted from records of credit-card purchases, telephone calls and emails. Words suddenly becoming more common on social media, such as 'demagogue' during the 2016 US presidential election, can be clues to hot political issues.

...

The social and political challenges are to ensure that such methods are not abused. With the growing introduction of powerful new methods, social physics has come a long way since Quételet first wondered how to find out how many people lived in Belgium, without actually counting them.

This is an adapted excerpt from the book

'Do Dice Play God? The Mathematics of Uncertainty' (2019) by Ian Stewart, published by Basic Books in September 2019.

## 16.2 Gerd Gigerenzer and How to Lie with Statistics

There is *Professor Gigerenzer* who is very good at thinking *Mathematical and Statistical Monstrosities*. Someone quite intelligent had said something like this:

**Never believe a statistic that you haven't forged yourself.**

It is probably for a good reason that most of all the good *doctors of humanity*, have never learned much statistics in their *medical schools*. The distribution of *intelligence and education factors in humanity* is such that he who may be a good doctor is likely to have a mediocre to poor ability in mathematics.

<https://www.mpib-berlin.mpg.de/de/mitarbeiter/gerd-gigerenzer>

[https://de.wikipedia.org/wiki/Gerd\\_Gigerenzer](https://de.wikipedia.org/wiki/Gerd_Gigerenzer)

<https://www.referenten.de/redner-referent-prof-dr-gerd-gigerenzer-686.html>

<https://www.zeitleben.de/interview-gigerenzer/>

<https://www.br.de/fernsehen/ard-alpha/sendungen/campus/talks/talks-risiko-gigerenzer100.html>

[https://www.randomhouse.de/leseprobe/Bauchentscheidungen/leseprobe\\_9783570009376\\_1.pdf](https://www.randomhouse.de/leseprobe/Bauchentscheidungen/leseprobe_9783570009376_1.pdf)

<https://www.theeuropean.de/gerd-gigerenzer/13832-interview-mit-gerd-gigerenzer>

[https://psyche-und-arbeit.de/?page\\_id=3372](https://psyche-und-arbeit.de/?page_id=3372)

<https://www.faz.net/aktuell/wissen/thema/gerd-gigerenzer>

<https://www.amazon.de/Bauchentscheidungen-Intelligenz-Unbewussten-Macht-Intuition/dp/3442155037>

<https://www.youtube.com/watch?v=Qy3LXZVjbNM>

<https://www.br.de/mediathek/video/prof-gerd-gigerenzer-risiko-warum-fuerchten-wir-was-uns-nicht-umbringt-av:584fdb183b46790011a5f3e7>

<https://www.br.de/mediathek/video/alpha-forum-gerd-gigerenzer-direktor-am-max-planck-institut-fuer-bildungsforschung-direktor-harding-zentrum-fuer-risikokompetenz-av:5979cac5b14013001251267a>

### 16.2.1 Statistics and the Medical Profession

And when one thinks of the work of Gerd Gigerenzer one will probably get to imagine some scenario like this: When the good doctor has the nice *Pharmaka Company Sales Representative* coming to his/her doorstep, then the nice Pharmaka Representative presents the good doctor with some statistics... And then the good doctor should exactly do what Giordano Bruno advised in his *Kabbalah of the Pegasus: Fold your hands, and bend your knees, and start to pray*:

"Dear God don't lead us into the statistics, and deliver us from the evil... er I mean deliver us from the Pharmaka Company Sales Representative. Amen."

Unfortunately the good doctor had never learned anything about praying. Er I mean the preying of the preying mantis called the Pharmaka Representative. And so my advice is totally in vain. Amen.

Now since *most doctors are mostly not so good at statistics*, it comes to pass that about 3/4 of clinical studies on the effects of Pharmaka are full of bad statistics. And in the consequence they are of no scientific value at all. And in the articles sponsored by the Pharmaka Companies, it will be close to 100%. So the whole *Pharmaka Business is corrupted up over their heads* by bad statistics. And the good German Minister/in of Public Health (or in just any other country) will also be challenged beyond his/her intelligence since *the good Minister has no idea of Medical and Pharmaka Statistics* and on top of that s/he will also have *no idea of medicine*. So, *incompetence and idiocy always go together well*. And of course then come the out-of-proportion prices of (some patentable) Pharmaka. Since the Pharmaka Companies just cook up some very old recipes with minimal molecular changes, and then they call them a new Pharmaka / Medicine with a whole new patent, and of course a whole new price, about 10 times of the old Pharmaka.

### 16.2.2 Journalists, Tall Stories, and an Aversion to Statistics and Mathematics

The same holds pretty much for all the journalists, because they have studied journalism because they hate mathematics. The ability to tell tall stories (like Claas Relotius) versus the sharp but very cotton-dry mathematical thinking mostly oppose each other and don't fit together well into one human brain. And I do a little journalistic psychology on the side. The journalists seem to have "two souls in their breasts" as Goethe would have said it. On the one side they must be as objective and impartial as possible to give their readers a view of "the world as it is". Now this may be a lofty ethos of the profession. But every journalist also has some *pathe*, meaning a yearning in his soul that s/he would rather be like the *Great Ernest Hemingway*. Hemingway had been a journalist "of sorts", but he was a very passionate one. So actually he used to tell tall stories all the time. Finally he won *fame and fortune* by *telling tall stories* alone without a journalistic pretense. What information there is on the www is mostly *euphemistic and apologetic* about Hemingway. But we can get a hint that he was very passionate in the way of his writing.

<https://spartacus-educational.com/USAhemingway.htm>

Ernest Hemingway, the son of Clarence Edmonds Hemingway, a doctor, was born in Oak Park, Illinois, on 21st July, 1899. His mother, Grace Hall Hemingway, was a music teacher but had always wanted to be an opera singer. According to Carlos Baker, the author of *Ernest Hemingway: A Life Story* (1969), he began writing stories as a child: "Ernest loved to dramatize everything, continuing his boyhood habit of making up stories in which he was invariably the swashbuckling hero." ...

After the war Hemingway wrote the novel, *For Whom the Bell Tolls* (1940). The book, which deals with the Republican partisans in the Sierra de Guadarrama, sold over 270,000 copies in its first year. A former member of the *Abraham Lincoln Battalion*, the writer *Alvah Bessie*, later complained about the book: "His (Hemingway) dedication to the cause of the Spanish Republic was never questioned, even though the VALB men attacked his novel, *For Whom the Bell Tolls*, as a piece of romantic nonsense when it was not slanderous of many Spanish leaders we all revered, and scarcely representative of what the war was all about."

<https://newrepublic.com/article/95915/hemingway-reports-spain>

David Sanders, Ernest Hemingway's Spanish Civil War Experience

[https://www.jstor.org/stable/2710752?read-now=1&refreqid=excelsior%3A8630df9e8d09548213e9d2652123ae9b&seq=8#page\\_scan\\_tab\\_contents](https://www.jstor.org/stable/2710752?read-now=1&refreqid=excelsior%3A8630df9e8d09548213e9d2652123ae9b&seq=8#page_scan_tab_contents)

### 16.2.3 The Two Sides of a Journalist's Soul

So when we understand those *two sides of a journalist's soul* better, then we will be able to dispense some forgiveness onto those poor journalists. Perhaps the best ever psychogram of the journalist was sketched in the "Superman" comics. Here the hero is a lowly newspaper journalist who turns unobtrusively into Superman when the need arises and then returns the next day to his lowly profession again to tell the latest superman adventure in his newspaper. Most journalists will not earn fame, but at least sometimes they earn

*some free rides*. Like the motor journalists who will always get a free car to "test" for a few months from the *nice motor companies*, and of course he will write some nice stories about that car later. Other journalists get *free aeroplane flights* and *free room and board* and transportation at the location, when they concoct some nice reports about some *nice tourist destinations*. Of course all expenses are paid by the respective tourist ministry of that country which is almost always presided by *a close relative of that country's premier minister or minister president*. And this country's hotels are almost always owned by the president's son or daughter-in-law. So we will surely really soon come to read some really exciting stories about the hottest insider tips about *tourist hot-spots like Haiti, the Kongo, and South Sudan*. Sociologically, one may note that for almost all journalists of humanity, the word "truth" is always spelled like "pravda". There is a famous sketch by *Hape Kerkeling* aka *Horst Schlämmer* who saw his higher calling to become *Chancellor of Germany*: „*Horst Schlämmer – Isch kandidiere*“ in 2009.

<https://www.welt.de/fernsehen/article4255117/Horst-Schlaemmer-kandidiert-sie-alle-nieder.html>

Now, 10 years later, we all would wish that Horst Schlämmer would have won the election.

#### 16.2.4 The Wealth of Statistical Tricks is Almost Infinite

The wealth of *statistical tricks* is almost infinite. The one most often used is "*Correlation does not imply Causation*". This is a special trick for all would-be benefactors of humanity who want to either ban something, like smoking, or to promote something that is either useless or harmful in great quantity, like *Vitamin C* (which was the fabrication of *Linus Pauling*). Another great trick is to take totally skewed samples or extremely small and not representative ones.

<https://orbitermag.com/the-vitamin-c-hoax/>

[https://en.wikipedia.org/wiki/Correlation\\_does\\_not\\_imply\\_causation](https://en.wikipedia.org/wiki/Correlation_does_not_imply_causation)

Correlation does not imply causation

Not to be confused with *Illusory correlation*.

In *statistics*, the phrase "**correlation does not imply causation**" refers to the inability to legitimately deduce a *cause-and-effect* relationship between two *variables* solely on the basis of an observed association or *correlation* between them.<sup>[1][2]</sup> The complementary idea that "correlation implies causation" is an example of a *questionable-cause logical fallacy*, in which two events occurring together are taken to have established a *cause-and-effect* relationship. This fallacy is also known by the Latin phrase **cum hoc ergo propter hoc** ("with this, therefore because of this"). This differs from the fallacy known as *post hoc ergo propter hoc* ("after this, therefore because of this"), in which an event following another is seen as a *necessary consequence* of the former event.

In a widely studied example of the statistical fallacy, numerous *epidemiological studies* showed that women taking combined *hormone replacement therapy* (HRT) also had a lower-than-average incidence of *coronary heart disease* (CHD), leading doctors to propose that HRT was protective against CHD. But later *randomized controlled trials* showed that use of HRT led to a small but *statistically significant* increase in the risk of CHD. Reanalysis of the data from the epidemiological studies showed that women undertaking HRT were more likely to be from higher *socioeconomic groups* (ABC1), with better-than-average diet and exercise regimens. Thus the use of HRT and decreased incidence of coronary heart disease were coincident effects of a common cause (i.e., the benefits associated with a higher socioeconomic status), rather than one being a direct cause of the other, as had been supposed.<sup>[3]</sup>

<https://towardsdatascience.com/why-correlation-does-not-imply-causation-5b99790df07e>

<https://www.welt.de/wirtschaft/article198158065/Novartis-Das-teuerste-Medikament-der-Welt-geraet-unter-Verdacht.html>

Es geht um die Frage, ob bei der Zulassung der teuren Medizin getrickst worden ist. Die mächtige US-Gesundheitsbehörde FDA wirft Novartis und der 2018 übernommenen Tochterfirma Avexis vor, dass diese vor der Zulassung manipulierte Testdaten gegenüber den Aufsehern verschwiegen haben.

Der Vorwurf wiegt schwer: Das Unternehmen habe erst am 28. Juni über die Manipulation von Tierversuchsdaten informiert, obwohl es schon im März davon erfahren habe – mehr als zwei Monate vor der Zulassung am 24. Mai, teilte die FDA mit. An der positiven Einschätzung der klinischen Studien am Menschen ändere sich zwar nichts, und auch die Sicherheit des Mittels sollte davon nicht beeinträchtigt sein.

#### 16.2.5 Some Side Tracks about Lying with Statistics

AG: I have just discovered one of the most egregious examples how to lie with statistics that anyone with a little more phantasy than *Claas Relotius* could come up with. The following ingenious story is that India will surpass *Great Britain as the fifth largest economy* of the world in 2019. We can just imagine what a *great intellectual masterpiece* that is. Since Great Britain has about 66 million (= 66.000.000) people and 242.495

km<sup>2</sup>, and India has about 1.000.000.000 people and 3.287.000 km<sup>2</sup>. Small wonder that a normal human being just thinks that the journalists must be *just a little bit out of their minds*:

<https://www.welt.de/finanzen/article197217249/Brexit-Jetzt-werden-die-Briten-sogar-von-Indien-abgehaengt.html>

Denn in diesem Jahr wird die indische Volkswirtschaft aller Voraussicht nach die britische abhängen – ausgerechnet eine einstige Kolonie überrundet damit die frühere Kolonialmacht, die damit in der Liste der größten Volkswirtschaften einen weiteren Platz absteigt. Das wirft ein Licht auf die wahren Kräfteverhältnisse in der Welt, eine Welt, in der Großbritannien allein um seinen Platz kämpfen muss.

Auf der anderen Seite dagegen steht Indien. Dort entwickelt sich die Wirtschaft seit Jahren äußerst dynamisch. Und erst im Mai wurde die Regierung unter Premierminister Narendra Modi in den Wahlen eindrucksvoll bestätigt. Das beflügelte die Aktienmärkte. Der Sensex-Index kletterte im Juni erstmals über 40.000 Punkte und erreichte ein neues Allzeithoch.

AG: There is at least one intelligent reader who writes the obvious comment that any sane human would make:

Zweitens ist ein so tendenziöser Briten-Bash-Artikel nur möglich, weil Indien so enorm bevölkerungsreich ist. Pro Kopf lag das BIP 2017 auf dem Niveau der Republik Kongo. Selbst Swasiland ist da erfolgreicher.

We can also state another version of this euphemistic story: When compared with the population increase, the economy of India is even shrinking. And we must not forget that the *environmental cost* of that economy is also *proportionally worse* than that of China. The reason for this is the situation in the hot tropics which worsens all environmental problems, especially *water shortage and contamination*. In the very near future, India will probably be *the most contaminated region of the planet*. And this has nothing at all to do with climate change. It is just that *so many millions of deep-bore water wells* suck the subcontinent dry.

### 16.3 Murder rates, Narco and Terrorist murders, and then... Road Traffic

So we come to another "pet" theme of the Mainstream press: *Murder rates, versus Narco war victims, versus Terrorist victims, versus Traffic deaths, versus population size, versus length of interstate highways, versus number of motor vehicles overall and per capita, versus the area size of a country*. The murder rates of any country or population is combed (or tweaked) around these factors of statistics and how they will always yield very surprising and mostly very different results. And all *the Mainstream Press monkeys and all the Mainstream Press men*, will never get the statistics together again. Quoting Lewis Carrol himself who was a very good Mathematician. We have so many cases how to distort murder rates when they are quoted *without any sense of proportion in the Mainstream Press*.

1) The total murder rate in a given country, like Mexico, Honduras or India. In absolute numbers.

2) The murder rate in proportion to the absolute number of murders divided by the total number of population.

For example we have in Honduras about 10 million, and we may have there about 10.000 murders every year. Now we take India with around 1.000 million, and we have about 100.000 murders every year.

So: Which one is the more dangerous country to live in?

But one should also care about population density, which is dependent on the area size of the country. Honduras is very small in area, and India is very large. But this still doesn't cover all the cases. An extreme case: Egypt is quite large in overall area, but 90% of that is desert, so no people there. The population tends to be squeezed into a corridor about 20 km wide along the whole length of the Nile in Egypt. So when one wants to calculate traffic deaths and murder rates, versus country size, one should heed the distribution of population density, otherwise one would get very distorted and deceiving figures. Every country with lots of deserts (ice sheets are also deserts) or lots of jungles (like Kongo) and difficult mountain ranges (like Japan and New-Guinea) needs to adjust the population density proportions.

Then we have the Khoi San in S. Africa with around 100 murders every year. But the total size of Khoi San population is maybe 50.000 in total. Again the question what is the proportional murder rate per capita of population?

3) Statistical significance of premature deaths. Again what is the more dangerous country to live in?

Murder rate vs. traffic accident rate vs. the total population size. Let us again take India as example. Now one must discount this against total number of traffic accidents and per capita of population: Railways, and

especially National Interstate Highways which cross the whole Subcontinent. The answer of statistical significance is: we have about 100.000 murders every year, but we have about 500.000 traffic deaths every year.

So we ask the same question again: Which one is the most dangerous country to live in?

And we come up with India on top, and Mexico a close second, since the Mexicans are such horrible macho Kamikaze Hell-Drivers. And then comes Brazil. But since Brazil is so large, the statistics always lie terribly. Because most of the deaths occur along the great national highways which have none whatsoever devices like the Freeways or the Autobahn, to keep the intersections clean, and keep the opposing traffic from running into each other.

And then in India as well as in Brazil there are countless other traffic participants or rather obstacles like oxcarts, large animals that cross the roads unpredictably like cows and sometimes even Elephants. And all those other traffic participants will have no lights at all during night times. And of course there are the terrible national road conditions. Traffic deaths concentrate on the more populated highways. These are just small strips that cut through the country but a very high concentration of accidents occurs there. Proportional to total population size there are probably about as many traffic deaths in India as there are in Mexico, and as there are in Brazil. So we come to the conclusion that one can twist and turn the statistics whichever way one likes. That is the problem of the Mainstream press which is always pointing at some terrorists and narcos, while the traffic deaths are about one order of magnitude higher.

### **16.3.1 The Statistics of Premature Deaths in some Pretty Bad places**

[https://en.wikipedia.org/wiki/List\\_of\\_countries\\_by\\_traffic-related\\_death\\_rate](https://en.wikipedia.org/wiki/List_of_countries_by_traffic-related_death_rate)

### **17 Traffic Deaths in India**

[https://en.wikipedia.org/wiki/Traffic\\_accidents\\_in\\_India](https://en.wikipedia.org/wiki/Traffic_accidents_in_India)

[https://www.who.int/violence\\_injury\\_prevention/road\\_traffic/countrywork/ind/en/](https://www.who.int/violence_injury_prevention/road_traffic/countrywork/ind/en/)

WHO/T. Pietrasik

The Global status report on road safety 2013 estimates that more than 231,000 people are killed in road traffic crashes in India every year. Approximately half of all deaths on the country's roads are among vulnerable road users - motorcyclists, pedestrians and cyclists.

India is a good example for skewed statistics. With all the murders, thugs, and gang rapes and the dowry burning of wives it comes to a very high murder rate. And this is also totally undocumented, because the life of a woman is very cheap in India and it has always been this way for many many millennia... Dowry murder is a speciality of India because of the silly dowry rules there...

All those murders are statistically insignificant when compared to the number of traffic deaths in the country. Just for the railways alone, there are about some 50.000 railway deaths in India every year. And you can safely estimate the number of all sorts of interstate highway and all other traffic deaths would be around 300.000 per year.

### **18 There was a Terrible Car Crash with Four Cars**

And the Indians are such a bunch of expert Kamikaze drivers, that when you have a very sleepy village out in the boondocks... where there comes hardly a car driving by at about a leisurely rate of one car per hour... so there is some intersection. And lo and behold. The Indians are able to manage to have a deadly car crash with four cars coming from all four sides of the intersection...

And as it says in the local newspaper the next day: There was a terrible car crash with four cars involved, and there were about 25 to 30 deaths. Now I wonder besides all these other wonders. How between Heaven and Hell, could you manage to cram 25 to 30 poor Indians into just four cars? I am still wondering. I think that they could even manage to have an oxcart traffic accident, with just two oxcarts and about 20 dead. India is surely a country where there are still many miracles happening every day.

So I give you an appropriate joke, since we are in India: What is more difficult than getting a pregnant Elephant into a VW Volkswagen? Quite easy. It is so much more difficult to get an Elephant pregnant in a VW Volkswagen. Presuming that the female Elephant is already in the VW Volkswagen. Well er, If you have at any time seen an Elephant Dick, it is almost as long as the dick of the Moby Dick.

Of course no-one in the enlightened West could ever care about Indian traffic deaths. And so when there come a few Islamist Terrorist bombers and they manage to kill about 100 people and maim about 500 more...

There would be such an outcry in all the High Quality Mainstream Media in the whole world. Such is the hypnotizing Power of *Lying with Statistics*.

I know about all this because I had been on the Indian railways and then on some buses on the Indian national main interstate road system some time ago. I have also some nice youtube videos in my archive, of people cut in two by a railway train. I even saw this when the ambulance came after a few hours later, when they lifted one part of the body on the stretcher, and then leisurely lifted to other part on the same stretcher, to put together again what a few hours ago, had been a whole human. You don't need to read the story of Humpty Dumpty of Lewis Carroll to get an idea of this. You just go to the youtube for some videos of this kind. The Indians are not so shy of Political Correctness and some such Moralistic Victorian Puritan dealings. And the Indians are quite un-concerned about death since they believe in re-birth, and they probably think: If I kill myself now, perhaps I will have a better rebirth in my next life. This is the Indian Gamble with Rebirth. I have another nice story about Rebirth which just fits in here. Das Tibetische Bardo Thodol:

[http://www.noologie.de/diadenk.htm#bardo\\_thodol](http://www.noologie.de/diadenk.htm#bardo_thodol)

## 19 And Now about the Indian Railway Deaths

<https://www.youtube.com/watch?v=PvAhLfYB8Io>  
<https://www.youtube.com/watch?v=g2e0HzFTFjk>  
<https://www.youtube.com/watch?v=6q5MbE-PTZw>  
<https://www.youtube.com/watch?v=7fj18QmxGI0>  
[https://www.youtube.com/watch?v=2-qo\\_3wS9Vo](https://www.youtube.com/watch?v=2-qo_3wS9Vo)  
<https://www.youtube.com/watch?v=KOL0prOLrdk>  
<https://www.youtube.com/watch?v=TUXHWKN4Mhg>  
<https://www.youtube.com/watch?v=yRZVxInNZBU>  
<https://www.youtube.com/watch?v=8vM59ULCiII>  
<https://www.youtube.com/watch?v=ASIAiB24EwY>  
<https://www.youtube.com/watch?v=nl0DjJOIDm4>  
<https://www.youtube.com/watch?v=IJ4YoXxCCOs>  
<https://www.youtube.com/watch?v=VzEhYcX01HY>  
<https://www.youtube.com/watch?v=mq0u9T6Pf5c>  
<https://www.youtube.com/watch?v=6MFC9IRJbME>  
<https://www.youtube.com/watch?v=PdVTIDYcvp4>  
<https://www.youtube.com/watch?v=9M7Is8R362M>  
<https://www.youtube.com/watch?v=74qyeiNmdqw>  
<https://www.youtube.com/watch?v=BOraHZmEDs0>  
<https://www.youtube.com/watch?v=SpLPJ3g2Z7w>  
<https://www.youtube.com/watch?v=g0Tb1PQCnlc>  
<https://www.youtube.com/watch?v=Ec32klue9UI>  
[https://www.youtube.com/watch?v=ad3pJzvi-\\_k](https://www.youtube.com/watch?v=ad3pJzvi-_k)  
<https://www.youtube.com/watch?v=94KuIbpWBIE>  
<https://www.youtube.com/watch?v=-eIOaAHYkaA>  
<https://www.youtube.com/watch?v=L-I82gxMnDY>  
<https://www.youtube.com/watch?v=IJ4YoXxCCOs>  
<https://www.youtube.com/watch?v=JfEwkILaB34>  
<https://www.youtube.com/watch?v=mq0u9T6Pf5c>

...

and then some more of this.

You just put this into the youtube search: indian railway death

[https://www.youtube.com/results?search\\_query=indian+railway+death](https://www.youtube.com/results?search_query=indian+railway+death)

And you will notice that the Indians have a totally different attitude about death than we in the west are accustomed to. And they don't (yet) have the Political Correctness to delete that material from the youtube. But I am sure that the Agents of the Matrix of the youtube will finally find out about this and delete all this important material about death in India, really soon I believe. I have collected some more interesting ethnographic material on the Holy Order of the Thugees. Kali, die Göttin der Rache und die Thuggees.

[http://www.noologie.de/diadenk.htm#kali\\_thugees](http://www.noologie.de/diadenk.htm#kali_thugees)

## 20 The Death Statistics of Narco Wars against Traffic Deaths

Now we are coming to some other hell-holes on the scary face of our nice planet Earth. We want to get a clearer picture of the sum total of all the damages to a National Economy. All premature deaths and injuries have a cost in a National Economy. Like loss of income for families, loss of productive humanpower for the National Economy. Costs of treating the wounded. The Quality Mainstream Press will never do a statistical weighing of the cold factors of death rate totals against more sensational stories like Terrorism, Narco and Catastrophe deaths. The many other statistics of "quite ordinary" premature deaths are just omitted because they occur routinely and daily.

## 21 Other Bad Places of the World

Next to Africa and India, come as close seconds Afghanistan and Pakistan, and the countries on the American Isthmus, like Guatemala, and Honduras, but they are quite small in the total size of population compared with Africa. A short distance further north, some parts of Mexico, they are also quite deadly but there is also a large territory and population size. Narco wars happen just in some parts of Mexico along the main narco trading routes. We also must account for the fact that most of Northern Mexico is 1/2 to 3/4 desert. The Mainstream Press tends to over-estimate the number and significance of deaths due to drug wars of trafficking narco gangs compared to the overall size of population and distribution in some quite limited areas. Narco death rates are in the order of  $x * 10.000$  a year. This is a small percentage compared to the size of the whole population of Mexico of about 130 million. Statistically it is not so relevant. Road traffic deaths are so much higher. Since the Mexicans are a whole bunch of mad macho Kamikaze automobile drivers, ... The number of automobile and truck traffic deaths on Mexico probably exceeds the number of narco drug gang wars by about at least one order of magnitude. Lets say about 100.000 every year.

To complement this, we take the example of Brazil, Sao Paulo. There is a joke about two friends who meet each other again after some quite long years. Says the one, oh my dear Paolo, I haven't seen you in so many years, what did happen to you? The other just said: I had moved to the other side of the road.

## 22 Jared Diamond and Guns, Germs, and Steel

This section gives us some more details how one can go about observing the fates of humanity by very different methods and from very different viewpoints. The statistical method of Quetelet seems to be the most scientific one since it derives its method from the "hard sciences" like astronomy. But Quetelet didn't bother so much about ecology. This is where Jared Diamond had based his work on. At least in "Guns, Germs, and Steel". There he spells out the different fates of human societies according to the ecological conditions of their environment. The factors of geographical extension, East-West in Eurasia, and North-South in the Americas and Africa contribute decisively to the (not-so) development of cultures, as well as the availability of work animals. Inversely the close presence of animals in human habitations can lead to deadly diseases being transmitted to humans. The history of Biospheric anthropology goes back to at least Vernadsky who had single-handedly combined the large-scale geo-morphology with bio-climatology. It took the Western bio- / eco- / climato- / techno- / oeonomo- scientists at least 50 years longer to get a grasp on these things. So Jared Diamond was quite a late-comer to the field, and on top of that, he was an amateur in the field since he had started out as an Ornithologist. And Lev Gumilev had followed the work of Vernadsky very closely, but practically no-one in the West knew about his work.

### 22.1 Energy Anthropology and Technical Infrastructures

<https://www.sciencedirect.com/science/article/pii/S2214629617301998>

<https://www.sciencedirect.com/sdfe/pdf/download/aam/pii/S2214629617301998>

A pioneer of the field was *Leslie White* who had concentrated his work on *energy availability* and -use, but today one would call it the field of *technical infrastructures of human societies*. Leslie White's work is not very fashionable any more today, since it is based on the *evolutionistic idea*. It is not a marker of higher development, how much human societies use external energies. But this research still has some reasons. The usage of fire is the most ancient and important of human energy technology.

#### 22.1.1 Fire Usage and Human Evolution

Without fire there would be no humanity. Fire and Cooking is the oldest and most important of external energies used by humans. Cooking provided vital nutritional energy for the brain to grow. Fire provided warmth, light, and protection from the elements. Smoke provided protection from parasites, like mosquitoes.

In many third-world countries, people still cook with open fire, and that is a health hazard. But on the upside, it provides some protection against mosquitoes. And almost all "indigenous" societies used fire to selectively clear their environment for various purposes, like slash burning, clearing underbrush, etc.

<https://www.youtube.com/watch?v=trSRozVaco0>

Humans: The Cooking Ape, a lecture by Richard Wrangham.

<https://muse.jhu.edu/book/33220>

<http://www.stephenpyne.com/works.htm>

<https://journals.sagepub.com/doi/10.1177/0263276414536929>

Nigel Clark, Kathryn Yusoff, David Tyfield, ...

Combustion and Society: A Fire-Centred History of Energy Use

As Pyne likes to remind us, members of the genus *Homo* are the only creatures on Earth which have routinely manipulated fire (1994: 889). Some evolutionary anthropologists have suggested that – both culturally and biologically – learning to handle fire is the single most important moment in becoming human. While some estimates extend the ability of hominin species to control fire as far back as 1.6 million years before the present, clear stratigraphic evidence of the ash remains of in-situ fire use has been dated to approximately 1 million years ago (Berna et al., 2012).

More than a turning point in human evolution, Pyne proposes, 'the capture of fire by *Homo* marks a divide in the natural history of the Earth' (1994: 889). The fact that fire was there to be appropriated, he argues, reflects the uniqueness of our planet. It is the presence of life – specifically life-forms capable of converting the electro-magnetic energy of solar radiation into chemical energy stored in tissue – that makes combustion such a significant and definitive mode of energy conversion on our planet.

### 22.1.2 Hydraulic Architectural Systems

The next most important achievements of human large-scale technological culture are the *hydrological architectural systems* since about 10.000 years. First and foremost are the massive architectural works of irrigation which seeded the Egyptian and Mesopotamian and Chinese civilizations. For this, there was even a special term: *Hydraulic Civilization*. The *Khmer Empire* that flourished in the larger area around the well-known site of *Angkor Wat* may have been the largest ever pre-industrial hydrological architectural system. This was possible for several circumstances: The very flat plain of the territory, the *Monsoon patterns*, and the peculiarity of the *Mekong River* system in the different *Monsoon phases*. The *Tonle Sap Lake* acted as a water reservoir for the dry season, which was then distributed through 1.000's of man-made channels.

[https://www.oup.com.au/\\_data/assets/pdf\\_file/0024/58191/Chapter-13-The-Khmer-Empire-obook-only.pdf](https://www.oup.com.au/_data/assets/pdf_file/0024/58191/Chapter-13-The-Khmer-Empire-obook-only.pdf)

[https://en.wikipedia.org/wiki/Khmer\\_Empire](https://en.wikipedia.org/wiki/Khmer_Empire)

[https://www.ancient.eu/Khmer\\_Empire/](https://www.ancient.eu/Khmer_Empire/)

But it was not always connected with highly centralized government and power structures. For example the cases of Indonesia and Bali testify that this was achieved on a quite localized level of perhaps a few villages in a valley with adjacent mountains where one gets the water from. And the people in those areas had built this massive *Hydraulic Architecture* just by communal effort. Also they had extremely high and steep terrace systems high up the mountain sides. Pretty much the same had happened in the areas of the former Inka empire. And that system was very much older than the Inka, by a few 1000 years. Before the Inka, those systems were also maintained by local organization structures, called *Ayllu*, and only the Inka "sort of" centralized them.

### 22.1.3 The Inka Ayllu System

<https://en.wikipedia.org/wiki/Ayllu>

The **ayllu** is the traditional form of a *community* in the *Andes*, especially among *Quechuas* and *Aymaras*. They are an indigenous local government model across the *Andes* region of *South America*, particularly in *Bolivia* and *Peru*. Ayllus functioned *prior to Inca conquest*, during the *Inca* and Spanish colonial period, and continue to exist to the present day - such as the Andean community *Ocra*.<sup>[1]</sup> How the ancient form and current organization correspond is unclear, since Spanish chronicles do not give a precise definition of the term.<sup>[2]</sup>

Ayllus had defined territories and were essentially extended family or kin groups, but they could include non-related members, giving individual families more variation and security of the land that they farmed.<sup>[3]</sup> The male head of an ayllu is called a *mallku* which means, literally, *condor*, but is a title which can be roughly translated as "prince". They would often have their own *wak'a*, or minor god, usually embodied in a physical object such as a mountain or rock. "Ayllus were named for a particular person or place."<sup>[4]</sup>

Ayllu were self-sustaining units and would educate their own offspring and farm or trade for all the food they ate, except in cases of disaster such as *El Niño* years when they relied on the Inca storehouse system.

<sup>[5]</sup> Their primary function was to solve subsistence issues, and issues of how to get along in family, and larger, units.<sup>[6]</sup>

Each ayllu owned a parcel of land, and the members had reciprocal obligations to each other.<sup>[7]</sup> In *marriages*, the woman would generally join the class and ayllu of her partner as would her children, but would *inherit* her land from her parents and retain her membership in her birth ayllu. This is how most movements of people between ayllu occurred. But a person could also join an ayllu by assuming the responsibility of membership. This included *mink'a*, communal work for common purposes, *ayni*, or work in kind for other members of the ayllu, and *mit'a*, a form of taxation levied by the Inca government.<sup>[5]</sup>

The local authority of Ayllu remained un-touched until the Spaniards came to conquer and destroy it all. The steep and tall mountains of Peru, Bolivia and Northern Chile are still covered very high up with lost and ruined terraces, which give ample testimony of what the ancient people could achieve with only their manual labor.

#### 22.1.4 More Hydraulic Architecture

Another very good example are the *Qanats* of ancient Persia. They were more of an engineering feat than the Roman Aqueducts, but one cannot see them because they are underground, just a lineage of mole hill like structures everywhere in the country-side. These are some wonders of ancient technology. Another also less well known are water transport and water cultivation systems. The best of them and the most completely lost one is that of the *Azteks in Tenochtitlan*, since they had intensively cultivated the whole lake where they lived. They had a *combined floating-garden* and canal transport system together with an intensive fish culture. Because what the humans threw away or excreted, was fed into the canal system and ensured the fertility of the whole system. And the Spaniards, as ignorant and brutal as they usually were, destroyed it all very diligently. So the famous *city of Venice* is a mere shadow of the ancient Aztek system. There were and are huge river and estuary culture systems all over the planet. Also in Australia, which is not so well known for higher culture, there were huge estuary channel systems. Of course they are gone by now, since it was now the turn of the equally brutal British'ers to exterminate them. Some kind of this also exists in France, where they have lots of salt pans, and oyster culture. There are so many www sites on these subjects that no more quotes need to be given for them.

<http://www.nologie.de/energie.htm>

#### 22.1.5 Aeolian or Wind Technology

This is also a very old technology, of windmills, especially known from Holland. What is not so well-known are *wind-traps* or *wind-tunnels* which are especially vital for ore smelting furnaces.

[https://en.wikipedia.org/wiki/Aeolian\\_processes](https://en.wikipedia.org/wiki/Aeolian_processes)

It is just a nice fiction of present-day archeologists to presume that the ancients had used only primitive blow-pipes or bellows for ore smelting. I have seen some vivid but extremely stupid illustrations in some anthropology journals and books. The ancients were so much more refined to build their smelting furnaces exactly in those places where there were always strong winds blowing. It is only that present-day archeologists don't know about how the ancients knew to use the wind. Even if the Classical Greek writings are full of stories about such ancient wind-tunnels.

#### 22.1.6 More Energy Sources

Then comes the sun energy, which is more recent, and then all the fossil fuels, and then the atomic power. So we have a hierarchy and structurization in age and in energy density and ressource availability, and in ecological and human cost. The coal industry is or was also one of the most dangerous in terms of human deaths, and in China, India, and Turkey there are yearly a couple 1000 deaths in the coal mines. And for more examples, the sun and wind energies consume immense amounts of area, about 10 to 100 times more than fossil fuels, while also being very inefficient and costly next to impossible to store some energy. Also the wind turbines are now in-famous for shredding all the birds and bats that come close to them. And they require some environmentally very dangerous materials like Neodym for the generator magnets, Cobalt and other difficult to refine materials.

#### 22.1.7 Herbert Spencer and Howard Bloom

There is a group of writers that can be classed as more or less Herbert Spencer'ian *Social Darwinists*. One of the most pronounced and excentric of this group is Howard Bloom. He sings the songs of highest praise for the US American Capitalist System.

<https://www.heise.de/tp/autoren/?autor=Howard%20Bloom>

Then there is Jacques Neyrinck "*Der göttliche Ingenieur*". We may contraposition these views against the work of Patrice Ayme' who is about as vociferous against what he calls the Plutokrats, ie. just those members of the (mainly) US American Capitalist Society who have amassed so many billions and who direct the US

politics from behind the scenes, using the politicians as their puppets. And Patrice Ayme' is by no means a Marxist or a Socialist as one may assume. He believes in the Democracy of "We the People".

<https://patriceayme.wordpress.com/>

As a Morphologist, one believes that it is all "in the eye of the beholder". By whichever conceptual (or ideological) system you view the fates of humanity, you will get the appropriate answers. And the wikipedia is all wrong to call Herbert Spencer a liberal political theorist. Today the meaning of "liberal" has changed quite a lot. Today liberal means a bit leftist leaning, and especially Politically Correct. And if there was anything that Herbert Spencer was not, then it was leftist. So one has to take all these tall tales with a quite a big Table Spoon Granum Salis. So the good Jared is like a Story-Telling God, and he writes good, tall stories, which I like very much.

[https://en.wikipedia.org/wiki/Herbert\\_Spencer](https://en.wikipedia.org/wiki/Herbert_Spencer)

**Herbert Spencer** (27 April 1820 – 8 December 1903) was an English philosopher, [biologist](#), [anthropologist](#), [sociologist](#), and prominent [classical liberal political theorist](#) of the [Victorian era](#).

Spencer developed an all-embracing conception of [evolution](#) as the progressive development of the physical world, biological organisms, the human mind, and human culture and societies. As a [polymath](#), he contributed to a wide range of subjects, including ethics, religion, anthropology, economics, political theory, philosophy, literature, astronomy, biology, sociology, and psychology. During his lifetime he achieved tremendous authority, mainly in English-speaking academia. "The only other English philosopher to have achieved anything like such widespread popularity was [Bertrand Russell](#), and that was in the 20th century."<sup>[1]</sup> Spencer was "the single most famous European intellectual in the closing decades of the nineteenth century"<sup>[2][3]</sup> but his influence declined sharply after 1900: "Who now reads Spencer?" asked [Talcott Parsons](#) in 1937.<sup>[4]</sup>

Spencer is best known for the expression "[survival of the fittest](#)", which he coined in *Principles of Biology* (1864), after reading [Charles Darwin's](#) *On the Origin of Species*.<sup>[5]</sup> This term strongly suggests [natural selection](#), yet as Spencer extended evolution into realms of sociology and ethics, he also made use of [Lamarckism](#).<sup>[6]</sup>

<https://industrieanzeiger.industrie.de/allgemein/der-goettliche-ingenieur/>

[https://en.wikipedia.org/wiki/Howard\\_Bloom](https://en.wikipedia.org/wiki/Howard_Bloom)

### 22.1.8 The Grisly Story of the Corn Cob

One may interpret the case of the Maya and Aztek civilizations from an ecological perspective. It was only recently discovered that the Mayas were about as blood-thirsty as the Azteks. Quite tellingly, the *Maize God* of the ancient Azteks and Maya's also had some brutal aspects. It is well-known that pre-historic agricultural societies often assumed that the fruitfulness of the earth could be maintained with human *blood sacrifices*. And the ancient Mayas and Azteks celebrated these rites very diligently. And there are more indicators that Maize culture had its own intrinsic cost. The Amerind people created the Maize plant out of some very humble grass kind of vegetation called *Teosinte*. The simple indicator of this artificial creation of Maize is that it cannot reproduce naturally. Because the *Corn Kernels* don't fall out by themselves when they ripen, and so the Maize plant is doomed to extinction if the humans don't help it propagate. And the crucial difference between Maize and Rice and Wheat is the size of the fruit. When you weigh one Corn Cob against one risp of Rice or one of Wheat you will notice that the Maize has about 100 times the weight (= the food value) of the others. The only nutritional problem that Maize has is the lack of certain *amino acids* like *tryptophan* and *lysine*. So when a human population has to survive on Maize only they can develop very heavy metabolic diseases. Now we *possibly* can come to understand why the Mayas and especially the Azteks developed such a special taste for *human flesh*. It was *maybe* a problem of chronic *Amino Acid deficiency*, which induces some sort of madness or mental illness. So the Azteks were "not really" *cannibalistic*, but they had developed some very strange forms of *hallucinations produced by amino acid deficiency*. There were practically no large domesticated animals around in pre-historic Meso-America for *Protein Food*. The Azteks had some fish in their lake of *Tenochtitlan*, but there are no more statistics existant how large the proportion of fish protein was in their diet. And so the only remaining source of animal protein left over were the humans. Anyhow, this practice also served to economize on so many costly and wasteful burial rituals (like in most other "civilized" cultures) which had become unnecessary by that specific practice of cannibalism or lets say: "*Human Recycling*". The movie "Sylent Green" enlarges on this theme.

<http://www.fao.org/3/t0395e/t0395e0c.htm>

... The problem with maize lies in the diet of which it is a component, a diet mostly deficient in the kind of supplementary foods necessary to upgrade the nutrients ingested in relatively large amounts of maize. Maize-consuming populations would be nutritionally better off if the maize consumed had the lysine and

tryptophan genes of QPM or if it were consumed with a sufficient amount of protein foods such as legumes, milk, soybeans and amaranth seeds and leaves.

[https://en.wikipedia.org/wiki/Human\\_sacrifice\\_in\\_Aztec\\_culture](https://en.wikipedia.org/wiki/Human_sacrifice_in_Aztec_culture)

Although the extent of human sacrifice is unknown among several Mesoamerican civilizations, such as Teotihuacán,<sup>[1]</sup> what distinguished Maya and Aztec human sacrifice was the importance with which it was embedded in everyday life. ...

When death occurred from battling in a Flower War, it was considered much more noble than dying in a regular military battle.<sup>[11]</sup> Additionally, death in the Flower Wars contained religious importance as those who died were thought to live in heaven with the war god, Huitzilopochtli.<sup>[12]</sup> ...

For many rites, the victim had such a quantity of prescribed duties that it is difficult to imagine how the accompanying festival would have progressed without some degree of compliance on the part of the victim. For instance, victims were expected to bless children, greet and cheer passers-by, hear people's petitions to the gods, visit people in their homes, give discourses and lead sacred songs, processions and dances.<sup>[13]</sup>

...

Some post-conquest sources report that at the re-consecration of Great Pyramid of Tenochtitlan in 1487, the Aztecs sacrificed about 80,400 prisoners over the course of four days. This number is considered by Ross Hassig, author of *Aztec Warfare*, to be an exaggeration. Hassig states "between 10,000 and 80,400 persons" were sacrificed in the ceremony.<sup>[11]</sup> The higher estimate would average 15 sacrifices per minute during the four-day consecration. Four tables were arranged at the top so that the victims could be jettisoned down the sides of the temple.<sup>[18]</sup> Nonetheless, according to *Codex Telleriano-Remensis*, old Aztecs who talked with the missionaries told about a much lower figure for the reconsecration of the temple, approximately 4,000 victims in total.

<https://en.wikipedia.org/wiki/Centeotl>

In the Tonalpohualli (a 260-day sacred calendar used by many ancient Mesoamerican cultures), Centeotl is the Lord of the Day for days with number seven and he is the fourth Lord of the Night. In Aztec mythology, maize (which was called Cintli in Nahuatl, the Aztec spoken language) was brought to this world by Quetzalcoatl and it is associated with the group of stars known commonly today as the Pleiades.<sup>[9]</sup> ...

Corn was rather essential to Aztec life and thus the importance of Centeotl cannot be overlooked. It can be seen from countless historical sources that a lot of the maize that was cultivated by the Aztecs was used in sacrifices to Gods. Usually at least five newly ripened maize cobs were picked by the older Aztec women. These were then carried on the female's backs after being carefully wrapped up, somewhat like a mother would wrap up a newborn child. Once the cobs reached their destination, usually outside a house, they were placed in a special corn basket and would stay there until the following year. This was meant to represent the resting of the maize spirits until the next harvesting period came around.<sup>[10]</sup>

<https://www.thoughtco.com/centeotl-the-aztec-god-of-maize-170309>

April 30th. To honor the maize gods, people carried out self-sacrifices, performing blood-letting rituals, and sprinkling the blood throughout their houses. Young women adorned themselves with necklaces of corn seeds. Maize ears and seeds were brought back from the field, the former placed in front of the gods' images, whereas the latter were stored for planting in the next season.

The cult of Centeotl overlapped that of Tlaloc and embraced various deities of solar warmth, flowers, feasting, and pleasure. As the son of the earth goddess Toci, Centeotl was worshipped alongside Chicomecoatl and Xilonen during the 11th month of Ochpaniztli, which begins September 27th on our calendar. During this month, a woman was sacrificed and her skin was used to make a mask for Centeotl's priest.

### 22.1.9 Jared Diamond on the Maya Collapse

Jared Diamond had written something in this vein about the problems of the Maya's who didn't have enough vital protein to eat. See: The German edition of *Collapase*: p. 206-207, *no draft animals and no animals for food*: p. 208. Also the gruesome practices of very slow and prolonged *Torture-killing* p. 217-218. The Aztecs had quite the same problems of *deranged-mind* since they had the same *Protein Food Problems*.

[https://en.wikipedia.org/wiki/Zea\\_\(plant\)](https://en.wikipedia.org/wiki/Zea_(plant))

<https://www.vox.com/2014/10/15/6982053/selective-breeding-farming-evolution-corn-watermelon-peaches>

<https://learn.genetics.utah.edu/content/selection/corn/>

<https://phys.org/news/2009-10-amazing-maze-maize-evolution.html>

The amazing maze of maize evolution

Understanding the evolution and domestication of maize has been a holy grail for many researchers. As one of the most important crops worldwide and as a crop that appears very different from its wild relatives as a result of domestication, understanding exactly how maize has evolved has many practical benefits and may help to improve crop yields.

<https://www.spiegel.de/wissenschaft/mensch/maya-stadt-witzna-brannte-bei-heftigem-feuer-zur-blutzeit-der-kultur-nieder-a-1280638.html>

Die neue Studie zeichnet ein anderes Bild. "Die Theorie, dass die extreme Kriegführung ein wichtiger Faktor beim Kollaps der Maya-Gesellschaft war, ist nicht mehr haltbar", sagt Francisco Estrada-Belli von der Tulane University in New Orleans. ...

"Die Belege zeigen, dass die Maya zu einer Zeit zerstörerische Kriege führten, die als Höhepunkt des Wohlstands und der künstlerischen Raffinesse gilt", schreibt das Team.

<https://www.spiegel.de/wissenschaft/mensch/mexiko-das-maya-massengrab-von-uxul-a-1240711.html>

In Uxul muss sich einst ein entsetzliches Massaker zugetragen haben. "Die Menschen wurden nicht einfach nur umgebracht, sondern regelrecht ausgelöscht", sagt Seefeld. Man hat die Toten zerstückelt, bevor sie abgelegt wurden, Beine, Arme oder Füße lagen einzeln herum. Dann wurden die Gebeine mit einer Lehmschicht überzogen. Was genau war hier passiert?

Um den Tathergang nachvollziehen zu können, probiert Seefeld, die Knochen einzelnen Individuen zuzuordnen. Keine leichte Aufgabe. Denn die Köpfe wurden vom Torso abgetrennt, darauf deuten typische Spuren an den Halswirbeln. Schnittspuren an den Brustbeinen legen nahe, dass der Brustkorb geöffnet wurde. Auch an der Innenseite der Rippen finden sich welche. Möglicherweise wurden Organe entfernt.

<https://www.nature.com/articles/s41562-019-0671-x.epdf> ...

Despite over a century of archaeological research, the nature and broader consequences of Maya warfare remain poorly understood. Classic period (250–950 CE) Maya warfare has largely been viewed as ritualized and limited in scope (1–6). Evidence of violent warfare in the Terminal Classic period (800–950 CE) is interpreted as an escalation of military tactics that played a role in the socio-economic collapse of the Classic Maya civilization (7,8). The implications of specific textual references to war events (war statements) remain unknown, however, and the paucity of field data precludes our ability to test collapse theories tied to warfare. Here we connect a massive fire event to an attack described with a Classic period war statement. Multiple lines of evidence show that a large fire occurred across the ancient city of Witzna, coincident with an epigraphic account describing an attack and burning of Witzna in 697 CE. Following this event, evidence shows a dramatic decline in human activity, indicating extensive negative impacts on the local population. These findings provide insight into strategies and broader societal impacts of Classic period warfare, clarify the war statement's meaning and show that the Maya engaged in tactics akin to total warfare earlier and more frequently than previously thought.

## 22.2 More on "Guns, Germs and Steel": Continental Conditions

AG: So, I was telling a tale from the book of "Guns, Germs and Steel". Dear Jared could be forgiven that he forgot in his title, that Guns are normally made of Steel. The Spaniards of the Conquest of the Americas already had guns made of "some sort of" steel. But these guns were very laborious to fabricate. It was called steel hammer forging, which required to take a rod of steel and hammering it around and around and fuse it together to form a barrel. This was a very laborious process. The larger Artillery pieces were made of cast Bronze. This was because the technology of casting (crucible) steel was not available yet. This became only available with the *Bessemer* Iron casting technology.

[[Except of course in Damascene =crucible Steel. There is a lot to know about the different technologies of making and working steel, the technologies of smithing, like reducing iron ore, and smelting and casting, and then crucible steel.]]

When crucible steel became available on a greater industrial scale, the guns were of course made of steel. There was just a little bickering on the part of the *Arms Industry Historians*.

## 22.3 The Anthropology of Geography

Jared Diamond was quite correct on the point when he stated that in contrast to Eurasia, the continents of Africa and the Americas extend North to South. And this has many ecological and evolutionary consequences. And this was a considerable obstacle in the way of migrations and conquests. Because there is a definite obstacle in the way when you have to cross so many climate zones, which means totally different ecologies, and especially very interesting different diseases that one comes across. Like the *Tse Tse* fly in Africa, and then some more interesting or difficult *species of disease*.

### 22.3.1 African River Systems and Problems for Diffusion

A very interesting but rarely noticed diffusion obstacle in Africa are the rivers. They flow mostly in the direction East-West, with the exception of the Nile. Near the Equator, there is so much water and therefore so many big rivers like the Kongo, and they will all have very dangerous rapids, torrents, in some places and precipitous drops of a few 100 metres over some kilometres of distance. This means that river shipping is more difficult (or impossible) compared to the very benign rivers of Eurasia like the Rhine, the Danube, the Rhone, the Seine, and most important the Don and the Wolga. In the subtropic regions of Africa, many rivers dry out in the dry season. And the floodplain forests are an even worse obstacle to migration. They harbor the

*most awful type* of vegetation that even a very bad god would have had trouble to create such a *botched creation*. The vegetation is nothing short of murderous. And then there are some really bad animals on top of it. Lots of *mosquitoes*, with lots of *Malaria*, then *Dengue Fever*. And then some type of worm, the *Guinea Worm* which likes to make the human body as its abode... But when it reaches maturity, it is about one meter long, and it must wriggle itself out of the human body, somewhere... And I spare the dear reader the more grisly parts of that journey of the *Guinea Worm*. And so on and so on. *Africa is a sort of Hell-Hole* by any measure that you want to take. The problematic thing to think of, how the species of *Homo Sapiens* could ever develop there, and then migrate out of it, because of the difficulties of the terrain and the vegetation and the diseases. So there was and is quite some scientific speculation whether the theory of Out of Africa made any sense at all. We may consult also some literature about this:

<https://de.slideshare.net/asateren/africakimobst>

[http://www.africa.upenn.edu/Articles\\_Gen/Obstacles\\_Development.html](http://www.africa.upenn.edu/Articles_Gen/Obstacles_Development.html)

<https://www.natureasia.com/en/nmiddleeast/article/10.1038/nmiddleeast.2018.15>

<https://en.wikipedia.org/wiki/Dracunculiasis>

### 22.3.2 The Out-of-Africa model. A Key Piece in the Puzzle

The out-of-Africa model theorized that humans migrated out of Africa in one big push around 60,000 years ago. At 177,000 – 194,000 years-old, the Misliya Cave jaw provides evidence to disprove this theory.

This find is among a host of other discoveries pushing back the date of human evolution, for example the 300,000 year-old earliest modern human fossil from Jebel Irhoud, Morocco<sup>2 3</sup>, and showing an earlier and more varied pattern of human migration out of Africa, such as a recent study supporting the presence of modern humans in Asia 120,000 years ago.<sup>4</sup>

Douka says this find “confirms the current thought in the community that there was not a single wave out of Africa, but frequent expansions which often failed.” Bae adds, “New data like the evidence from Misliya Cave and other areas of Asia is really forcing us to re-think many of our ideas of modern human origins.”

This find, according to Hershkovitz, links recent discoveries so that now “everything starts to make sense.”

<https://blog.insito.me/is-the-out-of-africa-model-dead-22bacdd934a7>

<https://www.newscientist.com/article/dn18093-chinese-challenge-to-out-of-africa-theory/>

The discovery of an early human fossil in southern China may challenge the **commonly held idea that modern humans originated out of Africa**.

Jin Changzhu and colleagues of the [Institute of Vertebrate Palaeontology and Palaeoanthropology](#) in Beijing, announced to Chinese media last week that they have uncovered a 110,000-year-old putative *Homo sapiens* jawbone from a cave in southern China's Guangxi province.

The mandible has a protruding chin like that of *Homo sapiens*, but the thickness of the jaw is indicative of more primitive hominins, suggesting that the fossil could derive from interbreeding.

If confirmed, the finding would lend support to the “**multiregional hypothesis**”. This says that modern humans descend from *Homo sapiens* coming out of Africa who then interbred with more primitive humans on other continents. In contrast, the prevailing “out of Africa” hypothesis holds that modern humans are the direct descendants of people who spread out of Africa to other continents around 100,000 years ago.

<https://io9.gizmodo.com/more-evidence-undermines-the-out-of-africa-theory-of-1619420466>

Over on New Scientist, Catherine Brahic offers a cogent summary of the new evidence. Some comes from Asia, where scientists have discovered teeth that may be *Homo sapiens* dating from before 70 thousand years ago, and possibly from as long ago as 125 thousand. There are also fragments of early human skulls from Israel, which may date to as early as 150 thousand years ago.

What's emerging from this fragmentary evidence — which is still far from widely accepted — is a more complicated picture of when early humans left Africa, and where they went. Writes Brahic:

A closer look at the genetics also suggests there was an earlier migration. Recently, Katerina Harvati of the University of Tübingen in Germany and her colleagues tested the classic “out of Africa at 60,000 years ago” story against the earlier-exodus idea. They plugged the genomes of indigenous populations from south-east Asia into a migration model. They found that the genetic data was best explained by an early exodus that left Africa around 130,000 years ago, taking a coastal route along the Arabian peninsula, India and into Australia, followed by a later wave along the classic route (PNAS, [doi.org/tz6](https://doi.org/10.1073/pnas.1619420466)).

### 22.4 Back to the business of "Guns, Germs and Steel"

So *back to the business* of “Guns, Germs and Steel” by Jared Diamond. There was another decisive factor that the Europeans had in favor of them. The cows (or oxen), the donkeys, the goats and sheep, the pigs, the horses, and all those domesticated animals which the Amerind autochthonous people of the Americas had very few of. Especially with the load carrying animals. The Llamas and Alpacas are not able to carry big loads, and no way that they could pull a cart or a plow. I had somewhere enlarged on this in the *Spiritual*

*History of Antiquity* that the donkeys and the oxen were quite a *driver of civilization*. Horses less so, because the upkeep of a horse is very expensive indeed. So they were reserved for the higher nobility and the cavallery which was pretty much the same, like in the European Middle Ages.

### 22.4.1 Germs, Germs, Germs, and then some Steel

I would write a work like that of good Jared, I would just re-title it A LITTLE BIT. I would write it thusly: "Germs, Germs, Germs, and then some Steel, but Guns are really of Minor Importance in this Business of *Biological Warfare*". So that is it: *Biological Warfare*. And the rest is his-story as the historians would tell us in their fairy tales. And the poor Spengler, as erudite as he was, he was not an *epidemiologist*, he knew next to nothing about bacteria and viruses. So it eluded him that he hadn't gotten the slightest idea of WHAT REALLY drives History and Evolution. Too bad for Spengler. There were more armies defeated by disease than by their enemies. Sometimes even Welt-Online has a good idea on this:

<https://www.welt.de/geschichte/article199067983/Cholera-Wie-eine-Faekalspur-folgte-der-Tod-der-preussischen-Armee.html>

### 22.5 Deadly Friendly Enemies: How Diseases Drive Evolution

Diseases drive evolution like nothing else. This is not Darwinism, but *Spencerism in Pure Breed*: Disease kills the weak. Even for all the humanist well-wishers and tree-huggers, the disease is the *Grim Reaper*, and this Grim Reaper goes for the weak first. We have seen this in European history with *Smallpox*, *Cholera*, and the *Bubonic Plague*.

<https://www.welt.de/geschichte/article196420277/Pocken-Gestank-verwesender-Leichen-verpestete-weite-Gebiete.html?wtrid=onsite.onsitesearch>

Über Jahrtausende hinweg waren die Pocken die Geißel Europas. Schon in altägyptischen Gräbern wurden ihre Opfer entdeckt. Bis in die Neuzeit zählte sie zu den häufigsten Todesursachen. Nach einer britischen Studie war im London des 18. Jahrhunderts einer von 13 Todesfällen pockenbedingt. Noch im 20. Jahrhundert forderte die Seuche weltweit rund 300 Millionen Tote.

Die Ursprünge der Seuche sind nicht bekannt. Eine Spur führt nach Ägypten, wo sich schon früh auf engem Raum eine Hochkultur entwickelt hat. Da das Virus einer ausreichenden Zahl von Menschen bedarf, um zu überleben, fand es offenbar gute Bedingungen vor. Zu den ersten bekannten Pockentoten zählt Pharao Ramses V., der Mitte des 12. Jahrhunderts v. Chr. starb. Archäologen entdeckten auf seinem mumifizierten Schädel Spuren der charakteristischen Pusteln, wie sie bei Variola vorkommen.

#### 22.5.1 The Anopheles Wonder Mosquitoes

There is another *wonder of nature* which is not so nice at all. There are some quite dangerous species of Mosquito mainly in Africa but also in South America like the *Anopheles*. The adults live just a short time, just long enough to mate and breed. But when they see it fitting to take cover in the luggage of some *intercontinental traveller*, they get carried onto an Aeroplane, and then they go flying right into Europe or the USA. There they get out of the luggage and look for greener pastures. If it happens by chance that there are both a female and a male Mosquito on the same plane, then there is a good chance that they will mate and become the Ur-parents of a whole new population of Anopheles Mosquitos that are the carriers of Malaria. This would be quite an interesting case of *Xeno-Species* life in the middle of, say Italy. There it is warm enough for their larvae to make it through the winter, and then the next year there will be a thriving population of Malaria-carrying Anopheles Mosquitos.

#### 22.5.2 Malaria as a Driver of Evolution: Siccle Cell Anemia

But Malaria is also a strong driver of evolution. But only in the backwards sense, because of *Siccle Cell Anemia*. This is also a very forbidden territory of Political Incorrectness. Because no-one would ever think in their sane minds that Siccle Cell Anemia has something to do with Oxygen Supply or Oxygen Starvation of the brain.

Timothy C. Winegard: „The Mosquito: A Human History of Our Deadliest Predator“. (Dutton, New York. 485 S.)

<https://www.welt.de/geschichte/article204058766/Malaria-Sie-spuckten-Blut-und-eine-Substanz-schwarze-Suppe-genannt.html>

Die größte Feindin des Menschengeschlechts brüllt nicht, röhrt nicht, kreischt nicht, krächzt nicht. Sie summt. Die größte Feindin des Menschengeschlechts ist die Stechmücke – sei es, dass sie zur Gattung *Anopheles* oder zur Gattung *Aedes* gehört.

Nicht weniger als sechs Stacheln benötigt sie, um in die Haut eines Menschen einzudringen. Zwei davon haben winzige Zacken; mit ihnen sägt sie sich durch die Epidermis. Zwei weitere Stacheln spreizen die Haut auseinander. Mit einem Strohalmstachel sucht sie nach einem Blutgefäß, dann saugt sie das Blut.

Die Weltgesundheitsorganisation berichtet, dass 2017 ungefähr 435.000 Menschen an Malaria starben, die meisten im südlichen Afrika. Dem Gelbfieber erlagen zur gleichen Zeit circa 45.000 Menschen; zu einem schweren Ausbruch kam es in Brasilien. Am Dengue-Fieber, das vor allem in Asien grassiert, erkrankten 2015 mehr als zwei Millionen Menschen, und 1181 starben.

An den tückischen Stechmückenseuchen sind Abermillionen krepirt. Und weil die Mücke keinen ökologischen Nutzen erfüllt – sie ist nicht Teil einer Nahrungskette, sie befruchtet keine Pflanzen –, könnte man auf den zynischen Gedanken kommen, Anopheles und Aedes seien einzig und allein dazu da, um die Menschheit zu dezimieren. Vielleicht ist es kein Zufall, dass fiktive christliche Darstellungen des Teufels (blutrote Flügel, stechende Hörner, langer Schwanz) auf verwirrende Weise an den Moskito erinnern.

In seinem makaber-vergnüglichen Buch „The Mosquito. A Human History of Our Deadliest Predator“ erzählt der Historiker Timothy C. Winegard, wie die Stechmücke immer wieder Geschichte gemacht hat. Nehmen wir die alten Ägypter: Es gibt Hinweise, dass das Reich am Nil seit dem Jahr 1500 v. Chr. von Malariaepidemien heimgesucht wurde; und als Pharao Tutanchamun um 1323 v. Chr. vermutlich dieser Krankheit erlag, bedeutete dies das Ende einer antiken Supermacht. Die alten Chinesen sprachen von einem dreifachen Dämon, der die Menschen heimsuche – einem bösen Geist mit einem Kübel voller Eiswasser (dem Schüttelfrost), einem Fieberdämon (unerträglich heißes Kohlenfeuer) und schließlich einem Geist mit einem Hammer (Schweiß, Kopfschmerzen). ...

Wer hielt am Ende die Truppen des großen Strategen Hannibal auf, sodass er Rom nur beinahe erobert hat? Malaria. Wer gab dem Imperium Romanum den Rest, als es schon auf dem letzten Loch piff? Die Malaria. (Die Pontinischen Sümpfe im Südosten von Rom wimmelten von summenden Insekten.)

Was war das Christentum, das sich nach dem 3. Jahrhundert in ganz Europa verbreitete? Vor allem ein Kult, der sich im Namen der Nächstenliebe um Malariakranke kümmerte. Es gibt viele christliche Amulette, die im Namen Jesu vor der Seuche schützen sollten, und das Zentrum der neuen Religion, der Vatikan, stand mitten in einem Malariasumpf. (Noch im 19. Jahrhundert fiel Reisenden auf, dass die Einwohner von Rom ziemlich krank aussahen.)

Den größten Einfluss dürften die Stechmücken allerdings in der Neuen Welt gehabt haben. Die Schiffe, mit denen Kolumbus nach Amerika aufbrach, wurden von ihnen umschwirrt. In Nord- und Südamerika hatte es aber vor der Ankunft der Europäer keine Malaria gegeben. In der Schule wird gelehrt, Hernán Cortés habe mit 500 Mann das Großreich der Azteken in die Knie gezwungen; das ist naturgemäß Unsinn. Cortés und die anderen Konquistadoren metzelten nur jene paar Indios nieder, die noch am Leben waren, nachdem die Seuchen 90 Prozent von ihnen umgebracht hatten. (Zu diesen Seuchen gehörten auch Pocken, Tuberkulose, Masern und die Grippe – aber die Malaria war der schlimmste Killer.)

<https://www.newscientist.com/article/dn20450-how-sickle-cell-carriers-fend-off-malaria/>

So how can it be that free haem is at once dangerous and protective? Soares's findings suggest that a mechanism similar to vaccination is at work.

The low levels of free haem circulating in the blood of mice carrying the sickle-cell gene stimulate the production of an enzyme that breaks it down, called haem oxygenase-1. This releases small quantities of carbon monoxide – a gas that in large quantities is highly toxic.

AG: There is also a quite "Politically Incorrect" linkage between CO (Carbon Monoxide) and sexual Potency. This is also called the NO - CO cycle. Because all this is so "Politically Incorrect", I will not enlarge on this. One has to do their own research on these matters. See also the appropriate articles in the Specialist Journals on Sexology.

<https://en.wikipedia.org/wiki/Sildenafil>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4369255/>

The ability to get and keep an erection is important to men for several reasons and the inability is known as erectile dysfunction (ED). ED has started to be accepted as an early indicator of systemic endothelial dysfunction and subsequently of cardiovascular diseases. The role of NO in endothelial relaxation and erectile function is well accepted. The discovery of NO as a small signalling gasotransmitter led to the investigation of the role of other endogenously derived gases, carbon monoxide (CO) and hydrogen sulphide (H<sub>2</sub>S) in physiological and pathophysiological conditions. The role of NO and CO in sexual function and dysfunction has been investigated more extensively and, recently, the involvement of H<sub>2</sub>S in erectile function has also been confirmed. In this review, we focus on the role of these three sister gasotransmitters in the physiology, pharmacology and pathophysiology of sexual function in man, specifically erectile function.

### **22.5.3 The Romans Imported their Downfall from Africa in their Amphorae**

[https://en.wikipedia.org/wiki/History\\_of\\_malaria](https://en.wikipedia.org/wiki/History_of_malaria)

<https://www.ncbi.nlm.nih.gov/pubmed/19066765>

<https://www.wired.co.uk/article/malaria-roman-empire-remains>

<https://www.youtube.com/watch?v=ENPIZhULtXA>

<https://www.youtube.com/watch?v=cTDD4FGHSIQ>

[https://www.bbc.co.uk/history/ancient/romans/malaria\\_01.shtml](https://www.bbc.co.uk/history/ancient/romans/malaria_01.shtml)  
<https://blogs.transparent.com/latin/roman-fever-did-malaria-bring-down-the-roman-empire/>  
<https://www.cbc.ca/news/canada/hamilton/evolution-of-malaria-in-roman-empire-1.3881892>  
<https://www.theguardian.com/world/2001/feb/21/rorycarroll>  
<https://www.ibtimes.com/ancient-diseases-malaria-killed-millions-roman-empire-centuries-old-dna-teeth-2455787>  
<https://www.google.com/search?sa=N&q=malaria+roman+empire&tbm=isch&source=univ&ved=2ahUKEwjmtWU2KDkAhXJGewKHaDBH04ChCwBHoEAcQAQ&biw=1105&bih=538>

This is a kind of "*alternative history thinking*". It would be difficult to prove this, since one will find not many written records of some strange disease happening, when people don't know that there are insect-borne diseases that cause premature deaths, especially in children under 5 years of age. The name *Mal-Aria* is telling in itself. It means bad air(es). And that was especially the case near some swamps. And many of the lowland areas of Italy were swamps, especially those close to the sea. There is a quite telling archeological curiosity that we are very fortunate to have: The temples of *Paestum in South Italy*. They are so well preserved in contrast to most other destroyed temples of antiquity, just because of the swamps. After the Roman Empire had collapsed, there was no more man- (ie. slave-) power available for the upkeep of the drainage systems that had kept the swamps dry during Roman times. So these areas became uninhabitable after the collapse. And that kept marauding bands of "some certain sort of people" away from them. And therefore they are still so well preserved. We may sing an *ode to the honor of the Malaria*. Sometimes a bad thing has quite good or beneficial results.

#### 22.5.4 About Anopheles Teleportation

The Romans did their own kind of *Anopheles Teleportation* with their *Amphorae* full of oil and other foodstuffs which they imported from Africa. In those fortunate times, *North Africa* was the *breadbasket of the Roman Empire*. Egypt was especially successful in nourishing half the Roman population. These were quite wondrous times, especially compared to the desert conditions in these countries in present times. So the Romans brought their own seeds of destruction with their ships and amphores. This is (or may be) one reason for the breakdown of the Roman Empire that hardly any previous historian ever had thought of. Only an *Archeological Sherlock Holmes* could dream up such a *Malaria Epidemy* which de-populated the countryside and the swamps of Italy. And the effects are quite clear to see: Once a greater part of the working population had died from Malaria, then there are not enough workers (ie. slaves) to drain the swamps, and so the swamps were filling up again. And then the *Anopheles* grew out of all proportion in the exponential. So we might *out-do Gibbon and Spengler* by an order of magnitude. It was the *Anopheles* which did in the Roman Empire. Nothing else can come close to such Kata-Strophik run- away self- multiplying, exponential growth function like the *Explosion of Anopheles* and *Malaria* around the years 300- 500 CE. The his-story is re-written all the time, under our very own eyes. And the frogs like to eat Malaria *Anopheles* larvae, and fish also like them... Now we go around the full circle for the *Heinous Influence of Christianity*, or what the *Roman Christian Church Fathers* had made out of the Original (or the Origines) Christianity. Because the *Apiaceae* were also the *Birth-Control plants*, and by the well-meaning efforts of the Christian Church Fathers, while eradicating all the knowledge about the *Apiaceae*, there was also lost the beneficial effect of the *Apiaceae* to control the Mosquito populations, and this also did in the Roman Empire for good. This is the lesson learned by those who believe in Religion in the *Roman Katholik* Sense or better Non-Sense. It was one of the greatest idiocies in all of human history. The *Roman Katholik Christians* dug their own grave. And when they had reached the bottom of the pit, they just continued, digging deeper and deeper. The only reason why the *Christian Empires* thrived in the northern countries like Gallia, was of course that the *Anopheles* couldn't survive the winters there. The good Patrice Ayme' has unfortunately no idea of that part of the "*Missio Civilatrice*". I have to state that. *Even a genius like Patrice Ayme'* doesn't get the finer points of his-story.

#### 22.5.5 The Business of the Bacteriology and the Virology of Pigs

So I give some more background information on the germs. Because of the fact that that the Eurasians had so many domesticated animals around them, they had proportionally as many animal diseases around them also. And if one knows *the science of bacteriology and virology* just a little bit, then one knows that those diseases have a fabulous tendency to mutate and then change hosts. Like especially *the germs of the pigs*. And I am also telling a bit of *Jewish Sanitary Wisdom* that you should not keep pigs and never eat them. Because a pig likes not only to waddle in the swamp, but it also really likes to eat carrion of the worst kind. It they can get

to it. In our present-day *Sanitized European World*, there is not so much carrion left over that a pig could feast upon. But in those olden days, there was ample supply of carrion, because besides the pigs there were not so many big animals who liked to feast on carrion. So we have to deal with the *bacteriology and virology* especially of the pigs. As the popular saying goes, for every thing of utility for humans, there is a good side to it and a bad side. It is the principle of complementarity or more generally, the two-sidedness of everything. Being good or bad always means being good or bad in some situation or context and for someone for doing some things with it, or being influenced by it. We can even use a fitting visual metaphor, the *flip picture of the Boring Women*, to visually demonstrate the working of the good and bad principle in the neuronal system.

### 22.5.6 The Two-Sidedness of the Humans and their Domesticated Animals

So we come to the two-sidedness of the human dealings with *domesticated animals*, and in this case the pigs. As I describe it at another chapter in the present text, Pigs can be divine and even being parts of a very holy Rite, and even have some spiritual qualities. I explain this in the chapter on Antonius von Padua and the Eleusian Mysteries. But the backside or problematic side of the pig for human health should not be forgotten. Pigs are in a metaphor, some kind of *Super Aeroplane Carrier* of the most nasty *Bacteria* and *Viruses* and *Worm Parasites*, and then some more. This I will now enlarge on, in this chapter. Most of all the other domesticated animals of the Eurasians, except the cats, and dogs, and pigeons, and other fowls... are vegetarians. They only eat plants, and plants don't usually carry diseases that could do harm to humans. But the pigs are another quite different affair, and so much more deadly. Most of the infectious diseases of humanity came from mutations of some pig bacteria and viruses. Like smallpox and quite a few other very nasty ones.

In the wikipedia article it says that the variola virus originally came from a rodent. I don't quite believe that. But since the pigs had been around humanity for at least 10,000 years (probably even more than 10,000 years)... It came to pass that pretty much the whole of Eurasian humanity was infected with smallpox. And there was so much cosmetic powder consumed to cover up all those smallpox scars, that the powder industry was one of the largest businesses in the whole of Eurasia. You can take the *Queen Elizabeth I* as a fine example, or Josif Stalin. All were victims of the smallpox and they had survived, even if they were badly scarred.

### 22.5.7 The Evolution of Smallpox

<https://en.wikipedia.org/wiki/Talc>

<https://en.wikipedia.org/wiki/Smallpox>

<https://en.wikipedia.org/wiki/Smallpox#History>

[https://en.wikipedia.org/wiki/Smallpox#Disease\\_emergence](https://en.wikipedia.org/wiki/Smallpox#Disease_emergence)

<https://en.wikipedia.org/wiki/Smallpox#Evolution>

The date of the appearance of smallpox is not settled. It most likely evolved from a terrestrial African rodent virus between 68,000 and 16,000 years ago.<sup>[29]</sup> The wide range of dates is due to the different records used to calibrate the [molecular clock](#). One [clade](#) was the variola major strains (the more clinically severe form of smallpox) which spread from Asia between 400 and 1,600 years ago. A second clade included both *Alastrim* minor (a phenotypically mild smallpox) described from the American continents and isolates from West Africa which diverged from an ancestral strain between 1,400 and 6,300 years before present. This clade further diverged into two subclades at least 800 years ago.<sup>[30]</sup> A second estimate has placed the separation of variola from [Taterapox](#) (an [Orthopox virus](#) of some African rodents including gerbils) at 3,000 to 4,000 years ago.<sup>[31]</sup> This is consistent with archaeological and historical evidence regarding the appearance of smallpox as a human disease which suggests a relatively recent origin. If the mutation rate is assumed to be similar to that of the [herpesviruses](#), the divergence date of variola from [Taterapox](#) has been estimated to be 50,000 years ago.<sup>[31]</sup> While this is consistent with the other published estimates, it suggests that the archaeological and historical evidence is very incomplete. Better estimates of mutation rates in these viruses are needed.

AG: The wikipedia is probably wrong about the story of the African Rodent Virus. There was the *Yersinia Pestis*, which is the Pestilence Bacterium, which is endemic in rodents, the Mermot(a)s. But the life cycles of Rodents and Humans overlap very rarely, which is an oversight of the Epidemiologists. Only those animals that are around humans on a daily basis, can become Virus Carriers. Like the pigs, or the fowls. For this reason, the Influenza Virus is endemic in birds, like chicken and ducks and geese and propagates with the migrating birds, on a world wide basis. See the Influenza epidemic after WWI which killed more people than the whole war. Therefore by the birds, it can be so easily transmitted to humans. Especially in China which is

the largest fowl-keeping human population on the planet. So the pigs are the only other daily companions of humans that can be carriers of deadly viruses and germs.

### 22.5.8 Smallpox and Colonialism

*Smallpox* was the *Number One Killer* of *Eurasian Humankind*. Countless numbers had died, especially children who had died in their lower ages between 0 and 15. It must have been staggering numbers. So many, that the populations of Eurasia couldn't explode until the smallpox vaccine was developed. *So the smallpox prevented a population explosion* which was, by the terms of *Neurolinguistic Reframing* a very good thing. But just nearly so. Now we come to the superfluous sons of the Eurasian people. There were very many superfluous sons, and because of the *Primogenitur*, they had nothing to inherit. So some of them went to the Clergy, and others to the seafarers, and then some others to the newly expanding business of the *Conquistadores*. And then we come to the Real Business of World conquest, exploitation, and extermination. And the good thing about this is: *I am now doing a very very bad kind of Neurolinguistic Reframing*. This time it is really really very very bad: Because the *Conquistadores* carried all those smallpox germs around with them... And those germs did the really bad business for the *Conquistadores*. They did the business of extermination of the Amerind autochthonous people of the Americas, quite ahead of the *Conquistadores*. And when they went ahead themselves they could only find Hundreds and Thousands of empty deserted villages and towns. Where between Heaven or Earth had those people gone (with the wind of course). It was the deadly wind of the smallpox which had exterminated about 9/10 of the original Amerind autochthonous people of the Americas. The Spaniards were not the culprits, since they didn't know the slightest thing about virology. They were just the survivors of the scourge of smallpox that had taken away so many of their brothers and sisters in the early years of life, under 12-15 years of age. Such are the fates of humanity in co-evolution with the germs that were transmitted to them by the pigs. As I said it, this is a *Neurolinguistic Reframing* of the Worst Kind. Very very bad indeed. But as Forrest Gump had said it: Shit happens, and the pigs like nothing better than human shit. In those olden days the outhouse was placed directly above the pig pen. And the pigs just loved it. The sanitary problem was only: Together with the shit, it became pig meat, and then you have the nice pork chops, and all the germs that had accumulated in the shit, they got immediately recycled back onto your dinner or supper table. This was a very interesting business of recycling shit. And it was so ecological, that I think that the Green Parties of Present-Day Never-days would have never come upon a better idea of recycling shit. So we have it all-together now in the sow. The business of "Guns, Germs and Steel". And it wasn't so much the guns and the steel that did the job. It was the Germs.

### 22.6 On the Crumbling of Empires

So this was the business of *Hernan Cortez* and *Francisco Pizarro* (the latter one had been a pig herder in the Extremadura of Spain before he became the world-famous Conquistador). And they succeeded very nicely in this business, one would say, considering to building an empire or better: an Imperium where the sun would never set. This was the heyday of the *Spanish Habsburg Empire* after Columbus, 1492, and then some 100 or 200 years onwards. But as his-story has it... even from the times of *Nebuchandossor* and the *Achaemenids of Persia*: Empires have a tendency to crumble. This was the Generic Idea of the Dream of *Nebuchandossor* and it came to pass inevitably. And there is nothing miraculous about de-cyphering that dream. Since it was obvious that Empires just have this fatal tendency to go crumbling. I have enlarged this a little bit in my work:

<http://www.nologie.de/diadenk.htm>

[http://www.nologie.de/diadenk.htm#eschatol\\_krieg](http://www.nologie.de/diadenk.htm#eschatol_krieg)

[http://www.nologie.de/diadenk.htm#kali\\_thugees](http://www.nologie.de/diadenk.htm#kali_thugees)

[http://www.nologie.de/diadenk.htm#bardo\\_thodol](http://www.nologie.de/diadenk.htm#bardo_thodol)

[http://www.nologie.de/diadenk.htm#eschatol\\_krieg](http://www.nologie.de/diadenk.htm#eschatol_krieg)

[http://www.nologie.de/diadenk.htm#goetter\\_wirkung](http://www.nologie.de/diadenk.htm#goetter_wirkung)

[http://www.nologie.de/diadenk.htm#gottes\\_beweis](http://www.nologie.de/diadenk.htm#gottes_beweis)

Every historian knows that every Empire will crumble at some time sooner or later. For this revelation, one doesn't need to read the good Spengler or Gibbon at all. The Writing is on the Wall. It is just obvious when you just have a little knowledge of his-story. Because Empires are creatures of Accumulation, Aggregation, and their downfall is Entropy, in the physical sense. The most shortest lived Empire of humanity was that of the Napolium.

[[I write this wrong spelling with full intention, since it refers to the Napolium game of the Wilhelm Bus(c)h'ius of the George William Fitzgerald Bush'is of the Bush family fame.]]

The second most short lived Imperium was that of the Inka's. It lasted only 90 years. But it was cut short with the friendly assistance of the nice *Spaniard Conquistadores*. But it was not of the making of the Spaniards alone. Because the nice Inka Emperors had subjugated so many other autochthonous peoples in their conquests, that those poor autochthonous peoples saw in the Spaniards their saviors and they allied with the Spaniards. Much to their chagrin later on, when the Spaniards subjugated them in much worse ways than the Inka's had done. But his-story is always in the hindsight or what is called the 20/20 vision of his-story. When you think of it, you should have stayed with your old and trusted oppressors who could be calculable. The new oppressors were completely un-calculable and much much worse. This is the same story as the rise of Bolshevism in Russia. Only some time later it was called Communism. If the people of Russia had had the slightest inkling what dire fate would befall them under the rule of Lenin, Trotzky and Stalin, they would have had second thoughts about getting rid of the Czar. But then it was too late. The Czar was dead already, the terror of the Bolsheviks took the terrible toll of, let's estimate, about 50 million lives in Greater Russia. Peter Sloterdijk has given us some pretty good (or really bad) data about that in his "Zorn und Zeit".

### **22.6.1 The Business of World Conquest by the Britisher's**

After the Spaniards it was the Britisher's who had refined this business of world conquest quite a bit and they went on to become the first *Global World Power* where equally the sun would never set upon their lands. This empire was from about 1700 CE to 1950 CE when this one crumbled also.

## **22.7 Learning from New Guinea**

AG: This is a quote from an article about Jared Diamond and New Guinea.

<https://www.nybooks.com/articles/2004/03/11/learning-from-new-guinea/>

John Barker, reply by Jared Diamond

March 11, 2004 Issue

To the Editors:

In a lively review of David Sloan Wilson's *Darwin's Cathedral* [NYR, November 7, 2002], Jared Diamond writes: "It will surprise most Jews, Christians, and Muslims to learn that this link between religion and morality is entirely absent in the New Guinean societies of which I have experience." I don't think they will be nearly as surprised by this assertion as people familiar with New Guinea societies and religions. Diamond is certainly correct in stating that morality in traditional Melanesian societies tended to be highly relational and localized. But moral behavior was, all the same, infused by religious precepts and practices. A variety of divine entities, ranging from ancestral spirits to demigods, rewarded good behavior and punished bad in local communities. Humans themselves also developed many methods of deploying sacred powers to punish miscreants, through sorcery or witchcraft, or to heal those they felt had been unjustly set upon by others using magic or by ancestral spirits. In several areas of Melanesia, societies evolved elaborate initiation and mortuary complexes that entailed both the teaching and proclamation of moral values. Traditional religious beliefs and practices varied immensely throughout New Guinea, but nowhere was morality divorced from religion. Instead, the spiritual and the moral were deeply conjoined—even in the case of warfare, I might add—as has been documented in hundreds of articles and books.

Diamond's casual treatment in his review of contemporary New Guinea people as if they were all the same, and as if they represent our own tribal ancestors, also gives pause. Some anthropologists oppose in principle the use of studies of modern tribal peoples as a means to understand the general course of human evolution. I am not among them. Yet I accept that it is critically important, on both ethical and scientific grounds, to acknowledge openly that one can only draw imperfect and incomplete analogies. Contemporary indigenous peoples are as much members of the present as the rest of us; they are not relics of the past. Prior to colonization, New Guinean societies varied greatly and changed through time. Today, Papua New Guinea is an independent nation-state and West Papua a reluctant province of Indonesia. Almost everyone is at least a nominal Christian and one would be hard put to find even remote communities that have not been affected by national and international institutions or by global capitalism. Diamond clearly respects the "traditional" New Guineans of whom he writes. And yet his portrayal of them as timeless tribals perpetuates a widespread stereotype of New Guinea as the "last home of stone-age man," a stereotype that many of its people regard as a pernicious legacy of colonial prejudice. Ironically, his assertion that traditional New Guinea morality lacked a religious content or basis feeds a related powerful stereotype, one that has both motivated and legitimated missionary campaigns to replace "amoral" (in their view) Melanesian religions with Christian morality.

Jared Diamond replies:

Of course New Guineans are members of the present, vary greatly, and are not timeless tribals. No sensible person would be silly enough to claim otherwise. But it is equally clear that, until the European arrival, New Guinea societies shared many features with each other, with tribal societies elsewhere in the world, and with past tribal societies; they were different in many ways from the state societies that we first-world denizens now take for granted. Those earlier features still have strong legacies in New Guinea today. They included: political organization at the level of the band, tribe, or small chiefdom, not at the level of the paramount chiefdom or state; tribal religions rather than state religions; and moralities grounded tightly in relationships. There is nothing stereotypical in acknowledging, and learning from, such obvious salient features.

## 22.8 More www on Jared Diamond

Since Jared Diamond is just such a good writer, he is everywhere on the www and on youtube. He writes very lucidly, and he is a good story-teller. But when one hears him talk, one is just grossed out. He has such a bad (Bronx or Boston or whatnot) accent that one would never think how he could have made it to become a professor at some Ivy League University.

## 22.9 Jared Diamond on the www

[https://en.wikipedia.org/wiki/Guns,\\_Germes,\\_and\\_Steel](https://en.wikipedia.org/wiki/Guns,_Germes,_and_Steel)  
[https://en.wikipedia.org/wiki/Jared\\_Diamond#The\\_Third\\_Chimpanzee\\_\(1991\)](https://en.wikipedia.org/wiki/Jared_Diamond#The_Third_Chimpanzee_(1991))  
[https://en.wikipedia.org/wiki/Why\\_Is\\_Sex\\_Fun%3F](https://en.wikipedia.org/wiki/Why_Is_Sex_Fun%3F)  
[https://en.wikipedia.org/wiki/Societal\\_collapse](https://en.wikipedia.org/wiki/Societal_collapse)  
[https://en.wikipedia.org/wiki/Collapse:\\_How\\_Societies\\_Choose\\_to\\_Fail\\_or\\_Succeed](https://en.wikipedia.org/wiki/Collapse:_How_Societies_Choose_to_Fail_or_Succeed)  
[https://en.wikipedia.org/wiki/Collapse:\\_How\\_Societies\\_Choose\\_to\\_Fail\\_or\\_Succeed#Synopsis](https://en.wikipedia.org/wiki/Collapse:_How_Societies_Choose_to_Fail_or_Succeed#Synopsis)  
[https://en.wikipedia.org/wiki/Human\\_overpopulation](https://en.wikipedia.org/wiki/Human_overpopulation)  
[https://en.wikipedia.org/wiki/Planetary\\_boundaries](https://en.wikipedia.org/wiki/Planetary_boundaries)  
[https://en.wikipedia.org/wiki/Energy\\_crisis](https://en.wikipedia.org/wiki/Energy_crisis)  
<https://www.youtube.com/watch?v=IESYMFtLlis>  
<https://www.youtube.com/watch?v=7gqJM-3PB6w>  
<https://www.youtube.com/watch?v=GWXr7pXoCTs>  
<https://www.youtube.com/watch?v=OBUq0Mf5aU8>  
<https://www.youtube.com/watch?v=ceLuaf7low4>  
[https://www.youtube.com/watch?v=\\_rP8vkG3dmQ](https://www.youtube.com/watch?v=_rP8vkG3dmQ)  
<https://www.youtube.com/watch?v=refwHvF6ZA0>  
<https://www.youtube.com/watch?v=5n7yTEALxNc>  
<https://www.youtube.com/watch?v=dgGw8kZnJxE>  
<https://www.youtube.com/watch?v=qvaxPH3ftUQ>

<https://io9.gizmodo.com/jared-diamond-sued-by-new-guinea-natives-for-crimes-of-5226368>

Jared Diamond, author of *Guns, Germs, and Steel*, is being sued by two Papua, [New Guinea](#), men who claim the award-winning science writer lied about their lives to prove that tribal culture is violent.

Diamond's article in the *New Yorker* was called "[Vengeance Is Ours](#)," and described a young New Guinean man, called Wemp, and his violent quest for revenge after his uncle Soll was killed by another tribe. Diamond claimed Wemp was out to destroy a tribal leader called Isum, and that to do so he went on a murderous rampage, recruiting dozens of "soldiers" to aid him, and ultimately killing 17 people as well as injuring several others grievously. One of the injured was supposedly Isum (pictured, at far right), whom Diamond describes as being in a wheelchair.

Diamond used the men's story to illustrate a story from his own life, about how his father-in-law had the opportunity to kill the man responsible for murdering his family in a Polish prison camp during World War II. Instead of killing the man, Diamond's father-in-law turned him into police, who released him a year later. Apparently Diamond's father-in-law regretted for the rest of his life that he did not take violent revenge, and it weighed on his conscience.

But the New Guineans, Diamond claims, have no such neuroses because unlike civilized European guys they exact violent revenge on each other all the time.

The problem is that Diamond's notion of tribal culture is based on a fantasy of Diamond's own - one that was propagated by the *New Yorker*, which never fact-checked his story with the two men it featured as main characters. Wemp killed nobody, and Isum is not in a wheelchair - as you can see from the picture above. Indeed, the two men say they have never met and Isum has suffered no injuries at all. After the story went up online, Wemp suffered tremendously: He'd been accused of heinous crimes, which the men's lawsuit says he

did not commit. Other mistakes Diamond made include extremely basic facts, such as which tribes the men are associated with.

## 22.10 Popular science works of Jared Diamond

*The Third Chimpanzee* (1991)

Diamond's first popular book, *The Third Chimpanzee: The Evolution and Future of the Human Animal* (1991), examines [human evolution](#) and its relevance to the modern world, incorporating evidence from [anthropology](#), [evolutionary biology](#), [genetics](#), ecology, and [linguistics](#). The book traces how humans evolved to be so different from other animals, despite sharing over 98% of our DNA with our closest animal relatives, the chimpanzees. The book also examines the animal origins of language, art, agriculture, smoking and drug use, and other apparently uniquely human attributes. It was well received by critics and won the 1992 [Rhône-Poulenc Prize for Science Books](#)<sup>[14]</sup> and the [Los Angeles Times Book Prize](#).<sup>[15]</sup>

*Guns, Germs, and Steel* (1997)

His second and best known popular science book, *Guns, Germs, and Steel: The Fates of Human Societies*, was published in 1997. It asks why [Eurasian peoples](#) conquered or displaced Native Americans, Australians, and Africans, instead of vice versa. It argues that this outcome was not due to biological advantages of Eurasian peoples themselves but instead to features of the Eurasian continent, in particular, its high diversity of wild plant and animal species suitable for domestication and its east/west major axis that favored the spread of those domesticates, people, and technologies for long distances with little change in latitude. The first part of the book focuses on reasons why only a few species of wild plants and animals proved suitable for domestication. The second part discusses how local food production based on those domesticates led to the development of dense and stratified human populations, writing, centralized political organization, and epidemic infectious diseases. The third part compares the development of food production and of human societies among different continents and world regions. *Guns, Germs, and Steel* became an international best-seller, was translated into 33 languages, and received several awards, including a [Pulitzer Prize](#), an [Aventis Prize for Science Books](#)<sup>[14]</sup> and the 1997 [Phi Beta Kappa Award in Science](#).<sup>[16]</sup> A television documentary series based on the book was produced by the [National Geographic Society](#) in 2005.<sup>[17][18]</sup>

*Why is Sex Fun?* (1997)

In his third book, *Why is Sex Fun?*, also published in 1997, Diamond discusses evolutionary factors underlying features of human sexuality that are generally taken for granted but that are highly unusual among our animal relatives. Those features include a long-term pair relationship (marriage), coexistence of economically cooperating pairs within a shared communal territory, provision of parental care by fathers as well as by mothers, having sex in private rather than in public, concealed ovulation, female sexual receptivity encompassing most of the menstrual cycle (including days of infertility), female but not male menopause, and distinctive secondary sexual characteristics.

*Collapse* (2005)

Diamond's next book, *Collapse: How Societies Choose to Fail or Succeed*, published in 2005, examines a range of past societies in an attempt to identify why they either collapsed or continued to thrive and considers what contemporary societies can learn from these historical examples. As in *Guns, Germs, and Steel*, he argues against explanations for the failure of past societies based primarily on cultural factors, instead focusing on ecology. Among the societies mentioned in the book are the [Norse and Inuit of Greenland](#), the [Maya](#), the [Anasazi](#), the indigenous people of [Rapa Nui](#) (Easter Island), Japan, Haiti, the [Dominican Republic](#), and modern [Montana](#). The book concludes by asking why some societies make disastrous decisions, how big businesses affect the environment, what our principal environmental problems are today, and what individuals can do about those problems. Like *Guns, Germs, and Steel*, *Collapse* was translated into dozens of languages, became an international best-seller, and was the basis of a television documentary produced by the [National Geographic Society](#).<sup>[19][20]</sup> It was also nominated for the [Royal Society Prize for Science Books](#).<sup>[14]</sup>

"Vengeance is Ours" controversy (2008)

In 2008, Diamond published an article in *The New Yorker* entitled "Vengeance Is Ours",<sup>[21]</sup> describing the role of revenge in tribal warfare in [Papua New Guinea](#). A year later two indigenous people mentioned in the article filed a lawsuit against Diamond and *The New Yorker* claiming the article defamed them.<sup>[22][23]</sup><sup>[24]</sup> In 2013, *The Observer* reported that the lawsuit "was withdrawn by mutual consent after the sudden death of their lawyer."<sup>[4]</sup>

Natural Experiments in History (2010)

In 2010, Diamond co-edited (with James Robinson) *Natural Experiments of History*, a collection of seven case studies illustrating the [multidisciplinary](#) and comparative approach to the study of history that he advocates. The book's title stems from the fact that it is not possible to study history by the preferred methods of the laboratory sciences, i.e., by controlled experiments comparing replicated human societies as if they were test tubes of bacteria. Instead, one must look at natural experiments in which human societies

that are similar in many respects have been historically perturbed, either by different starting conditions or by different impacts.[clarification needed]The book's afterword classifies natural experiments, discusses the practical difficulties of studying them, and offers suggestions on how to address those difficulties.[25] *The World Until Yesterday* (2012)

In *The World Until Yesterday*, published in 2012, Diamond asks what the western world can learn from traditional societies. It surveys 39 traditional small-scale societies of farmers and hunter-gatherers with respect to how they deal with universal human problems. The problems discussed include dividing space, resolving disputes, bringing up children, treatment of elders, dealing with dangers, formulating religions, learning multiple languages, and remaining healthy. The book suggests that some practices of traditional societies could be usefully adopted in the modern industrial world today, either by individuals or else by society as a whole.[citation needed]

*Upheaval* (2019)

In *Upheaval: How Nations Cope with Crisis and Change* Diamond is examining whether nations can find lessons during crises in a way like people do. The nations considered are Finland, Japan, Chile, Indonesia, Germany, Australia, and the U.S.[26] Anand Giridharadas, reviewing for *The New York Times*, claimed the book contained many factual inaccuracies.[27] Daniel Immerwahr, reviewing for *The New Republic*, reports that Diamond has "jettisoned statistical analysis" and the associated rigour, even by the standards of his earlier books, which have themselves sometimes been challenged on this basis.[28]

## 22.11 The Wikipedia on Jared Diamond

[https://en.wikipedia.org/wiki/Jared\\_Diamond](https://en.wikipedia.org/wiki/Jared_Diamond)

**Jared Mason Diamond** (born September 10, 1937) is an American geographer, historian, and author best known for his popular science books *The Third Chimpanzee* (1991); *Guns, Germs, and Steel* (1997, awarded a Pulitzer Prize); *Collapse* (2005); and *The World Until Yesterday*(2012). Originally trained in physiology, Diamond is known for drawing from a variety of fields, including anthropology, ecology, geography, and evolutionary biology. He is a professor of geography at UCLA.[1][2]

In 2005, Diamond was ranked ninth on a poll by *Prospect* and *Foreign Policy* of the world's top 100 public intellectuals.[3]

*The Third Chimpanzee* (1991)

Diamond's first popular book, *The Third Chimpanzee: The Evolution and Future of the Human Animal* (1991), examines human evolution and its relevance to the modern world, incorporating evidence from anthropology, evolutionary biology, genetics, ecology, and linguistics. The book traces how humans evolved to be so different from other animals, despite sharing over 98% of our DNA with our closest animal relatives, the chimpanzees. The book also examines the animal origins of language, art, agriculture, smoking and drug use, and other apparently uniquely human attributes. It was well received by critics and won the 1992 Rhône-Poulenc Prize for Science Books[14] and the Los Angeles Times Book Prize.[15]

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## 22.12 Louis Proyect: The Unrepentant Marxist

<https://louisproyect.org/2008/11/03/jared-diamond-on-tribal-warfare-in-new-guinea/>

Louis Proyect: The Unrepentant Marxist

November 3, 2008

Jared Diamond on tribal warfare in New Guinea

Recently somebody who shares my distaste for Jared Diamond alerted me to an article that appeared in the April 21, 2008 "New Yorker". Titled "Vengeance is Ours: What can tribal societies tell us about our need to get even?", it is focused on his account of so-called tribal wars in the highlands of Papua New Guinea, where Diamond has conducted many field trips studying the flora and fauna, as well as the bestial tribesmen apparently.

Papuan native: key to unlocking wars and ethnic cleansing?

Using interviews with an ostensibly self-confessed killer, who is a member of the Handa clan, the innocent reader is led to believe that the highlands of Papua are a kind of a Rosetta stone for understanding wars and ethnic cleansing. The feuding in the highlands, which usually involve slights such as a pig belonging to one clan ruining the garden of another clan, leads to a steady escalation of Hatfield-McCoy type confrontations that remind Diamond of the worst crimes of the 20th century:

Indeed, his Papuan "confessor's" bloodlust triggers memories of Diamond's late father-in-law Jozef Nabel (a Jew) who refused at the last minute to wreak vengeance on Polish villagers who had killed his wife, sister and niece in pursuit of loot. Nabel, who served in a Polish division attached to the Red Army, eventually caught up with the perpetrators but decided at the last minute not to wreak vengeance since the new Polish government would be expected to carry out justice. But by relinquishing control to a higher body, a kind of primitive, almost animal-like satisfaction is lost as Diamond puts it:

My conversations ... made me understand what we have given up by leaving justice to the state. In order to induce us to do so, state societies and their associated religions and moral codes teach us that seeking revenge is bad. But, while acting on vengeful feelings clearly needs to be discouraged, acknowledging them should be not merely permitted but encouraged. To a close relative or friend of someone who has been killed or seriously wronged, and to the victims of harm themselves, those feelings are natural and powerful. Many state governments do attempt to grant the relatives of crime victims some personal satisfaction, by allowing them to be present at the trial of the accused, and, in some cases, to address the judge or jury, or even to watch the execution of their loved one's murderer.

The first thing that leapt out at me when reading Diamond's article is how devoid of social or economic context it is. You feel that you are reading something out of the Old Testament-but without the deity instructing the Israelis to punish the Egyptians, etc. Diamond makes it clear that such considerations do not interest him. He writes:

Anthropologists debate whether the wars really arise from some deeper underlying ultimate cause, such as land or population pressure, but the participants, when they are asked to name a cause, usually point to a woman or a pig.

Unfortunately, I find Diamond's reliance on the testimony of his subjects somewhat unreliable given what appears his tendency to put words in the Papuan's mouth. Now I might be wrong, but somehow I find it far-fetched that a Papuan would have expressed himself to Jared Diamond in the words attributed to him in the New Yorker article:

I admit that the New Guinea Highland way to solve the problem posed by a killing isn't good. Our way disturbs our day-to-day life; we won't be comfortable for the rest of our lives; we are always in effect living on the battlefield; and those feelings go on and on in us. The Western way, of letting the government settle disputes by means of the legal system, is a better way. But we could never have arrived at it by ourselves: we were trapped in our endless cycles of revenge killings.

Just try to imagine a Papuan self-confessed killer using these formulations. I can't. Frankly, it smacks of Jared Diamond using this unfortunate individual as a sock-puppet for his own sociobiological predispositions. Lurking beneath the surface of his article are certain assumptions about a "killer instinct" that fit neatly into

the "naked ape" nonsense that flourished once upon a time in the pages of Time Magazine and elsewhere. Despite Diamond's reputation as a scrupulous biologist, his career involves making exactly the same types of speculations as a Robert Ardrey as I pointed out in one of the installments in my dissection of "Collapse": Diamond showed his sympathy for this trend with the publication of "The Third Chimpanzee" in 1993. This exercise in sociobiology (an updated version of the 19th century social Darwinism) includes a chapter titled "The Golden Age That Never Was"... Diamond has many other interesting things to say about any number of subjects. He argues that since animals have an evolutionary imperative to pass on their genes, art must be a clever stratagem by men to lure women into bed. This led Tom Wilkie to drolly observe in the May 22, 1991 Independent that this lesson must have been lost on Tchaikovsky, Andy Warhol and other homosexual artists. Diamond also believes that sexual jealousy is an important cause of war: "It was the seduction (abduction, rape) by Paris of Menelaus's wife Helen that provoked the Trojan War". In light of the fact that the Iliad also claims that gods and goddesses took part in the fighting, Wilkie wonders how reliable a guide to history it is.

Unrepentant Marxist that I am, it is incumbent on me to bring up those oh-so-boring issues of land or population pressure. In an article titled "Ol I Skulim Mipela: Contemporary Warfare in the Papua New Guinea Eastern Highlands" that appeared in the Oct. 1984 issue of "Anthropological Quarterly", George D. Westermarck pointed to the introduction of capitalist farming in the region as a prime aggravator of tensions between native peoples forced to compete for fewer and fewer resources. Coffee plantations and cattle ranching promoted by Australians led to less land available for subsistence farming. In other words, the same kinds of pressures that made Rwanda a living hell have also increased in-fighting in the highlands of Papua. Furthermore, if Jared Diamond was truly interested in reducing the level of violence in New Guinea, he should start with the imperialist companies that have put these kinds of pressures on the indigenous peoples. As somebody with the kinds of connections he has with Chevron, which has seen its profits fattened through drilling in New Guinea, Diamond might persuade the owners of Freeport Copper to take their operations elsewhere given the impact they have had on the lives of Papuans.

In the 1960s, the Indonesian government sent its troops in to destroy resistance to the Freeport mining that led to the death of at least 45,000 people. Villages were bombed and burned in an effort to break the back of the movement. Any tribal fighting is dwarfed by this kind of wholesale bloodshed.

Another copper company based in Bougainville was just as vicious. Indigenous peoples armed with nothing but bows and arrows went into battle against the multinational that once again relied on the Indonesian government for protection. Forests were cleared in order to establish the copper mine in 1969, leaving hundreds of native peoples landless. Further "economic development" left others without fishing rights. Altogether two hundred and twenty (220) hectares of local forests were poisoned, felled and burnt, and then bulldozed into nearby river, along with tons of rich organic topsoil.

All in all, the people of Papua New Guinea have been subjected to the same kinds of quasi-genocidal onslaughts from Indonesia that the people of East Timor have suffered. Amnesty International and most other human rights organizations agree that at least 100,000 Papuans (one sixth of the total population) have been killed during the occupation. In an effort to exploit the region's riches, native peoples have been slaughtered and driven into submission. This is the real story, not the Hatfield-McCoy scenario that Jared Diamond titillated his New Yorker audience with.

### **22.13 All Over the Map: Jared Diamond struggles to understand a connected world.**

AG: More on Jared Diamond. He has his own political twist, which is analyzed very thoroughly by Daniel Immerwahr. "All over the Map". I must laugh when I read the author's name. Immerwahr means "always speaking the truth", which is also called the Aletheia in the Philosophical Lingo. I have referenced the "Philosophy of the Lie" by Arno Baruzzi. This is also "a kind of" Immerwahr. (I am laughing really hard, ROFL in www lingo).

I like this criticism of Jared Diamond as much as I like the tall stories of the good Jared. It is mostly the same, whether we take the 3-volume piece of the Matrix, and the xyz-volume pieces of the Star Wars Saga. The more volumes one adds on top of the original work, the more diluted it becomes. So the later works of Jared Diamond are just a re-hash. "Collapse" has not very much new to say since the theme has been re-worked thoroughly by the "Club of Rome" crowd who see "collapse" going on all around us. The ecological situation world wide is on "collapse course" except maybe in Switzerland, and maybe in Norway. We have no idea as yet, why the ecology there is not "collapsing". Perhaps it is because the Swiss know the *Land Management* for about 500-1000 years or so. And in Africa and Asia and South America no-one has the slightest idea what Land Management is all about. I just add a few "???" - signs" and a few "\$\$\$ - signs" just to amplify the question why "collapse" happens in some places but not in other places.

"Guns Germs and Steel" was quite original, and the evolutionary ecological history is a field that hadn't been worked too much by his-storians. Except of course Lev Gumilev, who had expounded all of Vernadski, who had been the first evolutionary ecological historian of hu-manity. It is just such a pity that no-one of the

Western historians ever noticed that. And especially not the German historians like the good Herfried Münkler. And it is quite correct that Jared Diamond is quite as good as a political propaganda machinator, who has all the best "friendships" with all the elites of all the (near-) collapsing nations that he describes. "Honni soit qui mal y pense". As I say it again and again: A his-torian is the pet dog (or minion) of the power mongers and he is kept in a good and well-paid professor position so that he writes the eulogies and the euphemisms and apotheoses of All the Good Head Honchos. Since we all know the business of the his-torians by now, we should not be surprised at all.

Back to the article All Over the Map: By Daniel Immerwahr, June 11, 2019

<https://newrepublic.com/article/154142/jared-diamond-upheaval-book-review>

Jared Diamond doesn't use a computer. He relies "completely" on his secretary and on his wife for "anything" requiring one, as he puts it. Diamond also confesses that he lacks the ability to turn on his "home television set" and can "do only the simplest things" with his newly acquired iPhone. "Whenever friends have shown me how to use a computer, they turn it on and something goes wrong," Diamond once explained to an aghast reporter. "I just get frustrated."

UPHEAVAL: TURNING POINTS FOR NATIONS IN CRISIS by Jared Diamond Little, Brown and Company, 512 pp., \$35.00

Why It Matters How Powerful Men Treat Women

Give War a Chance

The First Democratic Debate Failed The Planet

The Supreme Court's Covert Plan to Gut the EPA's Powers

Why Georgia Brings Out Putin's Insecurities

Such incapacities haven't held Diamond back. Just the opposite. He has spent much of his career explaining and championing the "modern 'Stone Age' peoples," as he calls them—cultures reliant on tools and practices dating back thousands of years. The most "vivid part of my life," Diamond has written, was spent in "technologically primitive human societies," especially the "intact" societies of New Guinea, where Diamond worked for decades studying birds. It was on one such ornithological trip in the 1970s that Diamond encountered a "remarkable" Papua New Guinean named Yali. Diamond met him by chance on a beach, the two walked together for an hour, and Yali—with a "penetrating glance of his flashing eyes"—asked a big question: Why did whites have so much and New Guineans so little?

Diamond's breakout book, *Guns, Germs, and Steel*, was his answer. It offered a sweeping survey of the past 13,000 years. Thinking as a scientist, Diamond searched for the variables that had shaped societies. Though he couldn't run laboratory experiments on large human groups, he could find "natural experiments," similar societies that differed in just a few crucial respects. Their divergent fates could illuminate the effects of those differences. Islands and other locales with a "considerable degree of isolation," Diamond wrote, work best for this purpose.

On the scale of millennia, Diamond concluded, individual decisions don't make much difference to the trajectories of societies. Environmental factors are far more important. *Guns, Germs, and Steel* emphasized the shape of continents. Eurasia's horizontal axis allowed plants and germs to spread easily along latitudinal belts, endowing its inhabitants with large populations, powerful technologies, and fiercely contagious diseases (useful weapons in colonizing foreign lands). The Americas and sub-Saharan Africa, by contrast, run on vertical axes and produced smaller and less epidemiologically menacing civilizations. It was a reassuring conclusion, conspicuously rejecting racism and chauvinism in its account of nonindustrial cultures.

The book was stuffed with hundreds of pages of geography, epidemiology, and archaeology, and it presented virtually no characters besides Yali. Nevertheless, it caught fire, selling more than 1.5 million copies in dozens of languages, winning a Pulitzer Prize, and taking up a permanent perch in airport bookstores across the planet. It helped that *Guns, Germs, and Steel* was fun. Diamond offered charming explanations of why humans learned to farm almonds but never acorns ("slow growth and fast squirrels"), or why they ride horses but not zebras (nasty dispositions and a penchant for biting). Eight years later, Diamond produced a sequel, *Collapse*, studying mainly "small, poor, peripheral, past societies" that had fallen apart—the Norse in Greenland, and the ill-omened inhabitants of Rapa Nui, or Easter Island. These, too, he chronicled with palpable sympathy. "They were people like us," he wrote. And perhaps, without care, we might share their fate.

Jared Diamond is back, now with the final installment of what his publisher describes as his "monumental trilogy." Where *Collapse* explored places that failed, the new volume, *Upheaval*, asks about those that survived. It takes Diamond far from the sorts of societies where he's felt most alive: the closed-off tribes, the "Stone Age" peoples. *Upheaval* examines such large countries as the United States, Finland, Japan, and Chile, and mainly in the twentieth and twenty-first centuries. Through them, Diamond hopes to show how nations have made it through destabilizing crises. But what we see instead is how poorly suited his approach—honed on nonindustrial and isolated societies—is for large, connected ones in an age of globalization.

If Yali inspired *Guns, Germs, and Steel*, the inspiration for *Upheaval* was Diamond's wife, Marie Cohen, a clinical psychologist. Her work at a community mental health center in the first year of their marriage acquainted Diamond with factors that therapists have identified to predict whether a patient will prevail in a crisis. Diamond selects a dozen: acknowledging the crisis, accepting responsibility, defining the problem, getting help, having patience, and so on. The same twelve variables, he argues, can be applied with slight modification to nations. Examining seven cases, Diamond sets out to show how his factors account for countries' ability to weather tumult.

Twelve variables, seven cases—this is the language of scientific history, the approach Diamond has long championed. A centerpiece of *Collapse* was his study of the effects of nine variables (such as temperature, moisture, and airborne volcanic ash) on island societies' survival. Though Diamond's high-velocity romps through history often vex specialists, this one earned him "high marks" from Patrick Kirch, a distinguished archaeologist of Oceania. Diamond had designed his study carefully. Nine variables were a lot, he acknowledged, so it "would have been utterly impossible to evaluate them without a large database and without the use of statistics." He and his fellow researcher, Barry Rolett, began with the hunch that Rapa Nui's storied collapse was environmentally caused. But without their careful statistical analyses of 80 other islands and similar locales, Diamond wrote, that guess "could not have been accepted."

Past Jared Diamond, meet Present Jared Diamond. Whatever rigor Diamond demanded of himself in writing *Collapse* has been set aside in *Upheaval*. Now we have more variables (twelve), and significantly fewer cases (only seven). Worse, the variables, ported from the psychological study of individuals to the sociological study of nations, are unquantified and maddeningly hard to pin down. How to know whether a nation has "honest self-appraisal"? And how to balance the variable of "national core values" against "national flexibility"—wouldn't one cancel the other out? Diamond initially sought to find ways to measure his variables and test their effects, as he'd done for his island study. But he concluded that this would entail "a large project." And so, displaying a decided lack of variables 2 (accepting personal responsibility), 4 (getting help from others), and 9 (patience), he gave up.

What remains is a "narrative survey," speculative and loose. Finland endures the Soviet Union. Australia sheds its white identity. Germany recovers from Nazism. The crises differ in type and severity. What unites them is that the nations in question survived.

Survival, it must be said, is a low bar to clear. Consider one of Diamond's cases, Indonesia. Its crisis was that in 1965, two army units killed six generals in a coup attempt. The ensuing tumult gave the general Suharto an opening to push aside Indonesia's left-leaning president, Sukarno. And the army inaugurated a massacre of some half-million suspected communists. Suharto soon took over, ruling Indonesia as a corrupt dictator for some 30 years.

It wasn't all bad, argues Diamond, who worked in Indonesia for 17 of those years. The ousted Sukarno had been no saint, and, "neglecting Indonesia's own problems," he had "involved himself in the world anti-colonial movement." Suharto, by contrast, was an "outstanding realist" who rightly "abandoned Sukarno's world pretensions" and concentrated on internal affairs. His regime "created and maintained economic growth," promoted family planning, and "presided over a green revolution." And the subsequent years have given the country, Diamond notes, a "deepening sense of national identity."

What accounts for Indonesia's success, such as it was? It's hard to say. The problem isn't merely that Diamond has jettisoned statistical analysis. It's that the crisp explanations that populated *Guns, Germs, and Steel*—the acorns, zebras, and continental axes—are missing. We learn that the government articulated core values, but that Indonesians, divided among thousands of islands and hundreds of languages, suffered a weak national identity. Indonesia identified its problems but at first lacked honest, realistic self-appraisal. Diamond isn't noticeably wrong in those judgments, vague as they are; it's just that he adds little to our understanding by them. It is hard to imagine a reader shouting "Aha! Core national values! Now I get why Indonesia's economy grew."

Lacking those eureka bursts, *Upheaval* settles into story time. There are joys here, particularly in Diamond's historical accounts. He narrates Finnish guerrilla tactics against the Red Army in World War II with infectious glee (skis and white camouflage, it turns out, fare well against tanks). He applies a similar gusto to the tale of nineteenth-century Japan, crediting Japan's "unifying national ideology" and realistic self-assessment with its mastering of Western technologies during the Meiji Restoration.

Yet the closer he gets to his own time and place, the less brightly this crazy Diamond shines. One problem is the basis of his authority. Diamond chose his case studies not for the insights they offer, but because they're the countries he's lived in (save for Japan, though Diamond reassures the reader that he has Japanese cousins and nieces by marriage). Rather than ground his pronouncements in the scholarship he's read, he repeatedly invokes "my own first-hand experiences and those of my long-term friends." His "friends" tell him that a coup against Chile's elected leftist President Salvador Allende was "inevitable," that Japanese teenagers text too much to date, and that U.S. venture capitalism succeeds because it takes bold risks. Those friends include senators, investors, and a member of the Dutch defense force in New Guinea—nearly all represent the elite of Diamond's chosen societies.

Perhaps it's not a surprise that the meandering accounts that follow offer mainly middle-class nostrums and bland conventional wisdom. Chile was right to proceed cautiously in punishing members of the Pinochet

dictatorship. Japan should apologize more fully for World War II. Australia's wines are delicious—Diamond recommends De Bortoli's One, Penfolds Grange, and Morris of Rutherglen's Muscat.

Upheaval's final case is the United States, where Diamond worries most about the loss of compromise and civility. It's a problem he knows well; a peer-reviewed scholarly journal recently ran an editorial titled "F\*\*k Jared Diamond." Yet reading Diamond on "declining courtesy" in elevators, the super-abundance of TV channels, and younger people's obsession with their cell phones, one feels oneself less in the presence of a penetrating social theorist than a dyspeptic relative at the Thanksgiving table. As Bernard DeVoto once said of Margaret Mead: "The more anthropologists write about the United States, the less we believe what they say about Samoa."

At the start of *Guns, Germs, and Steel*, Diamond identifies Yali as a "local politician" who had "never been outside New Guinea." A reader, noting the pictures Diamond includes of New Guineans in traditional garb and reading his talk of "intact societies" there, might take Yali for someone bound by custom, a man with constrained horizons.

But that would be wrong. Yali had left his home—the Ngaing bush area of Sor—at a young age to work in a European-run hotel. He had been a sergeant in the colonial police, left his country, joined an intelligence unit of the Australian army, spent time on a U.S. submarine, led an insurrection, and served nearly six years in prison for "incitement to rape." I know this because, eight years before Diamond met Yali, the anthropologist Peter Lawrence profiled him extensively in his classic study of cargo cults, *Road Belong Cargo*. In Lawrence's telling, Yali was thoroughly enmeshed in an international economy and international politics. His time outside New Guinea—contrary to Diamond's claim that he'd never left the island—had been crucial to his evolving political thought.

The difference between Diamond's Yali and Lawrence's Yali illustrates a key feature of Diamond's oeuvre, one that has great bearing on *Upheaval*. Diamond has always been drawn to "isolated" cultures or those just on the cusp of contact with outsiders. They best suit the natural experiments methodology as he practices it, and they have been the reliable source of his most memorable material. But the other side of the coin is that Diamond has a noticeable habit of downplaying the external connections of the places he's describing. Instead of Yali the anti-colonial leader or Yali the Allied intelligence officer, we get Yali the provincial New Guinean lowlander. It is, the geographer Alf Hornborg writes, an "atomistic approach," one that looks at the world and sees only separate societies "managing their own destinies."

Diamond has always been drawn to "isolated" cultures. He looks at the world and sees separate societies managing their own destinies.

That approach, perhaps appropriate for Rapa Nui circa 1500, falters when applied to modern countries. Again, take Indonesia. Surely, Diamond is correct that its national identity, core values, problem-solving skills, and self-appraisal mattered. But it seems bizarre to focus on these while saying so little about external factors. Most notably, Indonesia at the time of its crisis was a Cold War battleground. Both the United States and Soviet Union poured military aid into the country, while China egged the communists on. These powerful outside forces helped mold local political fights into a war over communism, and they intensified the resulting violence. "It is impossible to think of Indonesia in 1965–1966 outside of the Cold War," the historian Bradley Simpson insists.

The broader context mattered for what came next, too. Diamond notes with satisfaction that Indonesia has calmed and prospered in the past half-century. But these are not unusual outcomes. The International Monetary Fund expects only 5 percent of national economies to shrink this year. Per-capita deaths from war—civil or otherwise—have diminished sharply since 1945. Indeed, the awkward fact about *Upheaval* is that the outcome it seeks to explain, persistence through change in modern times, is the overwhelming norm.

The sort of "we have no more food and are, in fact, all dead" collapse that Diamond described fifteenth-century Vikings suffering in Greenland is today extremely rare (and it's not even clear Diamond was right about the Vikings). There is thus little surprise that Chile, Japan, Finland, Australia, and Germany survived their storms. What is perhaps surprising is that health, peace, and prosperity have on average risen dramatically in the past 50 years. But as these are global trends, they cannot be satisfactorily explained by many individual nations defining problems clearly or exhibiting "situation-specific national flexibility"—Diamond's variables. To say that few societies have fallen apart recently is no guarantee of a tranquil future. It's just that, if catastrophe lies ahead, we will almost certainly experience it not as "nations" but as a planet, at the scale where Diamond's variables seem less relevant.

Diamond acknowledges the difficulty of applying his Twelve Habits of Highly Effective Nations to the world as a whole. Using the traits of individuals to diagnose societies is intellectually treacherous enough; using them on an entire species is worse. Does humanity exhibit enough unity to even have "core values"? In response, Diamond weakly offers a parable about bird-watching in the Middle East. Despite hostility between Lebanon and Israel, birders in each country have agreed to send warnings about large avian flocks heading into each other's country, where they pose dangers for planes. This, Diamond cedes, "falls short of an agreement for all 216 nations constituting the whole world." But it's a start.

The first page of Diamond's trilogy—his conversation with Yali—was memorable. The last page is not. "Crises have often challenged nations in the past," Diamond writes. "They are continuing to do so today."

Fortunately, he concludes, summoning the final gust of wind like an undergraduate completing a term paper, “familiarity with changes that did or didn’t work in the past can serve us as a guide.” That’s not wrong, but nor is it helpful. Diamond seems unsteady in a world illuminated by iPhone screens. Complex countries, global economies, and international politics strain his “nations are like people” view of things. You’re left with the sense that he was on firmer ground where he started, chatting amiably as he strolled along the New Guinean shore.

## 23 Lev Gumilev on Empires and then Some

### 23.1 The Better Morphology of History by Lev Gumilev

Lev Gumilev was a quite a bit better than Spengler at thinking the *Morphology of History*. He called it the "Ethnogenesis and the Biosphere". And this was much better and clearer than the work of Spengler. Because Spengler had done some thinking that was quite dyed in the wool with *German Romanticism*, like the work of Nietzsche and Goethe, which usually doesn't lead one into clear and precise thinking. And even the good Schopenhauer, as good as he was, was not a friend of systematics, for all of his other merits that he had. I am so sorry to say that. He didn't really bother writing a lot of headlines or a lot of table of contents for his work. So everyone who wanted to know what Schopenhauer had to say, was forced to read the whole voluminous tome. Heidegger in WHD had done some very good work to explain Nietzsche to us. Better you read Heidegger WHD first. You can learn the Systematics mostly from *Whitehead*, who was an *English Thinker* through and through. And he wrote about the best table of contents, even with some abstracts for each chapter. If only more philosophers would write like him. [AG: I wish that for all the German Philosophers.] And the English philosophers knew it better than to engage in *Romanticism*. So I am very much indebted to Gumilev, as one of the First and Foremost Thinkers of the History of the Ethnology, or better: *The Morphology of the Psycho- Anthropology of Hu-Mankind*. Since the work of Gumilev is also a quite large volume, there is no room to include this in the present text. I just give some extracts of the Table of Contents, which I had converted into Hypertext, to facilitate the Reading a little bit, and to make the quoting a little bit easier. The work is therefore much easier to access, than just giving the page numbers of the book. Since his book is practically unknown to the *Western Historians*, it is also pretty useless to quote from the book, because practically no-one has this book. And to get it from the Library is also not so easy. But it is there on the Internet, for everyone who wants to get it. And I surely hope that the *Copyright Hunters* of the *Matrix* have not yet found out that this book exists on the www. Because then it would vanish into thin air in no time flat. I know this very well, how the best books on the www just vanish, when the new EU copyright rules really take effect. So I am very cautious and I save everything in my Archives, for the case that they vanish from the www. And to give some backgrounds of Gumilev's work. He leaned heavily on the theory of the *Biosphere of Vernadski*. And this man was one of the most egregious Thinkers of Biology and Ecology long before the Western Biology and Ecology professors were able to come up with the concept. Since I have read the most important works of Vernadsky, I am also very familiar with that thought structure. And then there was *Lotman*, who had invented the *Semiosphere*. And most thinkers of the *Western Intelligenza* had never heard of such a thing. Not even the good *Umberto Eco*. And I have done some extensive quoting of this in my Dissertation under those Headings. From the .htm and from the .pdf version:

<http://www.nologie.de/desn.htm>

<http://www.nologie.de/ag-dis.pdf>

#### 23.1.1 Die geosphärische System-Einbettung der Musterklassen

Vernadskys Arbeit handelt wesentlich von den Interaktionen des Lebens, der *Biosphäre*, mit der (Atmo- (Hydro- und (Litho- Sphäre))), welches er als chemisch- energetisches Gesamtsystem betrachtet.<sup>1</sup> Lovelock formulierte unabhängig von Vernadsky in seiner Gaia-Hypothese eine ähnliche Sicht dieses Gesamtsystems, und entwickelte es in seiner Zusammenarbeit mit Lynn Margulis weiter.<sup>2</sup> Da der terrestrische Film des Lebens, die Biosphäre, hauptsächlich wasserbasiert ist, können wir es als Extension der Hydrosphäre ansehen.<sup>3</sup> Der wesentliche neu dazukommende Faktor der Biosphäre sind die o.g. Musterklassen des Lebens, die sich ebenfalls mit der Sphären-Metapher darstellen lassen:

(Bio- (Oeko- (Semio- (Anthropo- (Ethno- (Noo- Sphäre))))))

Diese Schachtelung stellt einen Ansatz dar, verschiedene Gliederungen, die z.T. der Nachfolge von Vernadsky entstammen, weiter zu systematisieren. Diese weiteren Sphären sind weitere logische Ordnungen, bzw. Entwicklungen der Biosphäre. Die *Oekosphäre* (A.G.) wird hier als Generalbegriff für alle inter-organischen Kommunikations- und Interaktions-Formen eingeführt, die in der heutigen *Ökologie* vor

1 Gumilev (1990: 215), Nach Vernadsky (1930) ist die Lithosphäre zu einem wesentlichen Teil das Produkt der chemischen Umformungen, und mineralischen Absonderungen und Ausscheidungen der Lebewesen (z.B. Stromatolithen, Muschelschalen oder Korallengerüste). *Geo*, 4/96, p. 174-175 zur Theorie der Entstehung der Dolomiten in den Alpen bzw. des Dolomit-Gesteins durch Bakterien.

2 Vernadsky (1997: 16, 31, 32)

3 Gumilev (1987: 23): "All these form a single system in which the key link is water."

Frei Otto: "Naturverständnis" (1985), p. 29: *Hydraulik* als essentielle mechanische Grundlage der Organismen.

allem unter ihrem energetischen und materiellen Aspekt untersucht werden. Die *Semiosphäre* als Sammelbegriff der Zeichenkommunikation der Lebewesen stammt von Lotman,<sup>4</sup> *Anthroposphäre* als Gesamtheit der menschlichen Biomasse,<sup>5</sup> und *Ethnosphäre* der verschiedenen menschlichen Kulturmuster von Gumilev,<sup>6</sup> *Noosphäre* der höheren symbolischen Gebilde von Chardin, LeRoy und Vernadsky.<sup>7</sup> Ebenfalls bei Gumilev findet sich der Begriff *Technosphäre* für die dem Naturkreislauf (zeitweise) entzogenen Artefakte des Menschen,<sup>8</sup> und im Rahmen der vorliegenden Arbeit wurde der Begriff *Bibliosphäre* geprägt.<sup>9</sup>

### 23.1.2 Lotman's Semiosphere

Lotman (1990) coined the term *Semiosphere* (here also called *SEMsphere*) for the realm of all mental projections that are intersubjectively shared or exchanged, mainly through language. The SEMsphere is also the world of relations between communicating organisms as viewed from the viewpoint of semiotics. In the following quotation, Lotman refers to the work of Vernadsky as influence to his concept.

Lotman (1990: 123): By analogy with the biosphere, (Vernadsky's concept) we could talk of a semiosphere, which we shall derive as the semiotic space necessary for the existence and functioning of languages, not the sum total of different languages; in a sense the semiosphere has a prior existence and is in constant interaction with languages. In this respect a language is a function, a cluster of semiotic spaces and their boundaries... Outside the semiosphere there can be neither communication, nor language.

The unit of semiosis, the smallest functioning mechanism, is not the separate language but the whole semiotic space of the culture in question. This is the space we term the *semiosphere*. The semiosphere is the result and the condition for the development of culture; we justify our term by analogy with the biosphere, as Vernadsky defined it, namely the totality and the organic whole of living matter and also the condition for the continuation of life.

The next quotation shows that Vernadsky considered the biosphere as a system of societies of living beings in quite the exact sense as Whitehead had expressed it in more philosophical terms in the section before<sup>10</sup>.

Lotman, (1990: 125), [citing Vernadsky on the biosphere]: ... all life-clusters are intimately bound to each other. One cannot exist without the other. This connection between different living forms and clusters, and their invariability, is an age-old feature of the mechanism of the earth's crust, which has existed all through geological time.

The same idea is expressed more clearly again:

The biosphere has a quite definite structure which determines everything without exception that happens in it... A human being observed in nature and all living organisms and every living being is a function of the biosphere in its particular space-time.

[http://www.noologie.de/diadenk.htm#gumilev\\_passionary](http://www.noologie.de/diadenk.htm#gumilev_passionary)

[http://www.noologie.de/diadenk.htm#gumilev\\_soviet](http://www.noologie.de/diadenk.htm#gumilev_soviet)

Alexander Sergeevich Titov: Lev Gumilev, Ethnogenesis and Eurasianism:

<http://discovery.ucl.ac.uk/1446515/1/U602440.pdf>

Ethnogenesis and the Biosphere: Introduction

<http://www.noologie.de/gumilev/ebe0.htm>

Ethnogenesis and the Biosphere: Chapter One

<http://www.noologie.de/gumilev/ebe1.htm>

Ethnogenesis and the Biosphere: Chapter Two, Part 1

<http://www.noologie.de/gumilev/ebe2a.htm>

Ethnogenesis and the Biosphere: Chapter Two, Part 2

4 Lotman (1990: 123, 125), Hoffmeyer (1997) ->:SEMIOSPHERE, p. 116

Was Spengler (1980: 712-720) in diesem Abschnitt "Das Wesen der Sprache" (712) nennt, läßt sich heute als eine intuitive Beschreibung der *Semiosphäre* bezeichnen. Z.B.: "Mit dem Menschen darf eine Untersuchung der Sprache sicherlich nicht beginnen." "... daß nicht einmal einzellige Wesen ohne alle Sinnesorgane sprachlos gedacht werden dürfen." (714) "Die Weltsprachen hoher Zivilisationen sind nichts als äußerst verfeinerte Möglichkeiten, welche sämtlich schon in der Tatsache des gewollten Eindrucks einzelliger Wesen aufeinander enthalten sind."

5 Gumilev (1987: 360): In this perspective mankind is regarded as a certain covering of the planet Earth or as part of the biosphere... the anthroposphere... the biomass of all people together with the products of their activity... domestic animals, cultivated plants... the anthroposphere is ... a mosaic [consisting of] ... collections of persons.

6 Gumilev (1990: 175), (1987)

7 Vernadsky (1997: 155), Hofkirchner (1997)

8 Gumilev (1990: 268)

9 ->:BIBLIOSPHERE, p. 195

10 The idea of a global networked system of organisms has been taken up and elaborated by Howard Bloom. It is available on the WWW under:

-> <http://www.heise.de/tp/deutsch/special/glob/default.html>

<http://www.noologie.de/gumilev/ebe2b.htm>  
Ethnogenesis and the Biosphere: Chapter Three  
<http://www.noologie.de/gumilev/ebe3.htm>  
Ethnogenesis and the Biosphere: Chapter Four  
<http://www.noologie.de/gumilev/ebe4.htm>  
Ethnogenesis and the Biosphere: Chapter Five  
<http://www.noologie.de/gumilev/ebe5.htm>  
Ethnogenesis and the Biosphere: Chapter Six  
<http://www.noologie.de/gumilev/ebe6a.htm>  
Ethnogenesis and the Biosphere: Chapter Six, Part 2  
<http://www.noologie.de/gumilev/ebe6b.htm>  
Ethnogenesis and the Biosphere: Chapter Six, Part 3  
<http://www.noologie.de/gumilev/ebe6c.htm>  
'System' in ethnology.  
[http://www.noologie.de/gumilev/ebe2a.htm#\\_Toc351821108](http://www.noologie.de/gumilev/ebe2a.htm#_Toc351821108)  
Levels and types of ethnic systems.  
[http://www.noologie.de/gumilev/ebe2a.htm#\\_Toc351821109](http://www.noologie.de/gumilev/ebe2a.htm#_Toc351821109)  
Self-regulation of an ethnos.  
[http://www.noologie.de/gumilev/ebe2a.htm#\\_Toc351821112](http://www.noologie.de/gumilev/ebe2a.htm#_Toc351821112)  
When Immortality Is More Terrible Than Death  
[http://www.noologie.de/gumilev/ebe4.htm#\\_Toc351823232](http://www.noologie.de/gumilev/ebe4.htm#_Toc351823232)  
Clio vs Kronos.  
[http://www.noologie.de/gumilev/ebe4.htm#\\_Toc351823242](http://www.noologie.de/gumilev/ebe4.htm#_Toc351823242)

## 23.2 The Russian www site of Lev Gumilev

And this extremely important material can still be found there on the Russian www site. Lev Gumilev was one of the most important anthropologists in the whole of the USSR, even if there were so many academic detractors who lamented his flamboyant style, and his somewhat un-conventional approach to the history of man-kind almost world wide. Gumilev was of a better class than the good Oswald Spengler since he had had the occasion to do so much field work while he was in the Gulags. Even if that doesn't sound so nice, there is no better place to learn everything about the not-so-nice sides of Human Nature than when Gumilev was in the Gulags for a couple of years. This is very important field-work for any Anthropologist, I would say.

Because his many academic detractors always thought that it cannot be historically scientific at all, when you don't write it according to the dogma of historical sciences. This means that the historical scientific dogma states that you have to write everything in a very technical jargon, and in the completely obscure and cotton-dry style, as it is the norm especially in Germany. So Gumilev was always quite a bit suspicious for the historical scientific dogma. It didn't help that so many of his students were quite devoted disciples, and they considered Gumilev as a kind of Guru. When you are a Guru for so many disciples, and there were quite many of them, then you are already heavy on the Black List of the Academic Historical Scientific Professors. It cannot be other than that because these are the iron laws of the Academe. In the Western Countries probably more than in Russia, because in all of the universities of the USA and Europe there rules the iron law of Political Correctness. And he who doesn't follow these laws will get publication prohibition, will never get his papers accepted by any high-profile academic publishing house etc. pp. He who doesn't know his/her ways around the present-day laws of Correct Behavior, and Politically Correct thinking and writing, and quoting, will be rigorously exorcised from everything important in Academia. Now it was more or less a blessing in disguise [just another little Neurolinguistic Reframing to make] ... that the good Lev Gumilev had learned in the Gulags something very important down to his bones.

### 23.2.1 The Survival Knowledge of Lev Gumilev

Since Gumilev had spent so many years in the *nice Gulags of Väterchen Stalin*, he knew what it means to be able to *Double- and Triple- Think*. Every halfway intelligent citizen of the USSR during these times of the *Bolshevik and Stalinist purges* had to learn this, or it was the Death Sentence, by your friendly agents of the *Tscheka* and the *KGB*, and then some. And there was no such thing as a legal procedure. If someone thought the "Denunziant" or the Informer, that someone other was a traitor of the Fatherland or of Communism - A single denunciation was all that was needed. And that was the end for this poor soul. Even if the Denunziant only had just a little personal grudge with that other one, like having a dispute about some woman. The nice Bolshevik Fatherland and later the communist USSR had so many secret police and military organizations,

starting with Lenin, then Trotzki, and then Väterchen Stalin. And those secret police and other secret organizations were also rivalling each other who would be more efficient in killing as many potential opponents of the regime as was humanly possible. See also the harrowing tales that Peter Sloterdijk wrote in "Zorn und Zeit". He had a Russian colleague who had studied all this down to the dirtiest details. The henchmen of the regime were so busy that they went out of ammunition quite a few times. Since one needed a special type of ammunition which didn't penetrate the whole skull of the victim on both sides immediately. The preferred method of execution was that the executioner went behind the victim and gave him a shot in the base of the skull, exactly where the spine connects to the skull. In German it is called the "Genickschuss". And the henchmen of the Bolshevik regime were quite proficient and trained at this job. They never missed at all. It was precision work, because there was the Medulla Oblongata. And this meant instant death. Which was "sort of humane" so that the victim didn't suffer too much. As I said above, with ordinary pistol ammunition, the projectile would go right through the skull and that would produce a terrible mess in the execution room. So the henchmen tried to avoid this as much as possible, and they used a special, low power powder charge so that the projectile didn't fly out at the other end of the skull. Because that would make a hole so big that you could put your fist into it. I think there was this story in "Zorn und Zeit" about one such very proficient henchman who had such a stench of death and human cadaver decay odor around him that he couldn't wash it off any more. And he had a German Shepherd dog. And this poor dog tried to flee from this stench, and it crawled under the sofa, because this stench was even unbearable for the poor dog. This was quite a tall story.

### 23.2.2 Something in the Context of Lev Gumilev

[https://en.wikipedia.org/wiki/Secret\\_police](https://en.wikipedia.org/wiki/Secret_police)

The term **secret police** (or **political police**)<sup>[1]</sup> refers to [intelligence](#), [security](#) or [police](#) agencies that engage in covert operations against a government's political opponents and [dissidents](#). Secret police organizations are characteristic of [totalitarian](#) regimes.<sup>[2]</sup> Used to protect the [political power](#) of an individual [dictator](#) or an [authoritarian](#) regime, secret police often, but not always, operate outside the [law](#) and are used to repress dissidents and weaken the [political opposition](#), frequently with [violence](#), [assassinations](#), and [torture](#).<sup>[3]</sup>

History

In East Asia, the *jinyiwei* (Embroidered Uniform Guard) of the Ming Dynasty was founded in the 1360s by the [Hongwu Emperor](#) and served as the dynasty's secret police until the collapse of Ming rule in 1644. Originally, their main functions were to serve as the emperor's bodyguard and to spy on his subjects and report any plots of rebellion or regicide directly to the emperor. Over time, the organization took on law enforcement and judicial functions and grew to be immensely powerful, with the power to overrule ordinary judicial rulings and to investigate, interrogate, and punish anyone, including members of the imperial family. In 1420, a second secret police organization run by eunuchs, known as the *dongchang* (Eastern Depot), was formed to suppress suspected political opposition to the usurpation of the throne by the [Yongle Emperor](#). Combined, these two organizations made the Ming Dynasty one of the world's first [police states](#).<sup>[4]</sup>

In Europe, secret police organizations originated in 18th-century Europe after the [French Revolution](#), when such operations were established in an effort to detect any possible conspiracies or revolutionary subversion. The peak of secret-police operations in most of Europe was 1815 to 1860, "when restrictions on voting, assembly, association, unions and the press were so severe in most European countries that opposition groups were forced into conspiratorial activities."<sup>[5]</sup> The secret police of the [Austrian Empire](#) were particularly notorious during this period.<sup>[5]</sup> After 1860, the use of secret police declined due to increasing liberalization, except in autocratic regimes such as the [Russian Empire](#).<sup>[5]</sup>

In the [Russian Empire](#), the secret police forces were the [Third Section](#) of the Imperial Chancery and then the [Okhrana](#). After the [Russian Revolution](#), the [Soviet Union](#) established the [OGPU](#), [NKVD](#), [NKGB](#), [MVD](#), and [KGB](#).<sup>[6]</sup>

In [Nazi Germany](#), the *Geheimstaatspolizei* (Secret State Police, [Gestapo](#)) (1933–1945) was used to eliminate opposition; as part of the [Reich Main Security Office](#), it also was a vital organizer of [the Holocaust](#). Although the Gestapo had a relatively small number membership (32,000 in 1944), "it maximized these small resources through informants and a large number of denunciations from the local population."<sup>[7]</sup> After the defeat of the Nazis, the [East German](#) secret police, the [Stasi](#), likewise made extensive use of an extensive network of civilian informers.<sup>[8]</sup>

Control

A single secret service may pose a potential threat to the central political authority. Political scientist Sheena Chestnut Greitens writes that: "When it comes to their security forces, [autocrats](#) face a fundamental 'coercing dilemma between empowerment and control. ... Autocrats must empower their security forces with enough coercing capacity to enforce internal order and conduct external defense. Equal important to their survival, however, they must control that capacity, to ensure it is not turned against them."<sup>[12]</sup> Authoritarian regimes

therefore attempt to engage in "coup-proofing" (designing institutions to minimize risks of a coup). Two methods of doing so are increasing fragmentation (i.e., dividing powers among the regime security apparatus to prevent "any single agency from amassing enough political power to carry out a coup") and increasing exclusivity (i.e., purging the regime security apparatus to favor familial, social, or ethnic groups perceived as more loyal).<sup>[12]</sup>

[https://en.wikipedia.org/wiki/List\\_of\\_secret\\_police\\_organizations](https://en.wikipedia.org/wiki/List_of_secret_police_organizations)

Federal Security Service (FSB) (Russian: Федеральная служба безопасности Российской Федерации (ФСБ), tr. *Federal'naya sluzhba bezopasnosti Rossiyskoy Federatsii*, IPA: [fʲɪdʲɪˈralʲnəjə ˈsluzʲbə bʲɪzə ˈpasnəstʲɪ rɐˈsʲijskəj fʲɪdʲɪˈratsʲijɪ]<sup>[38][39][40][41][42][43][44][45][46]</sup>)

### 23.2.3 Some Battles of the Greeks and Romans against the Persians

AG: We all know about the battles of the Greeks against the Persians like the battle of the Thermopylae, and the sea battle of Salamis. But very much less is known about the wars that the Romans led against the Persians, and lo and behold, they could never conquer them. And this is quite something to think of, because the Romans could not duplicate the successes of Alexander the Great, even if they had been able to defeat the Sarissa forces of the Macedonians decisively.

[https://en.wikipedia.org/wiki/Macedonian\\_Wars](https://en.wikipedia.org/wiki/Macedonian_Wars)

<https://www.britannica.com/event/Macedonian-Wars>

<http://factsanddetails.com/world/cat56/sub407/entry-6251.html>

The mighty Roman Army was not able to break the mighty Persian Empire even after it had been defeated by Alexander the Great in the years around 330 BCE. Persia or Parthia or the Sassanids or Seleucids rose again to unprecedented heights around the first centuries CE. And the Romans were defeated a few times very bitterly such that even one Roman Emperor who had led his Legions against Parthia or Persia was made a slave and had to serve as footstool for the Parthian / Persian King. Such were the bitter defeats of the Romans against the Parthians. The Persians had learned a few important lessons of warfare, it seems.

[https://en.wikipedia.org/wiki/Roman%E2%80%93Seleucid\\_War](https://en.wikipedia.org/wiki/Roman%E2%80%93Seleucid_War)

[https://en.wikipedia.org/wiki/Seleucid\\_Empire](https://en.wikipedia.org/wiki/Seleucid_Empire)

In the following section I will give some food for thought by Lev Gumilev, who was one of the greatest story tellers in the whole history of the business of historians. And he was really unsurpassed in his skill of story-telling and these were very enlightened stories. This was the *Russian side of his daimonos*, the stories of the *Baba Jaga* of which I have made some reference. This is the typical Russian ability to *tell tall stories*, like *Tolstoi* and *Dostojewsky*, and some others, who were masters in the age-old heritage of telling Fairy Tales but with a very deep *Psycho-Historical Background*. And this art had been long lost to the Western Europeans and Americans, who had already been converted to perfectly one-track thinking Neuro-Robotons. The German School of Idealism according to Hegel is one prime example of this. The only one in German Philosophical history who could out-think this was Nietzsche, and his somewhat ideal, Hölderlin. And consequently enough, Nietzsche followed his ideal of Hölderlin by becoming mad himself. I have written quite a lot about the fate and the psychology of Nietzsche, especially about the pitfalls of his kind of philosophy. So no need to re-tell all those well-known stories here. Heidegger had given us many clues in WHD to think about re-thinking the thoughts of Nietzsche.

### 23.2.4 Lev Gumilev and The Empires of Persia

This is the Russian www where all the materials on and by Gumilev can be found.

Gumilev, Lev: "Ethnogenesis and the Biosphere", Progress, Moscow (1990).

<http://gumilevica.kulichki.net/English/ebe.htm>

Searches for an Imaginary Kingdom: The Legend of the Kingdom of Prester John

<http://gumilevica.kulichki.net/English/sik.htm>

<http://gumilevica.kulichki.net/English/>

<http://gumilevica.kulichki.net/English/biography.htm>

<http://gumilevica.kulichki.net/English/bibliography.htm>

<https://www.cambridge.org/fr/academic/subjects/history/european-history-1000-1450/searches-imaginary-kingdom-legend-kingdom-prester-john?format=PB&isbn=9780521108799>

<http://gumilevica.kulichki.net/English/maps.htm#HPH>

<http://gumilevica.kulichki.net/English/Article01.htm>

[https://en.wikipedia.org/wiki/Lev\\_Gumilyov](https://en.wikipedia.org/wiki/Lev_Gumilyov)

Lev Gumilev (1912-1992). Scientific heritage of Dr. Lev N. Gumilev.

Fortunately, the copyright hunters of the Matrix will not be so successful in Russia as they are or will be really soon now, in the Western EU. I daresay that in about 1 year or 2 or so, in the whole of the EU www at large, all interesting material and all interesting youtube videos will be purged out of existence and of course out of Political and Moral Correctness. So we can be quite lucky that there are a few interesting www-sites in Russia that cannot be purged by the copyright hunters of the Matrix. The Russians couldn't care less about copyright. In this they still are very copy-left-ist. Communism may be gone or not, this doesn't interest anyone at all. The Russians are quite well the world-class experts in circumventing any censure which anyone may concoct. This is a very valuable lesson that the Russians had learned in so many about 70++ years of oppression by Bolshevism and Communism. Lenin, Trotzky and Stalin were just so good teachers. And the Russians had built up something like an immunity against Brain Washing and Propaganda. The favorite newspaper of the Russians in the Soviet era was the Prawda or Pravda. This literally means "Truth". And it really was. And this is no joke.

### 23.2.5 The Spy vs. Spy Game in Soviet Russia

The expert Russians could read the Pravda every page, and they were able to Double- and Triple- Think everything that the Communist Party Political Supervisors of the Pravda tried to hide and distort. But where there is a Spy, there is a Counter-Spy. And the Editors and Journalists who produced the Pravda managed to hide the contents that they wanted to convey, in the plain sight of the Communist Party Political Supervisors. There are a few coding methods that only some very good spy-masters were able to produce. Like Anagram, Steganography, and 2-D word code stencils.

## 23.3 Codes and Code Breaking

### 23.3.1 The Busines of Codes and Code Breaking of English Renaissance Mystics

[https://en.wikipedia.org/wiki/Elizabeth\\_I\\_of\\_England](https://en.wikipedia.org/wiki/Elizabeth_I_of_England)

**Elizabeth I** (7 September 1533 – 24 March 1603)<sup>[1]</sup> was **Queen of England** and **Ireland** from 17 November 1558 until her death on 24 March 1603. Sometimes called **The Virgin Queen**, **Gloriana** or **Good Queen Bess**, Elizabeth was the last of the five monarchs of the **House of Tudor**.

Elizabeth was the daughter of **Henry VIII** and **Anne Boleyn**, his second wife, who was executed two-and-a-half years after Elizabeth's birth. Anne's marriage to Henry VIII was annulled, and Elizabeth was declared illegitimate. Her half-brother, **Edward VI**, ruled until his death in 1553, bequeathing the crown to **Lady Jane Grey** and ignoring the claims of his two half-sisters, Elizabeth and the **Roman Catholic Mary**, in spite of **statute law to the contrary**. Edward's will was set aside and Mary became queen, deposing Lady Jane Grey. During Mary's reign, Elizabeth was imprisoned for nearly a year on suspicion of supporting Protestant rebels. In 1558 upon Mary's death, Elizabeth succeeded her half-sister to the throne and set out to rule by good counsel.<sup>[2]</sup> She depended heavily on a group of trusted advisers, led by **William Cecil, 1st Baron Burghley**. One of her first actions as queen was the establishment of an English Protestant church, of which she became the **Supreme Governor**. This **Elizabethan Religious Settlement** was to evolve into the **Church of England**. It was expected that Elizabeth would marry and produce an heir; however, despite numerous courtships, she never did. She was eventually succeeded by her first cousin twice removed, **James VI of Scotland**. She had earlier been responsible for the imprisonment and execution of James's mother, **Mary, Queen of Scots**.

<https://blog.degruyter.com/cryptography-decoding-mathematics-secret-messages/>

<https://www.garykessler.net/library/crypto.html>

[https://en.wikipedia.org/wiki/Classical\\_cipher](https://en.wikipedia.org/wiki/Classical_cipher)

[https://en.wikipedia.org/wiki/History\\_of\\_cryptography](https://en.wikipedia.org/wiki/History_of_cryptography)

**David Kahn** notes in *The Codebreakers* that modern cryptology originated among the **Arabs**, the first people to systematically document cryptanalytic methods.<sup>[13]</sup> **Al-Khalil** (717–786) wrote the *Book of Cryptographic Messages*, which contains the first use of **permutations and combinations** to list all possible **Arabic** words with and without vowels.<sup>[14]</sup>

The invention of the **frequency analysis** technique for breaking monoalphabetic **substitution ciphers**, by **Al-Kindi**, an **Arab mathematician**,<sup>[15][16]</sup> sometime around AD 800, proved to be the single most significant cryptanalytic advance until World War II. Al-Kindi wrote a book on cryptography entitled *Risalah fi Istikhraj al-Mu'amma* (*Manuscript for the Deciphering Cryptographic Messages*), in which he described the first cryptanalytic techniques, including some for **polyalphabetic ciphers**, cipher classification, Arabic phonetics and syntax, and most importantly, gave the first descriptions on frequency analysis.<sup>[17]</sup> He also covered methods of encipherments, cryptanalysis of certain encipherments, and statistical analysis of letters and

letter combinations in Arabic.<sup>[18][19]</sup> An important contribution of [Ibn Adlan](#) (1187–1268) was on [sample size](#) for use of frequency analysis.<sup>[14]</sup>

In early medieval England between the years 800-1100, substitution ciphers were frequently used by scribes as a playful and clever way encipher notes, solutions to riddles, and colophons. The ciphers tend to be fairly straightforward, but sometimes they deviate from an ordinary pattern, adding to their complexity and, possibly, to their sophistication as well.<sup>[20]</sup> This period saw vital and significant cryptographic experimentation in the West. ...

Essentially all ciphers remained vulnerable to the cryptanalytic technique of frequency analysis until the development of the polyalphabetic cipher, and many remained so thereafter. The polyalphabetic cipher was most clearly explained by [Leon Battista Alberti](#) around the year AD 1467, for which he was called the "father of Western cryptology".<sup>[1]</sup> [Johannes Trithemius](#), in his work [Poligraphia](#), invented the [tabula recta](#), a critical component of the Vigenère cipher. Trithemius also wrote the [Steganographia](#). The French cryptographer [Blaise de Vigenère](#) devised a practical polyalphabetic system which bears his name, the [Vigenère cipher](#).<sup>[1]</sup> Cryptography, [cryptanalysis](#), and secret-agent/courier betrayal featured in the [Babington plot](#) during the reign of Queen [Elizabeth I](#) which led to the execution of [Mary, Queen of Scots](#). [Robert Hooke](#) suggested in the chapter *Of Dr. Dee's Book of Spirits*, that [John Dee](#) made use of Trithemian steganography, to conceal his communication with Queen Elizabeth I.<sup>[22]</sup>

The chief cryptographer of King Louis XIV of France was Antoine Rossignol and he and his family created what is known as the [Great Cipher](#) because it remained unsolved from its initial use until 1890, when French military cryptanalyst, [Étienne Bazeries](#) solved it.<sup>[23]</sup> An encrypted message from the time of the [Man in the Iron Mask](#) (decrypted just prior to 1900 by [Étienne Bazeries](#)) has shed some, regrettably non-definitive, light on the identity of that real, if legendary and unfortunate, prisoner.

Outside of Europe, after the Mongols brought about the end of the [Islamic Golden Age](#), cryptography remained comparatively undeveloped. [Cryptography in Japan](#) seems not to have been used until about 1510, and advanced techniques were not known until after the opening of the country to the West beginning in the 1860s.

In World War I the [Admiralty's Room 40](#) broke German naval codes and played an important role in several naval engagements during the war, notably in detecting major German sorties into the [North Sea](#) that led to the battles of [Dogger Bank](#) and [Jutland](#) as the British fleet was sent out to intercept them. However its most important contribution was probably in [decrypting](#) the [Zimmermann Telegram](#), a [cable](#) from the German Foreign Office sent via Washington to its [ambassador Heinrich von Eckardt](#) in Mexico which played a major part in bringing the United States into the war.

### 23.3.2 Encrypting methods in the days of Elizabeth I

The elaborate Encrypting methods that were invented by the English in the days of Elizabeth I and the Great Armada helped them quite a bit to win that war. And at those times there had been some good code-producers and some code-breakers around in England. So we can even put the Warburg Library to good use, since those were the very same people who are portrayed in the works of the Dame Frances Yates. The Renaissance Mystics and Neo-Platonists surely knew their ways around some codes and encryptions. The Jewish Kabbalah encryption system had probably been the most studied and puzzled about of them all. So every Renaissance Mystic invented his own method of decryption of the Kabbalah. And of course the Grand Master of all this was the good Giordano Bruno. And his master piece was "La Cena Delle Ceneri" or the Ash Wednesday Supper. I have enlarged a little bit about this work somewhere in this text. I also notice some puzzling details about literature about codes and en- and de-cryption. I had read "The Code Book" by Simon Singh, and I was quite surprised that I didn't find anything about the abovementioned cyphering methods. This may seem strange at first, but then it is only logical. Because a popular writer may not write anything about what is still considered a National Secret by the British Secret Intelligence Services. Even if all the rest of the world knows everything about it.

[https://en.wikipedia.org/wiki/British\\_intelligence\\_agencies](https://en.wikipedia.org/wiki/British_intelligence_agencies)

Their intelligence assessments contribute to the conduct of the [foreign relations of the United Kingdom](#), maintaining the [national security of the United Kingdom](#), military planning and [law enforcement in the United Kingdom](#).<sup>[a]</sup> The main organisations are the [Secret Intelligence Service](#) (SIS or MI6), the [Security Service](#) (MI5), the [Government Communications Headquarters](#) (GCHQ) and [Defence Intelligence](#) (DI).

...

The history of the organisations goes back to the 19th century. The decryption of the [Zimmermann Telegram](#) in 1917 was described as the most significant intelligence triumph for Britain during World War I,<sup>[a]</sup> and one of the earliest occasions on which a piece of signals intelligence influenced world events.<sup>[a]</sup> During

the Second World War and afterwards, many observers regarded **Ultra** as immensely valuable to the **Allies of World War II**. In the post-war period, intelligence cooperation between the United Kingdom and the United States became the cornerstone of Western intelligence gathering and the "**Special Relationship**" between the United Kingdom and the United States.<sup>[4]</sup>

### 23.3.3 The Numerical Values of the Kabbalah letters

I give just a little warning about the numerical values of the Kabbalah letters. This is a problem for the poor modern Kabbalist's like the nice Madonna, who also likes to do some Kabbalah. For every first semester student of ancient number systems one thing is immediately clear. The ancient Hebrews who went to Babylon, which was the place where the Bible also was the first time written down, and became a codex. ... They just did some plagiarizing of the very very ancient Babylonian Archaeo-Astronomy and -Astrology. This dates back around 7000 years, as I know from my studies of the very ancient deep structures long before civilization even began. So the good Hebrews of ancient Babyolon did some plagiarizing of this ancient Babylonian science. And for those people the decimal system had just not been invented yet. They did all their calculations in the Hexagesimal System. And there is good material to be found on this because there was also the Indian Vedic science of Archaeo-Astronomy and -Astrology. So the poor modern Kabbalists who try to do the Kabbalah in decimal, are totally out of luck. And on top of this, a Kabbalist must by needs also be an accomplished Talmudist. This is because the Semantic Root structures lie deep behind the ancient Aramaic (and not so much in Hebrew, which was invented much later). So when one doesn't know his/her way around all these things, one cannot do the Kabbalah at all. And as we all know, doing Talmud studies necessitates at least 7-10 years of concentrated studying, so that one has no time at all except some eating a little bit and then sleeping a little bit. Studying the Talmud is not for the faint-hearted. So you can't get the Talmud and the Kabbalah in some evening seminars for around \$\$\$ 1000.00 a pop. Even not for the nice Madonna. And I know that Giordano Bruno talked quite a bit about the Kabbalah, but I don't know how deeply he could descend in the Underground of Hebrew Talmudic Thought. Quite surely the earlier Renaissance Mystics like Marsilio Ficino and Picco della Mirandola must have had some expert Jewish connections. Just by the way, Platon mentions in the Timaios explicitly that the lecturer Timaios had studied astronomy in Babylon. And this is the only "dialog" in the whole of all the works of Platon where it is not Sokarates who does all the talking, but here it is Timaios.

<https://de.wikipedia.org/wiki/Timaios>

<http://www.noologie.de/plato.htm>

<http://www.noologie.de/infra09.htm>

The wikipedia apparently doesn't know Hexagesimal as it calls it the Sexagesimal.

<https://en.wikipedia.org/wiki/Hexadecimal>

<https://en.wikipedia.org/wiki/Sexagesimal>

**Sexagesimal (base 60)** is a **numeral system** with **sixty** as its **base**. It originated with the ancient **Sumerians** in the 3rd millennium BC, was passed down to the ancient **Babylonians**, and is still used—in a modified form—for measuring **time**, **angles**, and **geographic coordinates**.

The number 60, a **superior highly composite number**, has twelve **factors**, namely 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, and 60, of which 2, 3, and 5 are **prime numbers**. With so many factors, many **fractions** involving sexagesimal numbers are simplified. For example, one hour can be divided evenly into sections of 30 minutes, 20 minutes, 15 minutes, 12 minutes, 10 minutes, 6 minutes, 5 minutes, 4 minutes, 3 minutes, 2 minutes, and 1 minute. 60 is the smallest number that is divisible by every number from 1 to 6; that is, it is the **lowest common multiple** of 1, 2, 3, 4, 5, and 6.

*In this article, all sexagesimal digits are represented as decimal numbers, except where otherwise noted. For example, 10 means the number **ten** and 60 means the number **sixty**.*

It is possible for people to **count on their fingers** to 12 using one hand only, with the thumb pointing to each **finger bone** on the four fingers in turn. A traditional counting system still in use in many regions of Asia works in this way, and could help to explain the occurrence of numeral systems based on 12 and 60 besides those based on 10, 20 and 5. In this system, one hand counts repeatedly to 12, displaying the number of iterations on the other, until five dozens, i. e. the 60, are full.<sup>[1][2]</sup>

According to **Otto Neugebauer**, the origins of sexagesimal are not as simple, consistent, or singular in time as they are often portrayed. Throughout their many centuries of use, which continues today for specialized topics such as time, angles, and astronomical coordinate systems, sexagesimal notations have always contained a strong undercurrent of decimal notation, such as in how sexagesimal digits are written. Their use has also always included (and continues to include) inconsistencies in where and how various bases are to represent numbers even within a single text.<sup>[3]</sup>

The most powerful driver for rigorous, fully self-consistent use of sexagesimal has always been its mathematical advantages for writing and calculating fractions. In ancient texts this shows up in the fact that

sexagesimal is used most uniformly and consistently in mathematical tables of data.<sup>[3]</sup> Another practical factor that helped expand the use of sexagesimal in the past even if less consistently than in mathematical tables, was its decided advantages to merchants and buyers for making everyday financial transactions easier when they involved bargaining for and dividing up larger quantities of goods. The early *shekel* in particular was one-sixtieth of a *mana*,<sup>[3]</sup> though the Greeks later coerced this relationship into the more base-10 compatible ratio of a shekel being one-fiftieth of a *mina*.

Apart from mathematical tables, the inconsistencies in how numbers were represented within most texts extended all the way down to the most basic **Cuneiform** symbols used to represent numeric quantities.<sup>[3]</sup> For example, the Cuneiform symbol for 1 was an ellipse made by applying the rounded end of the stylus at an angle to the clay, while the sexagesimal symbol for 60 was a larger oval or "big 1". But within the same texts in which these symbols were used, the number 10 was represented as a circle made by applying the round end of the style perpendicular to the clay, and a larger circle or "big 10" was used to represent 100. Such multi-base numeric quantity symbols could be mixed with each other and with abbreviations, even within a single number. The details and even the magnitudes implied (since zero was not used consistently) were idiomatic to the particular time periods, cultures, and quantities or concepts being represented. While such context-dependent representations of numeric quantities are easy to critique in retrospect, in modern time we still have "dozens" of regularly used examples (some quite "gross") of topic-dependent base mixing, including the particularly ironic recent innovation of adding decimal fractions to sexagesimal astronomical coordinates.<sup>[3]</sup>

[https://de.wikipedia.org/wiki/Hertha\\_von\\_Dechend](https://de.wikipedia.org/wiki/Hertha_von_Dechend)

[https://en.wikipedia.org/wiki/Hamlet%27s\\_Mill](https://en.wikipedia.org/wiki/Hamlet%27s_Mill)

<https://www.frobenius-institut.de/en/>

<https://www.per-aspera-ad-astra.net/index.html>

Ernest G. McClain: The Myth of Invariance. This gives us some decoding methods.

[https://ernestmclain.files.wordpress.com/2017/05/mythsofinvariance\\_sanscartoonsoptimized.pdf](https://ernestmclain.files.wordpress.com/2017/05/mythsofinvariance_sanscartoonsoptimized.pdf)

<http://adsabs.harvard.edu/full/2003JHA....34...79I>

### 23.3.4 About Babylonian Astronomy

[https://en.wikipedia.org/wiki/Babylonian\\_astronomy](https://en.wikipedia.org/wiki/Babylonian_astronomy)

**Babylonian astronomy** was the study or recording of **celestial objects** during early history **Mesopotamia** (a historical event in Babylonian astronomy) These records can be found on **Sumerian clay tablets**, inscribed in **cuneiform**, dated approximately to 3500–3200 BC.<sup>[1]</sup>

In conjunction with their **mythology**, the Sumerians developed a form of **astronomy/astrology** that had an influence on **Babylonian** culture. Therein **Planetary gods** played an important role.

Babylonian astronomy seemed to have focused on a select group of **stars** and **constellations** known as Ziqpu stars.<sup>[2]</sup> These constellations may have been collected from various earlier sources. The earliest catalogue, *Three Stars Each*, mentions stars of the **Akkadian Empire**, of **Amurru**, of **Elam** and others.<sup>[3]</sup>

A **numbering** system based on sixty was used, a **sexagesimal** system. This system simplified the calculating and recording of unusually great and small numbers. The modern practices of dividing a circle into 360 degrees, of 60 minutes each, began with the Sumerians.<sup>[4]</sup>

During the 8th and 7th centuries BC, Babylonian astronomers developed a new **empirical** approach to astronomy. They began studying and recording their **belief** system and **philosophies** dealing with an ideal nature of the **universe** and began employing an **internal logic** within their predictive planetary systems. This was an important contribution to astronomy and the **philosophy of science**, and some modern scholars have thus referred to this novel approach as the first scientific revolution.<sup>[5]</sup> This approach to astronomy was adopted and further developed in **Greek** and **Hellenistic astrology**. Classical **Greek** and **Latin** sources frequently use the term **Chaldeans** for the **astronomers** of Mesopotamia, who were considered as **priest-scribes** specializing in **astrology** and other forms of **divination**.

The Connection Between a Calendar, Mathematics, and Astronomy

The exploration of the Sun, Moon, and other celestial bodies affected the development of Mesopotamian culture. The study of the sky led to the development of a calendar and advanced mathematics in these societies. The Babylonians were not the first complex society to develop a calendar globally and in nearby North Africa, The Egyptians developed a calendar of their own. The Egyptian calendar was solar based, while the Babylonian calendar was lunar based. A potential blend between the two that has been noted by some historians is the adoption of a crude leap year by the Babylonians after the Egyptians developed one. The Babylonian leap year shares no similarities with the leap year practiced today. it involved the addition of a thirteenth month as a means to re-calibrate the calendar to better match the growing season.<sup>[27]</sup>

Babylonian priests were the ones responsible for developing new forms of mathematics and did so to better calculate the movements of celestial bodies. One such priest, Nabu-rimanni, is the first documented Babylonian astronomer. He was a priest for the moon god and is credited with writing lunar and eclipse

computation tables as well as other elaborate mathematical calculations. The computation tables are organized in seventeen or eighteen tables that document the orbiting speeds of planets and the Moon. His work was later recounted by astronomers during the Seleucid dynasty.<sup>[27]</sup>

Arithmetical and geometrical methods

Though there is a lack of surviving material on Babylonian planetary theory,<sup>[6]</sup> it appears most of the Chaldean astronomers were concerned mainly with [ephemerides](#) and not with theory. It had been thought that most of the predictive Babylonian planetary models that have survived were usually strictly [empirical](#) and [arithmetical](#), and usually did not involve [geometry](#), [cosmology](#), or speculative [philosophy](#) like that of the later [Hellenistic models](#),<sup>[29]</sup> though the Babylonian astronomers were concerned with the philosophy dealing with the ideal nature of the early [universe](#).<sup>[5]</sup> Babylonian procedure texts describe, and ephemerides employ, arithmetical procedures to compute the time and place of significant astronomical events.<sup>[30]</sup> More recent analysis of previously unpublished [cuneiform tablets](#) in the [British Museum](#), dated between 350 and 50 BC, demonstrates that Babylonian astronomers sometimes used geometrical methods, prefiguring the methods of the [Oxford Calculators](#), to describe the motion of [Jupiter](#) over time in an abstract mathematical space.<sup>[31]</sup>  
<sup>[32]</sup>

In contrast to [Greek astronomy](#) which was dependent upon cosmology, Babylonian astronomy was independent from cosmology.<sup>[18]</sup> Whereas Greek astronomers expressed "prejudice in favor of circles or spheres rotating with uniform motion", such a preference did not exist for Babylonian astronomers, for whom [uniform circular motion](#) was never a requirement for planetary orbits.<sup>[33]</sup> There is no evidence that the celestial bodies moved in uniform circular motion, or along [celestial spheres](#), in Babylonian astronomy.<sup>[34]</sup>

Contributions made by the Chaldean astronomers during this period include the discovery of [eclipse cycles](#) and [saros cycles](#), and many accurate astronomical observations. For example, they observed that the [Sun's](#) motion along the [ecliptic](#) was not uniform, though they were unaware of why this was; it is today known that this is due to the Earth moving in an [elliptic orbit](#) around the Sun, with the Earth moving swifter when it is nearer to the Sun at [perihelion](#) and moving slower when it is farther away at [aphelion](#).<sup>[35]</sup>

Chaldean astronomers known to have followed this model include [Naburimannu](#) (fl. 6th–3rd century BC), [Kidinnu](#) (d. 330 BC), [Berossus](#) (3rd century BCE), and [Sudines](#) (fl. 240 BCE). They are known to have had a significant influence on the [Greek astronomer Hipparchus](#) and the [Egyptian astronomer Ptolemy](#), as well as other [Hellenistic](#) astronomers.

### 23.3.5 Babylonian Astronomy and the 60-er Number system

Back to the Renaissance Mystics and the Warburg Library, where all those books can be found, that Aby Warburg had collected. And there were some very rare works that are pretty hard to find anywhere else on Earth. Now this is not so difficult as it may seem at first. Because when you have a virtual Planetarium on your Personal Computer, you can look up all those ancient star mysteries of the wandering of the star system in the Equinoctial Precession, right on your computer. There are enough Astronomical Computer Programs around. These things have become so much easier since the days of Aby Warburg and Hertha v. Dechend. You don't need all those voluminous tables any more, since you can get the Astronomy in a program. And I suppose there are also programs that can do the Hexagesimal number system in and out. Because calculating in Hexagesimals makes a lot of sense for Astronomical Calculations and makes them a lot easier than in Decimal. This is because of the multiplication factor of the base number 12, which is not only there for the 12 disciples of Jesus, but also for the 12 hours of the day, and the 12 Zodiac star signs and then some more. It is quite convenient when you just multiply 12 by 5, and you get 60. This is called the factoring method.

<http://www.noologie.de/aby.htm>

<http://www.noologie.de/aby.pdf>

<https://www.purplemath.com/modules/factnumb.htm>

[https://en.wikipedia.org/wiki/Integer\\_factorization](https://en.wikipedia.org/wiki/Integer_factorization)

<https://www.calculator.net/factor-calculator.html>

<https://en.wikipedia.org/wiki/>

[Babylonian astronomy#The Connection Between a Calendar, Mathematics, and Astronomy](#)

**Babylonian astronomy** was the study or recording of [celestial objects](#) during early history [Mesopotamia](#) (a historical event in Babylonian astronomy) These records can be found on [Sumerian clay tablets](#), inscribed in [cuneiform](#), dated approximately to 3500–3200 BC.<sup>[1]</sup>

In conjunction with their [mythology](#), the Sumerians developed a form of [astronomy/astrology](#) that had an influence on [Babylonian](#) culture. Therein [Planetary gods](#) played an important role.

Babylonian astronomy seemed to have focused on a select group of [stars](#) and [constellations](#) known as Ziqpu stars.<sup>[2]</sup> These constellations may have been collected from various earlier sources. The earliest catalogue, *Three Stars Each*, mentions stars of the [Akkadian Empire](#), of [Amurru](#), of [Elam](#) and others.<sup>[3]</sup>

A **numbering** system based on sixty was used, a **sexagesimal** system. This system simplified the calculating and recording of unusually great and small numbers. The modern practices of dividing a circle into 360 degrees, of 60 minutes each, began with the Sumerians.<sup>[4]</sup>

During the 8th and 7th centuries BC, Babylonian astronomers developed a new **empirical** approach to astronomy. They began studying and recording their **belief** system and **philosophies** dealing with an ideal nature of the **universe** and began employing an **internal logic** within their predictive planetary systems. This was an important contribution to astronomy and the **philosophy of science**, and some modern scholars have thus referred to this novel approach as the first scientific revolution.<sup>[5]</sup> This approach to astronomy was adopted and further developed in **Greek** and **Hellenistic astrology**. Classical **Greek** and **Latin** sources frequently use the term **Chaldeans** for the **astronomers** of Mesopotamia, who were considered as **priest-scribes** specializing in **astrology** and other forms of **divination**.

### 23.3.6 Stencil Encoding

And since I know many of the works of the Warburg Library myself, I can Double- and Triple- Think my own way around them. So this is a nice side effect when you study Renaissance Mysticism and you suddenly end up with some very valuable material about Crypting and De- Crypting Methods. Now we get to the encoding method and how it works. I just call it Stencil Encoding, since I don't know the right keyword to look it up in the Google. And you take a sheet of the size of the letter that you are writing, a sort of stencil with some appropriate holes in it, where about 10 to 20 words would fit in. So then you write your secret message into those holes, and then you write a very lengthy letter around these holes. Like what you tell your dear Mother-in-law what you did this day or another, like you were just an English Tourist on his Grand Tour but this time in the Spanish and Portuguese harbors, where the Great Armada was just preparing their expedition to conquer England. You have to be a little inventive since you have to write at least 15 pages of useless letter where you can hide your code words. And then there is a double encoding. Because when you say "ships" and "guns" and "tonnage" and "soldiers" in your innocent letter to your dear mother-in-law, there would be some "raising of eyebrows" as it is said colloquially. And the good Code Breakers of the Secret Police at the court of the King of Spain, they would surely get an idea that something else was going on in that letter. So you make a second layer of the coding, and you write: Piss Pots for "Ships". Farts for "Guns" and Mouse for "Guardians" and Cats for "Soldiers". Or something like that. So the English were very inventive at those things and they could out-smart the smartest Spaniards. (Because the Spaniards had just thrown out all the Jews from their country. And the Jews would have been smart enough, since the Talmudists were of course also experts of the Kabbalah and encrypting and decrypting). So this happens when you throw out the smartest minds of your country. You will have to pay the price, in blood.

### 23.3.7 The Sokal Affair, or the Sokal Hoax

[https://en.wikipedia.org/wiki/Sokal\\_affair](https://en.wikipedia.org/wiki/Sokal_affair)

The **Sokal affair**, also called the **Sokal hoax**,<sup>[1]</sup> was a **scholarly publishing sting** perpetrated by **Alan Sokal**, a **physics** professor at **New York University** and **University College London**. In 1996, Sokal submitted an article to ***Social Text***, an academic journal of **postmodern cultural studies**. The submission was an experiment to test the journal's **intellectual rigor** and, specifically, to investigate whether "a leading North American journal of cultural studies—whose editorial collective includes such luminaries as **Fredric Jameson** and **Andrew Ross**—[would] publish an article liberally salted with nonsense if (a) it sounded good and (b) it flattered the editors' ideological preconceptions".<sup>[2]</sup>

The article, "Transgressing the Boundaries: Towards a Transformative **Hermeneutics** of Quantum Gravity",<sup>[3]</sup> was published in the ***Social Text*** spring/summer 1996 "**Science Wars**" issue. It proposed that **quantum gravity** is a social and linguistic construct. At that time, the journal did not practice academic **peer review** and it did not submit the article for outside expert review by a physicist.<sup>[4][5]</sup> Three weeks after its publication in May 1996, Sokal revealed in ***Lingua Franca*** that the article was a hoax.<sup>[2]</sup>

The hoax sparked a debate about the scholarly merit of commentary on the physical sciences by those in the humanities; the influence of **postmodern philosophy** on social disciplines in general; academic ethics, including whether Sokal was wrong to deceive the editors and readers of ***Social Text***; and whether ***Social Text*** had exercised appropriate intellectual rigor.

Sokal reasoned that if the presumption of editorial laziness was correct, the nonsensical content of his article would be irrelevant to whether the editors would publish it. What would matter would

be **ideologic** obsequiousness, fawning references to deconstructionist writers, and sufficient quantities of the appropriate jargon. Writing after the article was published and the hoax revealed, he stated:

The results of my little experiment demonstrate, at the very least, that some fashionable sectors of the American academic Left have been getting intellectually lazy. The editors of Social Text liked my article because they liked its conclusion: that "the content and methodology of postmodern science provide powerful intellectual support for the progressive political project" [sec. 6]. They apparently felt no need to analyze the quality of the evidence, the cogency of the arguments, or even the relevance of the arguments to the purported conclusion.[8]

## 24 Heidegger, Was Heisst Denken?

This is a short quote from the lecture script "Was Heisst Denken?":

The script comes in different versions for different editions.

There are some spelling errors which are due to the US-OCR which doesn't recognize the German Umlaute.

I Erste Stunde

(S. 1)

In das, was Denken heisst, gelangen wir, wenn wir selber denken.

Damit ein solcher Versuch glückt, müssen wir bereit sein, das Denken zu lernen.

Sobald wir uns auf dieses Lernen einlassen, haben wir auch schon zugestanden, dass wir das Denken noch nicht vermögen. Aber der Mensch heisst doch der, der denken kann - und das mit Recht. Denn er ist das vernünftige Lebewesen. Die Vernunft, die ratio, entfaltet sich im Denken. Als das vernünftige Lebewesen muss der Mensch denken können, wenn er nur will. Indes will der Mensch vielleicht denken und kann es doch nicht. Am Ende will er bei diesem Denkenwollen zu viel und kann deshalb zu wenig. Der Mensch kann denken, insofern er die Möglichkeit dazu hat. Allein dieses Mögliche verbürgt uns noch nicht, dass wir es vermögen. Denn wir vermögen nur das, was wir mögen. Aber wir mögen wiederum wahrhaft nur Jenes, was seinerseits uns selber und zwar uns in unserem Wesen mag, indem es sich unserem Wesen als das zuspricht, was uns im Wesen halt. Halten heisst eigentlich hüten, auf dem Weideland weiden lassen. Was uns in unserem Wesen halt, halt uns jedoch nur so lange, als wir selber von uns her das Haltende be-halten. Wir be-halten es, wenn wir es nicht aus dem Gedachtnis lassen. Das Gedachtnis ist die Versammlung des Denkens. Worauf? Auf das, was uns halt, insofern es bei uns bedacht ist, bedacht nämlich deshalb, weil Es das zu-Bedenkende bleisst. Das Bedachte ist das mit einem Andenken Beschenkte, beschenkt, weil wir es mögen. Nur wenn wir das mögen, was in sich das zu-Bedenkende ist, vermögen wir das Denken.

Um das Denken zu vermögen, müssen wir es lernen. Was ist Lernen? Der Mensch lernt, insofern er sein Tun und Lassen zu dem in die Entsprechung bringt, was ihm jeweils an Wesenhaftem zugesprochen wird. Das Denken lernen wir, indem wir auf das achten, was es zu bedenken gibt.

(S. 2)

Unsere Sprache nennt z. B. das, was zum Wesen des Freundes gehört, das Freundliche. Dementsprechend nennen wir jetzt das, was in sich das zu-Bedenkende ist: das Bedenkliche. Alles Bedenkliche gibt zu denken. Aber es gibt diese Gabe immer nur in soweit, als das Bedenkliche von sich her schon das zu-Bedenkende ist. Wir nennen jetzt und in der Folge dasjenige, was stets, weil einsther und allem voraus, zu bedenken bleisst: das Bedenklichste. Was ist das Bedenklichste? Wie zeigt es sich in unserer bedenklichen Zeit?

Das Bedenklichste ist, dass wir noch nicht denken; immer noch nicht, obgleich der Weltzustand fortgesetzt bedenklicher wird.

Dieser Vorgang scheint freilich eher zu fordern, dass der Mensch handelt und zwar ohne Verzug, statt in Konferenzen und auf Kongressen zu reden und sich im blossen Vorstellen dessen zu bewegen, was sein sollte und wie es gemacht werden müsste. Somit fehlt es am Handeln und keineswegs am Denken.

Und dennoch - vielleicht hat der bisherige Mensch seit Jahrhunderten bereits zu viel gehandelt und zu wenig gedacht. Aber wie kann heute jemand behaupten, dass wir noch nicht denken, wo doch überall das Interesse für die Philosophie rege ist und immer lauter wird, wo beinahe jedermann wissen will, was es denn mit der Philosophie auf sich hat. Die Philosophen sind »die« Denker. So heißen sie, weil sich das Denken eigentlich in der Philosophie abspielt.

Niemand wird bestreiten wollen, dass heute ein Interesse für die Philosophie besteht. Doch gibt es heute noch etwas, wofür der Mensch sich nicht interessiert, in der Weise nämlich, wie er das »interessieren« versteht?

Interesse heisst: unter und zwischen den Sachen sein, mitten in einer Sache stehen und bei ihr bleiben. Allein für das heutige Interesse gilt nur das Interessante. Das ist solches, was erlaubt, im nächsten Augenblick schon gleichgültig zu sein und durch anderes abgelöst zu werden, was einen dann ebensowenig angeht wie das Vorige. Man meint heute oft, etwas dadurch besonders zu würdigen, dass man es interessant findet. In Wahrheit hat man durch dieses Urteil das Interessante bereits in das Gleichgültige und alsbald Langweilige abgeschoben.

Daß man für die Philosophie ein Interesse zeigt, bezeugt noch keine Bereitschaft zum Denken. Gewiß gibt es allenthalben eine ernsthafte Beschäftigung mit der Philosophie und ihren Fragen. Es gibt einen rühmlichen Aufwand von Gelehrsamkeit zur Erforschung ihrer Geschichte. Hier bestehen nützliche und lobliche Aufgaben, zu deren Erfüllung nur die besten Kräfte gut genug sind, zumal dann,

(S. 3)

wenn sie uns Vorbilder großen Denkens

vor Augen führen. Aber selbst die Tatsache, dass wir uns Jahre hindurch mit den Abhandlungen und Schriften der großen Denker eindringlich abgeben, leistet noch nicht die Gewähr, dass wir selber denken oder auch nur bereit sind, das Denken zu lernen.

Im Gegenteil: die Beschäftigung mit der Philosophie kann uns sogar am hartnäckigsten den Anschein vorgaukeln, dass wir denken, weil wir doch unablässig »philosophieren«.

Gleichwohl bleibst es befremdlich und erscheint als anmaßend zu behaupten, das Bedenklichste in unserer bedenklichen Zeit sei, dass wir noch nicht denken. Darum müssen wir diese Behauptung beweisen. Noch ratsamer ist indessen, die Behauptung erst einmal zu erläutern. Es konnte nämlich der Fall eintreten, dass die Forderung nach einem Beweis hinfallig wird, sobald eine genügende Helle in das kommt, was die Behauptung sagt. Sie lautet: Das Bedenklichste in unserer bedenklichen Zeit ist, daß wir noch nicht denken.

Wie der Name »das Bedenkliche« zu verstehen sei, wurde bereits angedeutet. Es ist das, was uns zu denken gibt. Beachten wir es wohl und lassen wir jetzt schon jedem Wort sein Gewicht. Es gibt solches, was selber, von sich her, gleichsam von seinem Haus aus, uns zu denken gibt. Es gibt solches, das uns daraufhin an

spricht, dass wir auf es 'bedacht sind, dass wir, denkend, ihm uns zuwenden: es denken.

Das Bedenkliche, das, was uns zu denken gibt, ist demnach keineswegs durch uns festgesetzt, nicht durch uns erst aufgestellt, nicht durch uns nur vor-gestellt. Was am meisten von sich aus zu denken gibt, das Bedenklichste, ist nach der Behauptung dies: dass wir noch nicht denken.

Dies sagt jetzt: wir sind noch nicht vor das und noch nicht in den Bereich dessen gelangt, was von sich her in einem wesentlichen Sinne bedacht sein mochte. Dies wird vermutlich daran liegen, dass wir Menschen uns dem, was bedacht sein mochte, noch nicht hinreichend zuwenden. Dann wäre dies, dass wir noch nicht denken, lediglich eine Saumnis, eine Verzögerung im Denken oder, wenn es hoch kommt, ein Versaumnis von seiten des Menschen. Daher konnte einer solchen menschlichen Saumseligkeit auf menschliche Weise durch geeignete Maßnahmen abgeholfen werden. Das menschliche Versaumnis gabe zwar zu denken, aber doch nur vorübergehend. DaB wir noch nicht denken, wäre zwar bedenklich, dürfte jedoch als dieser augenblickliche und behebbare Zustand des heutigen Menschen nie-

(S. 4)

mals das Bedenklichste schlechthin genannt werden. Wir nennen es aber so und deuten hierdurch folgendes an: dass wir noch nicht denken, liegt keineswegs nur daran, dass der Mensch sich noch nicht genügend dem zuwendet, was von Haus aus bedacht sein mochte, weil es in seinem Wesen das zu-Denkende bleisst. Dass wir noch nicht denken, kommt vielmehr daher, dass dieses zu-Denkende selbst sich vom Menschen abwendet, langher schon abgewendet hat.

Sogleich werden wir wissen wollen, wann dies geschah. Wir werden vordem schon und noch begieriger fragen, wie wir denn überhaupt von einem solchen Ereignis wissen können. Die auf der Lauer liegenden Fragen solcher Art überstürzen sich vollends, wenn wir dazu noch dieses sagen: das, was uns eigentlich zu denken gibt, hat sich nicht irgendwann zu einer historisch datierbaren Zeit vom Menschen abgewendet, sondern: das eigentlich zu-Denkende halt sich von einsther in solcher Abwendung. Andererseits hat der Mensch unserer Geschichte immer in irgendeiner Weise gedacht; er hat sogar Tiefstes gedacht und dem Gedächtnis anvertraut. Als der so Denkende blieb er und bleisst er auf das zu-Denkende bezogen. Gleichwohl vermag der Mensch nicht eigentlich zu denken, solange sich das zu-Denkende entzieht. Wenn wir nun, so wie wir jetzt hier sind, uns nichts vorreden lassen, müssen wir das bisher Gesagte als eine einzige Kette leerer Behauptungen zurückweisen und außerdem erklären, dass das Vorgebrachte mit Wissenschaft nichts zu tun hat.

Es wird gut sein, wenn wir möglichst lange in solcher Abwehrlage zu dem Gesagten ausharren; denn so allein halten wir uns in dem nötigen Abstand für einen Anlauf, aus dem her vielleicht dem einen oder anderen der Sprung in das Denken gelingt. Es ist nämlich wahr, dass das bisher Gesagte und die ganze folgende Erörterung mit Wissenschaft nichts zu tun hat, gerade dann, wenn die Erörterung ein Denken sein dürfte. Der Grund dieses Sachverhaltes liegt darin, dass die Wissenschaft ihrerseits nicht denkt und nicht denken kann und zwar zu ihrem Glück und das heisst hier zur Sicherung ihres eigenen festgelegten Ganges. Die Wissenschaft denkt nicht.

Das ist ein anstössiger Satz. Lassen wir dem Satz seinen anstössigen Charakter auch dann, wenn wir so gleich den Nachsatz anfügen, dass die Wissenschaft es gleichwohl stets und auf ihre besondere Weise mit dem Denken zu tun hat. Diese Weise ist allerdings nur dann eine echte und in der Folge keine abschätzige Beurteilung; keine Feststellung einer Tatsache; vielmehr eine Wesensbestimmung (das »nicht« kein Versäumnis sondern »Verweigerung«): dies sagt: die Wissenschaft hat die Seinsweise ihres Gebietes als solche nicht zum Thema - ihrem Thema - kann dieses überhaupt nicht haben -

Denken im Sinne der Denker

Denken bestimmt von seinem Geheiss her das Geheiss des Austrags. - »Zur Sache des Denkens« Seinsgeschick und ontologische Differenz  
Wissenschaft und Besinnung - Technisch und politisch masslos

## 25 Where even Angels fear to tread

AG: There is quite a similarity between the thought of Gregory Bateson and my own type of Meta-Morphology. I have at some time been a disciple of Bateson. The information, or the difference that makes a difference is one of the main themes. Meta- Morphology is just another way of expressing this. The change of form is a difference. And the cumulations of changes of form is the cumulation of differences that make a difference.

<http://www.oikos.org/angelsfear.htm>

I Introduction

II The World of Mental Process (GB)

III Metalogue: Why Do You Tell Stories? (MCB)

We acknowledge the generosity of M. C. Bateson for the permission to publish in this site two chapters of Angels Fear by G. Bateson.

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ANGELS FEAR: TOWARDS AN EPISTEMOLOGY OF THE SACRED

Gregory Bateson & Mary Catherine Bateson

Full fathom five thy father lies;  
of his bones are coral made;  
Those pearls that were his eyes:  
Nothing of him that doth fade,  
But doth suffer a sea-change  
Into something rich and strange.  
Seanymphs hourly ring his knell: Ding-dong.  
Hark! Now I hear them, Ding-dong, bell.  
SHAKESPEARE, The Tempest

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## 25.2 Acknowledgments

It was six years ago that I undertook to complete the book my father was working on at the time of his death, and a great deal has happened in the interval. My first thanks should go to those who have waited patiently for a work they were already anxiously looking forward to, my father's widow, Lois Bateson, other family members, my father's publisher, and common friends and colleagues, who have exercised great restraint in pressing for completion.

A number of institutions have played a role in making this work possible, particularly in providing the settings and contexts for Gregory's work and thought: the Esalen Institute, the Camaldolese Hermitage in Big Sur, San Francisco Zen Center, the Lindisfarne Association. The Institute for Intercultural Studies has formal disposition of my father's literary estate and provided me with a computer on which the manuscript was typed. Amherst College facilitated this work by permitting me to go off salary and put necessary distance between myself and that institution, making concentrated work and creative thought possible.

This book has had the same agent, John Brockman, and editor, William Whitehead, since it was first conceived, and these two have been highly supportive in keeping it alive through changes in both authorship and publisher. Other individuals who played an important role include Lois Bateson, my brother, John Bateson, at whose home in British Columbia several chapters were composed, Joseph and Jane Wheelwright. More recently, I have benefited from help and suggestions from Rodney Donaldson, Richard Goldsby, Jean Houston, David Sofield, William Irwin Thompson, and Francisco Varela, each of whom has contributed a valuable perspective, whether for change or for restraint.

Most of my work on this book has been done in Cambridge, Massachusetts, with the support of my most enlivening critic, my husband, Barkev Kassarian. I have also relied on the companionship of a large, sweet Akita puppy who tirelessly assures me that epistemology is indeed a matter of relationship and comforts me for the vagaries of the computer.

MCB

Cambridge, Massachusetts

August 1986

I Introduction (MCB & GB)

## 25.3 I. Setting The Context (Mcb)

In 1978, my father, Gregory Bateson, completed the book titled *Mind and Nature: A Necessary Unity* (Dutton, 1979). Under the threat of imminent death from cancer, he had called me from Tehran to California so we could work on it together. Almost immediately, as it became clear that the cancer was in extended remission he started work on a new book, to be called *Where Angels Fear to Tread*, but often referred to by him as *Angels Fear*. In June 1980 I came out to Esalen, where he was living, having heard that his health was again deteriorating, and he proposed that we collaborate on the new book, this time as coauthors. He died on July 4, without our having had the opportunity to begin work, and after his death I set the manuscript aside while I followed through on other commitments, including the writing of *With a Daughter's Eye* (Morrow, 1984), which was already under way. Now at last, working with the stack of manuscript Gregory left at his death --miscellaneous, unintegrated, and incomplete -- I have tried to make of it the collaboration he intended.

It has not seemed to me urgent to rush this work forward. Indeed, I have been concerned on my own part to respect the warning buried in Gregory's title: not, as a fool, to rush in. The real synthesis of Gregory's work is in *Mind and Nature*, the first of his books composed to communicate with the nonspecialist reader. Steps to an *Ecology of Mind* (Chandler, 1972, and Ballantine, 1975) had brought together the best of Gregory's articles and scientific papers, written for a variety of specialist audiences and published in a multiplicity of contexts, and in the process Gregory became fully aware of the potential for integration. The appearance of *Steps* also demonstrated the existence of an audience eager to approach Gregory's work as a way of thinking, regardless of the historically shifting contexts in which it had first been formulated, and this moved him along to a new synthesis and a new effort of communication.

Where Angels Fear to Tread was to be different. He had become aware gradually that the unity of nature he had affirmed in *Mind and Nature* might only be comprehensible through the kind of metaphors familiar from religion; that, in fact, he was approaching that integrative dimension of experience he called the sacred. This was a matter he approached with great trepidation, partly because he had been raised in a dogmatically atheistic household and partly because he saw the potential in religion for manipulation, obscurantism, and division. The mere use of the word religion is likely to trigger reflexive misunderstanding. The title of the book therefore expresses, among other things, his hesitation and his sense of addressing new questions, questions that follow from and depend upon his previous work but require a different kind of wisdom, a different kind of courage. I feel the same trepidation. This work is a testament but one that passes on a task not to me only but to all those prepared to wrestle with such questions.

In preparing this book, I have had to consider a number of traditions about how to deal with a manuscript left uncompleted at the time of a death. The most obvious and scholarly alternative was that of scrupulously separating our voices, with a footnote or a bracket every time I made an editorial change and a sic every time I refrained when my judgment suggested that a change was needed. However, since it was Gregory's own intention that we complete this manuscript together, I decided not to follow the route of the disengaged editor, so I have corrected and made minor alterations in his sections as needed. The original manuscripts will, of course, be preserved, so that if the work proves to merit that kind of attention, someone someday can write a scholarly monograph about the differences between manuscripts and published text that incorporates the work of us both. I will limit my scrupulosity to the preservation of the sources. After some hesitation, I decided not to supplement the materials Gregory had designated for possible use in this book by drawing extensively on his other writings, but I have made omissions and choices, as Gregory would have. Material that partly duplicates previous publications, however, has often been retained for its contribution to the overall argument.

On the other hand, where my additions or disagreements were truly substantive, I have not been prepared simply to slip them in, writing prose that the reader might mistake for Gregory's own. This would be to return to the role of amanuensis, the role I was cast in for *Mind and Nature*, in which I merged all of my contributions in his, as wives and daughters have done for centuries. The making of this book has itself been a problem of ecology and of epistemology, because Gregory's knowing was embedded in a distinctive pattern of relationship and conversation.

Thus, it seemed important that when I made significant additions, it should be clear that these, right or wrong, were my own. I have chosen to do this partly in the form of inserted sections, set in square brackets, and partly in the form of what Gregory called metalogues. Over a period of nearly forty years, Gregory used a form of dialogue he had developed between "Father" and "Daughter," putting comments and questions into the mouth of a fictionalized "Daughter," asking the perennial question "Daddy, why . . ." to allow himself to articulate his own thinking. Over a period of about twenty years, we actually worked together, sometimes on written texts, sometimes in public dialogue or dialogue within the framework of a larger conference, and sometimes across the massive oak table in the Bateson household, arguing our way towards clarity. The fictional character he had created, who initially incorporated only fragmentary elements of fact in our relationship, grew older, becoming less fictional in two ways: "Daughter" came to resemble me more fully, and at the same time I modeled my own style of interaction with Gregory on hers.

This was a gradual process. Part of the dilemma I faced in deciding how to deal with the materials Gregory left was that he never defined what he was doing in relation to me. He attributed words to a character named "Daughter," words that were sometimes real and sometimes imagined, sometimes plausible and sometimes quite at odds with anything I might have said. Now I have had to deal with an uncompleted manuscript left by him, using my own experience of the occasions we worked together and my understanding of the issues as guides. The lines given to "Father" in these metalogues are sometimes things Gregory said in other contexts, often stories he told repeatedly. But these did not, as conversations, ever occur as presented here. They are just as real – and just as fictional – as the metalogues Gregory wrote himself. Like Gregory, I have found the form sufficiently useful and flexible not to observe stringently his original requirement that each metalogue exemplify its subject matter in its form, but, unlike his metalogues, the ones in this book were not designed to stand separately. Nevertheless, it seems important to emphasize that the father-daughter relationship continues to be a rather precise vehicle for issues that Gregory wanted to address because it functions as a reminder that the conversation is always moving between intellect and emotion, always dealing with relationship and communication, within and between systems. Above all, the metalogues contain the questions and comments I would have raised had we worked on this manuscript together, as well as my best approximation of what Gregory would have said. I have also allowed myself near the end to emerge from the child role of the metalogues and to write in my own present voice. Each section of the book

is labeled "GB" or "MCB," but this should be understood to be very approximate, meaning no more than "primarily GB" or "primarily MCB." The section of Notes on Chapter Sources provides further detail. At the top of the stack of materials Gregory had accumulated for the book was a draft introduction, one of several, that began with this story:

"In England when I was a boy, every railroad train coming in from a long run was inspected by a man with a hammer. The hammer had a very small head and a very long handle, rather like a drumstick, and it was indeed designed to make a sort of music. The man walked down the whole length of the train, tapping every hotbox as he walked. He was testing to find out if any one was cracked and would therefore emit a discordant sound. The integration, we may say, had to be tested again and again. Similarly, I have tried to tap every sentence in the book to test for faults of integration. It was often easier to hear the discordant note of the false juxtaposition than to say for what harmony I was searching."

I only wish that in drafting an introduction Gregory had been describing something he had actually done rather than something he still aspired to do. Gregory was working in an interval of unknown length while his cancer was in remission. He was living at Esalen, an environment where he had warm friendships but not close intellectual collaborations. Even though the "counterculture" has faded in the 1980s, Gregory's occasional references to it provide a clarifying contrast for the shifting population and preoccupations of Esalen underlined his essential alienation. Always, for Gregory, the problem was to get the ideas and the words right, but his life-style in that last period, without a permanent base or a steady source of income, required that he keep on producing, reiterating, and recombining the various elements of his thought as he sang for his supper, but without doing the tuning or making the integration that they needed. It also meant that Gregory, always sparing in his reading, was more cut off than ever before from ongoing scientific work. He combined great and continuing originality with a store of tools and information acquired twenty years earlier. In effect, his groping poses a challenge to readers to make their own creative synthesis, combining his insights with the tools and information available today, advances in cognitive science, molecular biology, and systems theory that are nonetheless still subject to the kinds of muddle and intellectual vulgarity he warned against.

There is no way that I can make this manuscript into what Gregory wanted it to be, and at some level I doubt that Gregory could have done so or that we could have done it together. Certainly what he wanted was still amorphous at the time of his death, the thinking still incomplete. But although the ideas were not yet in full flower, they were surely implicit in the process of growth.

Surely, too, the richest legacy lies in his questions and in his way of formulating questions.

In the autumn after the completion of *Mind and Nature*, living at Esalen, Gregory wrote several poems, one of which seems to me to express what he felt he had attempted in the work just completed, and perhaps an aspiration for the work that lay ahead.

### **25.3.1 The Manuscript**

So there it is in words

Precise

And if you read between the lines

You will find nothing there

For that is the discipline I ask

Not more, not less

Not the world as it is

Nor ought to be –

Only the precision

The skeleton of truth

I do not dabble in emotion

Hint at implications

Evoke the ghosts of old forgotten creeds

All that is for the preacher

The hypnotist, therapist and missionary

They will come after me

And use the little that I said

To bait more traps

For those who cannot bear

The lonely

Skeleton

## of Truth

Because Gregory's manuscript did not yet correspond to this aspiration, I could not read it as the poem commands. It has not been possible for me to avoid reading between the lines -- indeed, that has often been the only way I could proceed. Often, too, working within the context of a metalogue, I have deliberately admitted emotion and evocation. In fact, Gregory's own language was often highly evocative. His ambition was to achieve formalism but as he groped and ruminated, he often relied on less rigorous forms of discourse.

The poem is important here, however, not only for what it asserts about method and style, but because it proposes a context for interpretation. In this poem, Gregory was expressing real caution and irritation. A great many people, recognizing that Gregory was critical of certain kinds of materialism, wished him to be a spokesman for an opposite faction, a faction advocating the kind of attention they found comfortable to things excluded by atomistic materialism: God, spirits, ESP, "the ghosts of old forgotten creeds." Gregory was always in the difficult position of saying to his scientific colleagues that they were failing to attend to critically important matters, because of methodological and epistemological premises central to Western science for centuries, and then turning around and saying to his most devoted followers, when they believed they were speaking about these same critically important matters, that the way they were talking was nonsense.

In Gregory's view, neither group was able to talk sense, for nothing sensible could be said about these matters, given the version of the Cartesian separation of mind and matter that has become habitual in Western thought. Again and again he returns to his rejection of this dualism: mind without matter cannot exist; matter without mind can exist but is inaccessible. Transcendent deity is an impossibility. Gregory wanted to continue to speak to both sides of our endemic dualism, wanted indeed to invite them to adopt a monism, a unified view of the world that would allow for both scientific precision and systematic attention to notions that scientists often exclude.

As Gregory affirmed in his poem, he had a sense of his thinking as skeletal. This is a double claim: on the one hand, it is a claim of formalism and rigor; on the other hand, it is a claim to deal with fundamentals, with what underlies the proliferation of detail in natural phenomena. However, it was not dry bones that he aspired to outline but the functioning framework of life, life that in the widest sense includes the entire living planet throughout its evolution.

In attempting to rethink these issues, Gregory had arrived at a strategy of redefinition, a strategy of taking words like "Love" or "wisdom," "mind" or "the sacred" -- the words for matters that the nonmaterialists feel are important and that scientists often regard as inaccessible to study -- and redefining them by invoking the conceptual tools of cybernetics. In his writing, technical terms occur side by side with the words of ordinary language, but these less daunting words are often redefined in unfamiliar ways. (A glossary has been provided at the end of the book.)

Inevitably, this attracted several kinds of criticism: criticism from those most committed to the orthodoxy of the meaningfulness of these terms, asserting that they are impermissible in scientific discourse; criticism from those committed to other kinds of religious and philosophical orthodoxy, arguing that these terms already have good, established meanings which Gregory failed to understand and respect; and, finally, the criticism that to use a term in an idiosyncratic way or to give it an idiosyncratic definition is a form of rhetorical dishonesty -- one for which Alice taxed Humpty Dumpty.

In fact, Gregory was endeavoring to do with words like "mind" or "love" what the physicists did with words like force, energy, or mass, even though the juxtaposition of a rigorous definition with fuzzy popular usage can be a continual source of problems. It is a pedagogue's trick, counting on the redefined term to be at once memorable and grounded, to be relevant both to general discourse and matters of value. But what is most important to Gregory is that his understanding of such words as "mind" should be framed in precision, able to coexist with mathematical formalism.

The central theme of *Mind and Nature* was that evolution is a mental process. This was shorthand for the assertion that evolution is systemic and that the process of evolution shares key characteristics with other systemic processes, including thought. The aggregate of these characteristics provided Gregory with his own definition for the words "mental" and "mind," words that had become virtually taboo in scientific discourse. This allowed him to emphasize what interested him most about thought and evolution, that they are in an important sense analogous: they share a "pattern which connects," so that a concentration on their similarities will lead to significant new insight with regard to each, particularly the way in which each allows for something like anticipation or purpose. The choice of such a word as "mind" is deliberately evocative,

reminding the reader of the range of issues proposed by these words in the past and suggesting that these are properly matters for passion.

Similarly, Gregory has found a place to stand and speak of "God," somewhere between those who find the word unusable and those who use it all too often to argue positions that Gregory regarded as untenable. Playfully, he proposed a new name for the deity, but in full seriousness he searched for an understanding of the related but more general term "the sacred," moving gingerly and cautiously onto holy ground, "where angels fear to tread." Given what we know about the biological world (that knowledge that Gregory called "ecology," with considerable cybernetic revision of the usage of this term by members of the contemporary biological profession), and given what we are able to understand about "knowing" (what Gregory called "epistemology," again within a cybernetic framework), he was attempting to clarify what one might mean by "the sacred." Might the concept of the sacred refer to matters intrinsic to description, and thus be recognized as part of "necessity"? And if a viable clarity could be achieved, would it allow important new insight? It seems possible that a mode of knowing that attributes a certain sacredness to the organization of the biological world might be, in some significant sense, more accurate and more appropriate to decision making.

Gregory was quite clear that the matters discussed in *Mind and Nature*, the various ways of looking at the biological world and at thought, were necessary preliminaries to the challenge of this present volume, although they are not fully argued here. In this book he approached a set of questions that were implicit in his work over a very long period, again and again pushed back: not only the question of "the sacred," but also the question of "the aesthetic," and the question of "consciousness."

This was a constellation of issues which, for Gregory, needed to be addressed in order to arrive at a theory of action in the living world, a cybernetic ethics, and it is this that I have listened for above all in his drafts. Imagining himself at the moment of completion, Gregory wrote, "It was still necessary to study the resulting sequences and to state in words the nature of their music." This is necessary still, and can in some measure be attempted, for the implicit waits to be discovered, like a still-unstated theorem in geometry, hidden within the axioms. Between the lines? Perhaps. For Gregory did not have time to make sure that the words were complete.

## II. DEFINING THE TASK (GB)

The actual writing of this book has been a research, an exploration step by step into a subject matter whose overall shape became visible only gradually as coherence emerged and discord was eliminated.

It is easier to say what the book is not about than to define the harmony for which I was searching. It is not about psychology or economics or sociology, except insofar as these are chiaroscuro within some larger body of knowledge. It is not exactly about ecology or anthropology. There is the still wider subject called epistemology, which transcends all the others, and it seems that the glimpses of an order higher than that of any of these disciplines have come when I have touched on the fact of anthropological and ecological order.

The book, then, is a comparative study of matters that arise from anthropology and local epistemology. As anthropologists we study the ethics of every people and go on from there to study comparative ethics. We try to see the particular and local ethics of each tribe against a background of our knowledge of ethics in other systems. Similarly it is possible, and begins to be fashionable, to study the epistemology of every people, the structures of knowing and the pathways of computation. From this kind of study it is natural to go on to compare the epistemology implicit in one cultural system with that in other systems.

But what is disclosed when comparative ethics and comparative epistemology are set side by side? And when both are combined with economics? And when all is compared with morphogenesis and comparative anatomy?

Such comparison will inevitably drive the investigator back to the elemental details of what is happening. He must make up his mind about the universal minima of the overlapping of all these fields of study. The minima are not parts of any one field; they are not parts even of behavioral science at all. They are parts, if you will, of necessity. Some are what Saint Augustine called Eternal Verities, others are perhaps what Jung called archetypes. These fundamentals, which must underlie all of our thought, are the subject matter of the next section.

Of course, the anthropologist and the epistemologist, the psychologist and the students of history and economics will all have to deal, each in his or her field of concentration, with every one of these Eternal Verities. But the verities are not the subject matter of any special field and are, indeed, commonly concealed and avoided by the concentration of attention upon the problems proper to each specialized field.

Many before me, aware of these higher levels of order and organization and sense, including Saint Augustine himself, have attempted to share their discoveries with those who came after. There is a vast literature of

such sharing. In particular, every one of the great religions has contributed texts to the unraveling of these matters -- or sometimes to their further obfuscation.

Again, many of the contributions of the past have been made within the historically unique context of science, and yet today the intellectual preoccupation with quantity, the artificiality of experiment, and the dualism of Descartes combine to make these matters even more difficult of access than they have been heretofore. Science, for good reason, is impatient of muddled definitions and foggy confusions of logical typing, but in attempting to avoid these dangers, it has precluded discussion of matters of first -- indeed of primary -- importance.

It is, alas, too true, however, that muddleheadedness has helped the human race to find "God." Today, in any Christian, Buddhist, or Hindu sermon, you are likely to hear the mystic's faith extolled and recommended for reasons that should raise the hackles of any person undrugged and un hypnotized. No doubt the discussion of high orders of regularity in articulate language is difficult, especially for those who are untrained in verbal precision, so they may be forgiven if they take refuge in the cliché "Those who talk don't know, and those who know don't talk." If the cliché were true, it would follow that all the vast and often beautiful mystical literature of Hinduism, Buddhism, Taoism, and Christianity must have been written by persons who did not know what they were writing about.

Be that as it may, I claim no originality, only a certain timeliness. It cannot now be wrong to contribute to this vast literature. I claim not uniqueness but membership in a small minority who believe that there are strong and clear arguments for the necessity of the sacred, and that these arguments have their base in an epistemology rooted in improved science and in the obvious. I believe that these arguments are important at the present time of widespread skepticism -- even that they are today as important as the testimony of those whose religious faith is based on inner light and "cosmic" experience. Indeed, the steadfast faith of an Einstein or a Whitehead is worth a thousand sanctimonious utterances from traditional pulpits.

In the Middle Ages, it was characteristic of theologians to attempt a rigor and precision that today characterize only the best science. The *Summa theologica* of Saint Thomas Aquinas was the thirteenth-century equivalent of today's textbooks of cybernetics. Saint Thomas divided all created things into four classes: (a) those which just are -- as stones; (b) those which are and live -- as plants; (c) those which are and live and move -- as animals; and (d) those which are and live and move and think -- as men. He knew no cybernetics and (unlike Augustine) he was no mathematician, but we can immediately recognize here a prefiguring of some classification of entities based upon the number of logical types represented in their self-corrective and recursive loops of adaptation.

Saint Thomas's definition of Deadly Sin is marked with the same latent sophistication. A sin is recognized as "deadly" if its commission promotes further committing of the same sin by others, "in the manner of a final cause." (I note that, according to this definition, participation in an armaments race is among the sins that are deadly.) In fact, the mysterious "final causes" of Aristotle, as interpreted by Saint Thomas, fit right in with what modern cybernetics calls positive feedback, providing a first approach to the problems of purpose and causality [especially when causality appears not to flow with the flow of time].

One wonders whether later theology was not in many ways less sophisticated than that of the thirteenth century. It is as if the thought of Descartes (1596-1650), especially the dualism of mind and matter, the cogito, and the Cartesian coordinates, were the climax of a long decadence. The Greek belief in final causes was crude and primitive, but it seemingly left the way open for a monistic view of the world, a way that later ages closed and finally buried by the dualistic separation of mind and matter, [which set many important and mysterious phenomena outside of the material sphere that could be studied by science, leaving mind separate from body and God outside of the creation and both ignored by scientific thinking].<sup>1</sup>

For me, the Cartesian dualism was a formidable barrier, and it may amuse the reader to be told how I achieved a sort of monism -- the conviction that mind and nature form a necessary unity, in which there is no mind separate from body and no god separate from his creation and how, following that, I learned to look with new eyes at the integrated world. That was not how I was taught to see the world when I began work. The rules then were perfectly clear: in scientific explanation, there should be no use of mind or deity, and there should be no appeal to final causes. All causality should flow with the flow of time, with no effect of the future upon the present or the past. No deity, no teleology, and no mind should be postulated in the universe that was to be explained.

This very simple and rigorous creed was a standard for biology that had dominated the biological scene for 150 years. This particular brand of materialism had become fanatical following the publication of William Paley's *Evidences of Christianity* (in 1794, fifteen years before Lamarck's *Philosophie zoologique* and sixty-five years before *On the Origin of Species*). To mention "mind" or "teleology" or the "inheritance of acquired

characters" was heresy in biological circles in the first forty years of the present century. And I am glad I learned that lesson well.

So well that I even wrote an anthropological book, *Naven*,<sup>2</sup> within the orthodox antiteleological frame, but, of course, the rigorous limitation of the premises had the effect of displaying their inadequacy. It was clear that upon those premises the culture could never be stable but would go into escalating change to its own destruction. That escalation I called schismogenesis and I distinguished two principal forms it might take, but I could not in 1936 see any real reason why the culture had survived so long, [or how it could include self-corrective mechanisms that anticipated the danger]. Like the early Marxists, I thought that escalating change must always lead to climax and destruction of the status quo.

I was ready then for cybernetics when this epistemology was proposed by Norbert Wiener, Warren McCulloch, and others at the famous Macy Conferences. Because I already had the idea of positive feedback (which I was calling schismogenesis), the ideas of self-regulation and negative feedback fell for me immediately into place. I was off and running with paradoxes of purpose and final cause more than half-resolved, and aware that their resolution would require a step beyond the premises within which I had been trained.

In addition, I went to the Cybernetics Conferences with another notion which I had developed during World War II and which turned out to fit with a central idea in the structure of cybernetics. This was the recognition of what I called deutero-learning, or learning to learn.<sup>3</sup>

I had come to understand that "learning to learn" and "learning to deal with and expect a given kind of context for adaptive action" and "character change due to experience" are three synonyms for a single genus of phenomena, which I grouped together under the term deutero-learning. This was a first mapping of behavioral phenomena onto a scheme closely related to Bertrand Russell's hierarchy of logical types<sup>4</sup> and, like the idea of schismogenesis, was easily attuned to the cybernetic ideas of the 1940s. [The Principia of Russell and Whitehead provided a systematic way of handling logical hierarchies such as the relationship between an item, the class of items to which it belongs, and the class of classes. The application of these ideas to behavior laid the groundwork for thinking about how, in learning, experience is generalized to some class of contexts, and about the way in which some messages modify the meaning of others by labeling them as belonging to particular classes of messages.]

The significance of all this formalization was made more evident in the 1960s by a reading of Carl Jung's *Seven Sermons to the Dead*, of which the Jungian therapist Jane Wheelwright gave me a copy.<sup>5</sup> I was at the time writing a draft of what was to be my Korzybski Memorial Lecture <sup>6</sup> and began to think about the relation between "map" and "territory." Jung's book insisted upon the contrast between Pleroma, the crudely physical domain governed only by forces and impacts, and Creatura, the domain governed by distinctions and differences. It became abundantly clear that the two sets of concepts match and that there could be no maps in Pleroma, but only in Creatura. That which gets from territory to map is news of difference, and at that point I recognized that news of difference was a synonym for information.

When this recognition of difference was put together with the clear understanding that Creatura was organized into circular trains of causation, like those that had been described by cybernetics, and that it was organized in multiple levels of logical typing, I had a series of ideas all working together to enable me to think systematically about mental process as differentiated from simple physical or mechanistic sequences, without thinking in terms of two separate "substances." My book *Mind and Nature: A Necessary Unity* combined these ideas with the recognition that mental process and biological evolution are necessarily alike in these Creatural characteristics.

The mysteries that had challenged biology up to the epoch of cybernetics were, in principle, no longer mysterious, though, of course, much remained to be done. We now had ideas about the general nature of information, purpose, stochastic process, thought, and evolution, so that at that level it was a matter of working out the details of particular cases.

In place of the old mysteries, a new set of challenges emerged. This book is an attempt to outline some of these, [in particular, to explore the way in which, in a nondualistic view of the world, a new concept of the sacred emerges]. It is intended to begin the task of making the new challenges perceptible to the reader and perhaps to give some definition to the new problems. Further than that I do not expect to go. It took the world 2,500 years to resolve the problems that Aristotle proposed and Descartes compounded. The new problems do not appear to be easier to solve than the old, and it seems likely that my fellow scientists will have their work cut out for them for many years to come.

The title of the present book is intended to convey a warning. It seems that every important scientific advance provides tools which look to be just what the applied scientists and engineers had hoped for, and usually these gentry jump in without more ado. Their well-intentioned (but slightly greedy and slightly

anxious) efforts usually do as much harm as good, serving at best to make conspicuous the next layer of problems, which must be understood before the applied scientists can be trusted not to do gross damage. Behind every scientific advance there is always a matrix, a mother lode of unknowns out of which the new partial answers have been chiseled. But the hungry, overpopulated, sick, ambitious, and competitive world will not wait, we are told, till more is known, but must rush in where angels fear to tread.

I have very little sympathy for these arguments from the world's "need." I notice that those who pander to its needs are often well paid. I distrust the applied scientists' claim that what they do is useful and necessary. I suspect that their impatient enthusiasm for action, their rarin'-to-go, is not just a symptom of impatience, nor is it pure buccaneering ambition. I suspect that it covers deep epistemological panic.

1 Square brackets indicate an insert by MCB. [Back to text]

2 Naven: A Study of the Culture of a New Guinea Tribe from Three Points of View (Cambridge, England: Cambridge UP, 1936). 2d ed., with additional "Epilogue 1958" (Stanford, Calif.: Stanford UP, 1958). [Back to text]

3 See C. Bateson, "Social Planning and the Concept of Deutero-Learning," Steps, 159-76 (Chandler ed.), and elsewhere. [Back to text]

4 Alfred North Whitehead and Bertrand Russell, Principia Mathematica, 3 vols., 2d ed. (Cambridge, England: Cambridge UP, 1910-13). [Back to text]

5 Carl Gustav Jung's Septem Sermones ad Mortuos was privately published in 1916. There has been a more recent British edition (Stuart and Watkins, 1967), but the work is most accessible as a supplement to some editions of Memories, Dreams, Reflections, ed. Aniela Jaffe (New York: Pantheon, 1966 and later editions only). [Back to text]

6 See my essay "Form, Substance and Difference," in Steps, 454-71 (Chandler ed.). [Back to text]

II

The World of Mental Process (GB)

III

Metalogue: Why Do You Tell Stories? (MCB)

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## 25.4 II The World of Mental Process (GB)

BEFORE we proceed further, I want to elaborate on the contrast made by Carl Gustav Jung I between *Creatura* and *Pleroma*. This will give us an alternative starting point for epistemology, one that will be a much healthier first step than the separation of mind from matter attributed to René Descartes. In place of the old Cartesian dualism, which proposed mind and matter as distinct substances, I want to talk about the nature of mental process, or thought, in the widest sense of that word, and the relationship between "thought" and the material world.

I am going to include within the category mental process a number of phenomena which most people do not think of as processes of thought. For example, I shall include the processes by which you and I achieve our anatomy – the injunctions, false starts and self-corrections, obedience to circumstance, and so on, by which the differentiation and development of the embryo is achieved. "Embryology" is for me a mental process. And I shall also include the still more mysterious processes by which it comes about that the formal relations of our anatomy are recognizable in the anthropoid ape, the horse, and the whale – what zoologists call homology – i.e. along with embryology I shall include evolution within the term "mental process."

Along with those two big ones – biological evolution and embryology – I include all those lesser exchanges of information and injunction that occur inside organisms and between organisms and that, in the aggregate, we call life.

In fact, wherever information – or comparison – is of the essence of our explanation, there, for me, is mental process. Information can be defined as a difference that makes a difference. A sensory end organ is a comparator, a device which responds to difference. Of course, the sensory end organ is material, but it is this responsiveness to difference that we shall use to distinguish its functioning as "mental." Similarly, the ink on this page is material, but the ink is not my thought. Even at the most elementary level, the ink is not signal or message. The difference between paper and ink is the signal.

It is, of course, true that our explanations, our textbooks dealing with nonliving matter, are full of information. But this information is all ours; it is part of our life processes. The world of nonliving matter, the *Pleroma*, which is described by the laws of physics and chemistry, itself contains no description. A stone

does not respond to information and does not use injunctions or information or trial and error in its internal organization. To respond in a behavioral sense, the stone would have to use energy contained within itself, as organisms do. It would cease to be a stone. The stone is affected by "forces" and "impacts," but not by differences.

I can describe the stone, but it can describe nothing. I can use the stone as a signal – perhaps as a landmark. But it is not the landmark.

I can give the stone a name; I can distinguish it from other stones. But it is not its name, and it cannot distinguish.

It uses and contains no information.

"It" is not even an it, except insofar as I distinguish it from the remainder of inanimate matter.

What happens to the stone and what it does when nobody is around is not part of the mental process of any living thing. For that it must somehow make and receive news.

You must understand that while Pleroma is without thought or information, it still contains – is the matrix of – many other sorts of regularities. Inertia, cause and effect, connection and disconnection, and so on, these regularities are (for lack of a better word) immanent in Pleroma. Although they can be translated (again for lack of a better word) into the language of *Creatura* (where alone language can exist), the material world still remains inaccessible, the Kantian Ding an sich which you cannot get close to. We can speculate – and we have speculated very carefully and very creatively about it – but in the end, at the last analysis, everything we say about Pleroma is a matter of speculation, and such mystics as William Blake, for example, frankly deny its existence.

In summary then, we will use Jung's term Pleroma as a name for that unliving world described by physics which in itself contains and makes no distinctions, though we must, of course, make distinctions in our description of it.

In contrast, we will use *Creatura* for that world of explanation in which the very phenomena to be described are among themselves governed and determined by difference, distinction, and information.

[Although there is an apparent dualism in this dichotomy between *Creatura* and Pleroma, it is important to be clear that these two are not in any way separate or separable, except as levels of description. On the one hand, all of *Creatura* exists within and through Pleroma; the use of the term *Creatura* affirms the presence of certain organizational and communicational characteristics which are themselves not material. On the other hand, knowledge of Pleroma exists only in *Creatura*. We can meet the two only in combination, never separately. The laws of physics and chemistry are by no means irrelevant to the *Creatura* – they continue to apply – but they are not sufficient for explanation. Thus, *Creatura* and Pleroma are not, like Descartes' "mind" and "matter," separate substances, for mental processes require arrangements of matter in which to occur, areas where Pleroma is characterized by organization which permits it to be affected by information as well as by physical events.

[We can move on from the notion of mental process to ask, what, then, is "a mind"? And if this is a useful notion, can one usefully make a plural and speak of "minds" which might engage in interactions which are in turn mental? The characterization of the notion of "a mind" was one of the central thrusts of Mind and Nature, where a series of criteria were laid out for the identification of "minds." The definition anchors the notion of a mind firmly to the arrangement of material parts:

1. A mind is an aggregate of interacting parts or components.
2. The interaction between parts of mind is triggered by difference.
3. Mental process requires collateral energy.
4. Mental process requires circular (or more complex) chains of determination.
5. In mental process, the effects of difference are to be regarded as transforms (i.e. coded versions) of events which preceded them.
6. The description and classification of these processes of transformation disclose a hierarchy of logical types immanent in the phenomena. 2

[If you consider these criteria, you will recognize that they fit a number of complex entities that we are used to talking about and investigating scientifically, such as animals and persons and, in fact, all organisms. They also apply to parts of organisms that have a degree of autonomy in their self-regulation and functioning: individual cells, for instance, and organs. Then, you can go on to notice that there is no requirement of a clear boundary, like a surrounding envelope of skin or membrane, and you can recognize that this definition includes only some of the characteristics of what we call "life." As a result, it applies to a much wider range of those complex phenomena called "systems," including systems consisting of multiple organisms or systems in which some of the parts are living and some are not, or even to systems in which there are no living parts. What is described here is a something that can receive information and can, through the self-

regulation or self-correction made possible by circular trains of causation, maintain the truth of certain propositions about itself. These two provide the rudiments of identity – unlike the stone, the mind we are describing is an "it." There is, however, no reason to assume that it will be either conscious or capable of self-replication, like some of the minds we count among our friends and relatives. A given mind is likely to be a component or subsystem in some larger and more complex mind, as an individual cell may be a component in an organism or a person may be a component in a community. The world of mental process opens into a self-organizing world of Chinese boxes in which information generates further information.

[This book is above all concerned with certain characteristics of the interface between Pleroma and Creatura and also with interfaces between different kinds of mental subsystems, including relations between persons and between human communities and ecosystems. We will be especially concerned with the way in which our understanding of such interfaces underlies epistemology and religion, bearing in mind that because what is is identical for all human purposes with what can be known, there can be no clear line between epistemology and ontology.]

When we distinguish Creatura from Pleroma by some first, primary act of distinguishing, we are founding the science of Epistemology, rules of thought. And our Epistemology is a good epistemology insofar as the regularities of Pleroma can be correctly, appropriately translated in our thought, and insofar as our understanding of Creatura, namely of all of embryology, biological evolution, ecology, thought, love and hate, and human organization – all of which require rather different kinds of description than those we use in describing the inanimate material world can grow and sit on top of (can be comfortably deductive from) that primary step in Epistemology.

I think that Descartes' first epistemological steps – the separation of "mind" from "matter" and the cogito – established bad premises, perhaps ultimately lethal premises, for Epistemology, and I believe that Jung's statement of connection between Pleroma and Creatura is a much healthier first step. Jung's epistemology starts from comparison of difference – not from matter.

So I will define Epistemology as the science that studies the process of knowing – the interaction of the capacity to respond to differences, on the one hand, with the material world in which those differences somehow originate, on the other. We are concerned then with an interface between Pleroma and Creatura.

There is a more conventional definition of epistemology, which simply says that epistemology is the philosophic study of how knowledge is possible. I prefer my definition – how knowing is done – because it frames Creatura within the larger total, the presumably lifeless realm of Pleroma; and because my definition bluntly identifies Epistemology as the study of phenomena at an interface and as a branch of natural history.

Let me begin this study by mentioning a basic characteristic of the interface between Pleroma and Creatura, which will perhaps help to define the direction of my thinking. I mean the universal circumstance that the interface between Pleroma and Creatura is an example of the contrast between "map" and "territory" – is, I suppose, the primary and most fundamental example. This is the old contrast to which Alfred Korzybski 3 long ago called attention, and it remains basic for all healthy epistemologies and basic to Epistemology.

Every human individual – every organism – has his or her personal habits of how he or she builds knowledge, and every cultural, religious, or scientific system promotes particular epistemological habits. These individual or local systems are indicated here with a small e. Warren McCulloch used to say that the man who claimed to have direct knowledge – i.e. no epistemology – had a bad one.

It is the task of anthropologists to achieve comparisons between the many and diverse systems and perhaps to evaluate the price that muddled systems pay for their errors. Most local epistemologies – personal and cultural – continually err, alas, in confusing map with territory and in assuming that the rules for drawing maps are immanent in the nature of that which is being represented in the map.

All of the following rules of accurate thought and communication apply to the properties of maps, that is, to mental process, for in the Pleroma there are no maps, no names, no classes, and no members of classes.

The map is not the territory

The name is not the thing named.

The name of the name is not the name.

(You remember the White Knight and Alice? Alice is rather tired of listening to songs and, offered yet another, she asks its name. "The name of the song is called 'Haddock's Eyes,' " says the White Knight. "That's the name of the song, is it?" says Alice. "No, you don't understand," says the White Knight, "that's not the name of the song, that's what the name is called."4)

The item in the class is not the class (even when the class has only one item).

The class is not a member of itself.

Some classes have no members. (If, for example, I say, "I never read the small print," there is no class of events consisting of my reading the small print.)

In the *Creatura*, all is names, maps, and names of relations – but still the name of the name is not the name, and the name of the relation is not the relation – even when the relation between A and B is of the kind we denote by saying that A is the name of B.

These constraints are Eternal. They are necessarily true, and to recognize them gives something resembling freedom – or shall we say that it is a necessary condition of skill. It will be interesting to compare them with other basic components of Epistemology such as Saint Augustine's Eternal Verities or Jung's archetypes, and see where these fall in relation to the interface.

Now, Saint Augustine was not only a theologian, he was also a mathematician. He lived in Hippo in North Africa and was probably more Semite than Indo-European, which means in the present context that he may very well have been quite at home in algebraic thought. It was, I gather, the Arabs who introduced the concept "any" into mathematics, thus creating algebra, for which we still use an Arabic word.

These verities were rather simple propositions, and here I quote Warren McCulloch,<sup>5</sup> to whom I owe much: "Listen to the thunder of that saint, in almost A.D. 500: 'Seven and three are ten; seven and three have always been ten; seven and three at no time and in no way have ever been anything but ten; seven and three will always be ten. I say that these indestructible truths of arithmetic are common to all who reason.' "

Saint Augustine's Eternal Verities were crudely or bluntly stated, but I think the saint would go along with the more modern versions: e.g. that the equation

$$x + y = z$$

is soluble, and uniquely soluble -- there is only one solution -- for all values of x and y, provided that we agree on the steps and tricks which we must use. If "quantities" are appropriately defined and if "addition" is appropriately defined, then  $x + y = z$  is uniquely soluble. And z will be of one substance with x and y.

But, oh my, what a long step it is from the blunt statement "Seven plus three equals ten" to our cautious generalization hedged with definitions and conditions. We have in a certain sense pulled the whole of arithmetic over the line that was to divide *Creatura* from *Pleroma*. That is, the statement no longer has the flavor of naked truth and instead is clearly an artifact of human thought, indeed of the thought of particular humans at particular times and places.

Is it then so, that Saint Augustine's Eternal Verities are only spin-offs from peculiar ideas or customs cherished at various times by various human cultural systems?

I am an anthropologist by trade and training, and ideas of cultural relativity are a part of anthropological orthodoxy . . . but how far can cultural relativity go? What can the cultural relativist say about the Eternal Verities? Does not arithmetic have roots in the unchanging, solid rock of *Pleroma*? And how can we talk about such a question?

Is there then such a subject of inquiry as Epistemology, with a capital E? Or is it all a matter of local and even personal epistemologies, any one of which is as good, as right, as any other?

These are the kinds of questions that arise when we try to survey the interface between *Pleroma* and *Creatura*, and it is clear that arithmetic somehow lies very close to that line.

But do not dismiss such questions as "abstract" or "intellectual," and therefore meaningless. For these abstract questions will lead us to some very immediately human matters. What sort of question are we asking when we say, "What is heresy?" or "What is a sacrament?" These are deeply human questions – matters of life and death, sanity and insanity, to millions of people – and the answers (if any) are concealed in the paradoxes generated by the line between *Creatura* and *Pleroma* . . . the line which the Gnostics, Jung, and I would substitute for the Cartesian separation of mind from matter . . . the line that is really a bridge or pathway for messages.

Is it possible to be Epistemologically wrong? Wrong at the very root of thought? Christians, Moslems, Marxists (and many biologists) say yes – they call such error "heresy" and equate it with spiritual death. The other religions – Hinduism, Buddhism, the more frankly pluralistic religions – seem to be largely unaware of the problem. The possibility of Epistemological error does not enter their epistemology. And today in America it is almost heresy to believe that the roots of thought have any importance, and it is undemocratic to excommunicate a man for Epistemological errors. If religions are concerned with Epistemology, how shall we interpret the fact that some have the concept of "heresy" and some do not?

I believe that the story goes back to the most sophisticated religion that the world has known – that of the Pythagoreans. Like Saint Augustine, they knew that Truth has some of its roots (not all) in numerology, in numbers. The history is obscure, probably because it is difficult for us to see the world through Pythagorean eyes, but it seems to be something like this: Egyptian mathematics was pure arithmetic and always particular, never making the jump from "seven and three are ten" to "x plus y equals z." Their mathematics contained no deductions and no proofs as we would understand the term. The Greeks had proofs from about the fifth century B.C., but it seems that mere deduction is a toy until the discovery of proof of an impossibility by

reductio ad absurdum. The Pythagoreans had a whole string of theorems (which are not taught in schools today) about the relations between odd and even numbers. The climax of this study was the proof that the isosceles right triangle, with sides of unit length, is insoluble – that  $\sqrt{2}$  cannot be either an odd or an even number, and therefore cannot be a number or be expressed as a ratio between two numbers.<sup>6</sup>

This discovery hit the Pythagoreans squarely between the eyes and became a central secret (but why secret?), an esoteric tenet of their faith. Their religion had been founded on the discontinuity of the series of musical harmonies – the demonstration that that discontinuity was indeed real and was firmly founded upon rigorous deduction.

And now they faced an impossibility proof. Deduction had said no.

As I read the story, from then on it was inevitable to "believe," to "see" and "know" that a contradiction among the higher generalizations will always lead to mental chaos. From this point on, the idea of heresy, the notion that to be wrong in Epistemology could be lethal, was inevitable.

All this sweat and tears – and even blood – was to be shed on quite abstract propositions whose Truth seemed to lie, in some sense, outside the human mind.

As I see it, the propositions that Augustine and Pythagoras were interested in and which Augustine called Eternal Verities are, in a sense, latent in Pleroma – only waiting to be labeled by some scientist. If, for example, a man is pouring lentils or grains of sand from one container into another, he is not aware of any numbering of the units, but still within the crowd of lentils or grains it is true – or would be true if somebody got in there and did some counting (perhaps the ghost of Bishop Berkeley might be willing to do it for us, just to make sure that the truth is still the same when we are not there) – that seven plus three equals ten among the lentils.

In this sense there is a whole slew of regularities out there in Pleroma, unnamed, ready to be picked up. But the distinctions and differences that would be used in an analysis have not been drawn, in the absence of organisms to whom the differences can make a difference. (Bishop Berkeley always forgot the grass and the squirrels in the woods, for whom the falling tree made a meaningful sound!)

I want to make very clear the contrast between Pleromatic regularities and those regularities that exist inside mental and organized systems the necessary limitations and patterns of mental process such as those of coding and logical typing.

McCulloch's famous double question: "What is a number that a man may know it: and what is a man that he may know a number?"<sup>7</sup> takes on a very different coloring, presents new difficulties, when we substitute some archetype for the utterly impersonal concept "number." The Jungian archetypes have a certain claim to transcend the purely local, but they belong squarely in the realm of Creatura.

What is a father that a man, a woman, or a child may know him; and what is a man, or woman, or child, that he or she may know a father?

Let me offer you an example, what in field anthropology we would call a native text -- a crucial cultural utterance:

Our Father which art in heaven,  
Hallowed be thy name.

The epistemology latent in that text is enough to keep us busy for a long while.

The words themselves are sanctified -- hallowed, to use their own idiom--by the gospel narrative (Matt. 6:9), according to which Jesus recommended this prayer to his disciples for myriad repetition. In every Christian ceremony, these words are in a strange way the rock upon which the whole structure stands -- the words are the familiar theme to which the ritual continually returns, not as to a logical premise but rather as music returns to a theme or phrase from which it is built.

For while the quasi-Pleromatic verities of Augustine and Pythagoras have roots in logic or mathematics, we are now looking at something different.

"Our Father ..."

This is the language of metaphor, and a very strange language it is.

First we need some contrasting data to show that we are in the realm of epistemology with a small e. (If you would seek for an absolute Epistemology among the metaphors, you must go one or perhaps two stones higher-- straight on and up the stairs...)

In Bali, when a shaman, or balian, goes into a state of altered consciousness, he or she speaks with the voice of a god, using the pronouns appropriate to the god, and so on. And when this voice addresses ordinary adult mortals, it will call them "Papa" or "Mama." For the Balinese think of the relationship between gods and people as between children and parents, and in this relationship it is the gods who are the children and the people who are the parents.

The Balinese do not expect their gods to be responsible. They do not feel cheated when the gods are capricious. Indeed, they enjoy minor caprice and charm as these are exhibited by gods temporarily incarnate in shamans. How unlike our dear Job!

This particular metaphor, then, between fatherhood and godhead, is by no means eternal or universal. In other words, the "logic" of metaphor is something very different from the logic of the verities of Augustine and Pythagoras. Not, you understand, "wrong," but totally different. [It may be, however, that while particular metaphors are local, the process of making metaphor has some wider significance -- may indeed be a basic characteristic of *Creatura*.]

Let me point up the contrast between the truths of metaphor and the truths that the mathematicians pursue by a rather violent and inappropriate trick. Let me spell out metaphor into syllogistic form: Classical logic named several varieties of syllogism, of which the best known is the "syllogism in Barbara." It goes like this:

Men die;

Socrates is a man;

Socrates will die.

The basic structure of this little monster -- its skeleton -- is built upon classification. The predicate ("will die") is attached to Socrates by identifying him as a member of a class whose members share that predicate.

The syllogisms of metaphor are quite different, and go like this:

Grass dies;

Men die;

Men are grass.

[In order to talk about this kind of syllogism and compare it to the "syllogism in Barbara," we can nickname it the "syllogism in grass."] I understand that teachers of classical logic strongly disapprove of this way of arguing and call it "affirming the consequent," and, of course, this pedantic condemnation is justified if what they condemn is confusion between one type of syllogism and the other. But to try to fight all syllogisms in grass would be silly because these syllogisms are the very stuff of which natural history is made. When we look for regularities in the biological world, we meet them all the time.

Von Domarus long ago pointed out that schizophrenics commonly talk and act in terms of syllogisms in grass,<sup>8</sup> and I think he, too, disapproved of this way of organizing knowledge and life. If I remember rightly, he does not notice that poetry, art, dream, humor, and religion share with schizophrenia a preference for syllogisms in grass.

But whether you approve or disapprove of poetry, dream, and psychosis, the generalization remains that biological data make sense -- are connected together -- by syllogisms in grass. The whole of animal behavior, the whole of repetitive anatomy, and the whole of biological evolution -- each of these vast realms is within itself linked together by syllogisms in grass, whether the logicians like it or not.

It's really very simple -- in order to make syllogisms in Barbara, you must have identified classes, so that subjects and predicates can be differentiated. But, apart from language, there are no named classes and no subject-predicate relations. Therefore, syllogisms in grass must be the dominant mode of communicating interconnection of ideas in all preverbal realms.

I think the first person who actually saw this clearly was Goethe, who noted that if you examine a cabbage and an oak tree, two rather different sorts of organisms but still both flowering plants, you would find that the way to talk about how they are put together is different from the way most people naturally talk. You see, we talk as if the *Creatura* were really Pleromatic: we talk about "things," notably leaves or stems, and we try to determine what is what. Now Goethe discovered that a "leaf" is defined as that which grows on a stem and has a bud in its angle; what then comes out of that angle (out of that bud) is again a stem. The correct units of description are not leaf and stem but the relations between them.

These correspondences allow you to look at another flowering plant -- a potato, for instance -- and recognize that the part that you eat in fact corresponds to a stem.

In the same way, most of us were taught in school that a noun is the name of a person, place, or thing, but what we should have been taught is that a noun can stand in various kinds of relationship to other parts of the sentence, so that the whole of grammar could be defined as relationship and not in terms of things. This naming activity, which probably other organisms don't indulge in, is in fact a sort of Pleromatizing of the living world. And observe that grammatical relationships are of the preverbal kind. "The ship struck a reef" and "I spanked my daughter" are tied together by grammatical analogy.

I went to see the nice little pack of wolves in Chicago at the Brookfield Zoo, ten of them lying asleep all day and the eleventh one, the dominant male, busily running around keeping track of things. Now what wolves do is to go out hunting and then come home and regurgitate their food to share with the puppies who weren't along on the hunt. And the puppies can signal the adults to regurgitate. But eventually the adult wolves wean

the babies from the regurgitated food by pressing down with their jaws on the backs of the babies' necks. In the domestic dog, females eventually wean their young from milk in the same way. In Chicago they told me that the previous year one of the junior males had succeeded in mounting a female. Up rushed the lead male -- the alpha animal -- but instead of mayhem all that happened was that the leader pressed the head of the junior male down to the ground in the same way, once, twice, four times, and then walked off. The communication that occurred was metaphoric: "You puppy, you! " The communication to the junior wolf of how to behave is based on a syllogism in grass.

But let us go back to the Lord's Prayer:

Our Father which art in heaven,  
Hallowed be thy name.

Of course, my assertion that all preverbal and nonverbal communication depends upon metaphor and/or syllogisms in grass does not mean that all verbal communication is -- or should be -- logical or nonmetaphoric. Metaphor runs right through *Creatura*, so, of course, all verbal communication necessarily contains metaphor. And metaphor when it is dressed in words has added to it those characteristics that verbalism can achieve: the possibility of simple negation (there is no not at the preverbal level), the possibility of classification, of subject-predicate differentiation, and the possibility of explicit context marking.

Finally there is the possibility, with words, of jumping right out of the metaphoric and poetic mode into simile. What Vaihinger called the as if mode of communication becomes something else when the as if is added. In a word, it becomes prose, and then all the limitations of the syllogisms that logicians prefer, Barbara and the rest, must be precisely obeyed.

The Lord's Prayer might then become:

It is as if you or something were alive and personal and if that were so, it would perhaps be appropriate to talk to you in words. So, although, of course, you are not a relative of mine, since you only as if exist and are, as it were, in another plane (in heaven), etc....

And you know, in human ethnography, the creativeness of human minds is capable of that extreme, and most surprisingly, that extreme can itself constitute a religion -- among behaviorists for example. In a currently fashionable metaphor, the right hemisphere can applaud (and be reassured in) the prosy, cautious logic of the left.

The very act of translation -- from grass to Barbara, from metaphor to simile, and from poetry to prose -- can itself become sacramental, a sacred metaphor for a particular religious stance. Cromwell's troops could run around England, breaking the noses and even heads and genitals off the statues in the churches, in a religious fervor, simultaneously stressing their own total misunderstanding of what the metaphoric-sacred is all about. I used to say -- have said many times -- that the Protestant interpretation of the words "This is my Body -- This is my Blood" substitutes something like "This stands for my Body -- This stands for my Blood." This way of interpretation banished from the Church that part of the mind that makes metaphor, poetry, and religion -- the part of the mind that most belonged in Church -- but you cannot keep it out. There is no doubt that Cromwell's troops were making their own (horrible) poetry by their acts of vandalism-in which indeed they smashed the metaphoric genitals as if they were "real" in a left brain sense --

What a mess. But nonetheless, we cannot simply discard the logic of metaphor and the syllogism in grass, for the syllogism in Barbara would be of little use in the biological world until the invention of language and the separation of subjects from predicates. In other words, it looks as though until 100.000 years ago, perhaps at most 1.000.000 years ago, there were no Barbara syllogisms in the world, and there were only Bateson's kind, and still the organisms got along all right. They managed to organize themselves in their embryology to have two eyes, one on each side of a nose. They managed to organize themselves in their evolution so there were shared predicates between the horse and the man, which zoologists today call homology. It becomes evident that metaphor is not just pretty poetry, it is not either good or bad logic, but is in fact the logic upon which the biological world has been built, the main characteristic and organizing glue of this world of mental process that I have been trying to sketch for you.

1 In *Septem Sermones ad Mortuos*. In later works, e.g. in *Answer to Job*, Jung uses these words in such a way as to include his archetypes within *Pleroma*. I believe that this latter usage is more in step with classical and medieval thought, but I also believe that Jung's earlier way of talking provides a clearer base for epistemology. [Back to text]

2 p. 92. [Back to text]

3 *Science and Sanity* (New York: Science P, 1941). [Back to text]

4 Lewis Carroll, *Alice Through the Looking Glass* (New York: New American Library, 1960), 212. GB here uses the example from Alice to make a transition from Korzybski to the theory of logical types. [Back to text]

5 Warren McCulloch, *Embodiments of Mind* (Cambridge, Mass.: MIT P, 1965), 3. [Back to text]

6 Gregory seems to have become interested in this material as the result of an article by Curtis Wilson, "On the Discovery of Deductive Science," *The St. John's Review* (January 1980): 21-31. [Back to text]

7 *Embodiments of Mind*, 1-18 [Back to text]

8 E. von Domarus, "The Specific Laws of Logic in Schizophrenia," *Language and Thought in Schizophrenia*, ed. J. S. Kasanin (Berkeley: U of California P, 1944). GB developed these ideas in response to criticism by Nick Humphrey ("New Ideas, Old Ideas") *The London Review of Books*, 6 December 1979) of the argument of Mind and Nature, which may be said to have the following structure:

Evolution is stochastic (able to achieve novelty by a

combination of random and selective processes);

Mental process (such as thought) is stochastic;

Evolution is a mental process. [Back to text]

### **25.5 III Metalogue: Why Do You Tell Stories? (MCB)**

DAUGHTER: Daddy, why do you talk about yourself so much?

FATHER: When we are talking, you mean? I'm not sure that I do. Certainly there is a lot about myself that never comes up.

DAUGHTER: That's right, but you tell the same stories again and again.

For instance, you presented your epistemology for the introduction by telling how you arrived at it, and now you've been telling about going to the zoo in Chicago. And I've heard you tell a hundred times about going to the San Francisco Zoo and watching the otters at play, but you never talk about what you played with as a child. Did you ever have a puppy to play with when you were a little boy? What was its name?

FATHER: Whoa, Cap. That's a question that's just going to remain unanswered. But you're quite right that even when I tell stories out of my experience, it's not my own history I'm talking about. The stories are about something else. The otter story is about the notion that in order for two organisms to play, they have to be able to send the signal "this is play." And that leads to the realization that that kind of signal, the metacommunication or the message about the message, is going to be part of their communication all the time.

DAUGHTER: Well, but we're two organisms. And we have that same problem you're always talking about, of figuring out whether we are playing or exploring or what. What does it tell me that you don't talk about play. I want to talk about talking about play -- how the otters go about it and how we might try to go about it.

DAUGHTER: Talking about talking about talking. Cosy. So this has turned into an example of logical types, all piled up. The otter story is a story about metamessages, and the stories of you growing up in a positivistic household are about learning -- because it was in thinking about learning and learning to learn that you began to realize the importance of the logical types. Messages about messages, learning about learning. I must say, even though the logic boys say they have new and better models of logical types that you don't take account of, you get a lot of mileage -- a lot of insight -- out of using them, when almost nobody else does.

But, Daddy, can you just go along at the top of the pile? I don't think you can talk about talking about talking without talking, and I mean talking about something specific, something solid and real. If you tell a story about play when I'm not part of it, does that mean we're not playing?

FATHER: Playing we may be, but you're nipping at my heels in this particular game. Look, we're getting into a tangle. You have to distinguish the logical types in the words of our conversation from the overall structure in the communication, of which the verbal conversation is only part. But one thing you can be sure of is that the conversation isn't about "something solid and real." It can only be about ideas. No pigs, no coconut palms, no otters or puppy dogs. Just ideas of pigs and puppy dogs.

DAUGHTER: You know, I was giving a seminar one evening at Lindisfarne, Colorado, and Wendell Berry was arguing that it is possible to know the material world directly. And a bat flew into the room and was swooping around in a panic, making like Kant's Ding an sich. So I caught it with somebody's cowboy hat and put it outside. Wendell said, "Look, that bat was really in here, a piece of the real world," and I said, "Yes, but look, the idea of the bat is still in here, swooping around representing alternative epistemologies, and the argument between me and Wendell too. "

FATHER: Well, and it is not irrelevant that Wendell is a poet. But it's also true that since we're all mammals, whatever word games we play we are talking about relationship. Professor X gets up at the blackboard and

lectures about the higher mathematics to his students, and what he is saying all the time is "dominance, dominance, dominance." And Professor Y stands up and covers the same material, and what he is saying is "nurturance, nurturance, " or maybe even "dependency, dependency," as he coaxes his students to follow his argument.

DAUGHTER: Like the mewling cat you're always talking about that isn't saying "milk, milk" but "dependency, dependency." Hmm. You wouldn't want to comment on the nationality of your two professors, would you?

FATHER: Brat. What is even more interesting is that someone like Konrad Lorenz can be talking about communication of relationships among geese, and he turns into a goose up there at the blackboard, the way he moves and holds himself, and it's a much more complicated account, a much richer account of the geese than we have had here about otters. . . .

DAUGHTER: And he's talking to the audience about dominance and so on at the same time. A man talking about a goose talking about a relationship that's also about the man's relationship to the other men . . . oh dear. And everybody in the room is supposed to pretend that it isn't happening.

FATHER: Well, the other ethologists get pretty resentful of Lorenz. They talk as if he were cheating, somehow.

DAUGHTER: What is cheating anyway?

FATHER: Mmm. In conversation it is "cheating" to shift logical types in ways that are inappropriate. But I would argue that for Lorenz to move like a goose or to use empathy in the study of geese is appropriate -- the way he moves is part of the empathy. But I run into the same problem: people say I'm cheating when I use the logic of metaphor to speak about the biological world. They call it "affirming the consequent" and seem to feel that anyone who does so should have their knuckles rapped. But really it seems to me to be the only way to talk sense about the biological world, because it is the way in which that world, the *Creatura*, is itself organized.

DAUGHTER: Hmm. Empathy. Metaphor. They seem similar to me. It seems to me as if making those things against the rules -- calling them cheating -- is like the kind of constraints you have in a relay race. You know, one hand tied behind your back, or your legs in a sack.

FATHER: Quite.

DAUGHTER: Well, but Daddy, I want to get back to the subject. I want to know why you are always telling stories about yourself. And most of the stories you tell about me, in the metalogues and so on, aren't true, they're just made up. And here I am, making up stories about you.

FATHER: Does a story have to have really happened in order to be true? No, I haven't said that right. In order to communicate a truth about relationships, or in order to exemplify an idea. Most of the really important stories aren't about things that really happened -- they are true in the present, not in the past. The myth of Kevembuangga, who killed the crocodile that the Iatmul believe kept the universe in a random state --

DAUGHTER: Look, let's not get into that. What I want to know is, why do you tell so many stories, and why are they mainly about yourself.

FATHER: Well, I can tell you that only a few of the stories in this book are about me, and only apparently so at that. But as for why I tell a lot of stories, there's a joke about that. There was once a man who had a computer, and he asked it, "Do you compute that you will ever be able to think like a human being?" And after assorted grindings and beepings, a slip of paper came out of the computer that said, "That reminds me of a story . . ."

DAUGHTER: So human beings think in stories. But maybe you're cheating on the word "story." First the computer uses a phrase that's used for introducing one kind of story . . . and a joke is a kind of story . . . and you said that the myth of Kevembuangga is not about the past but about something else. So what is a story really? And are there other kinds of stories, like sermons in the running brook? How about trees, do they think in stories? Or do they tell stories?

FATHER: But surely they do. Look, just give me that conch over there for a minute. Now, what we have here is a whole set of different stories, very beautiful stories indeed.

DAUGHTER: Is that why you put it up on the mantelpiece?

FATHER: This that you see is the product of a million steps, nobody knows how many steps of successive modulation in successive generations of genotype, DNA, and all that. So that's one story, because the shell has to be the kind of form that can evolve through such a series of steps. And the shell is made, just as you and I are, of repetitions of parts and repetitions of repetitions of parts. If you look at the human spinal column, which is also a very beautiful thing, you'll see that no vertebra is quite like any other, but each is a sort of modulation of the previous one. This conch is what's called a right-handed spiral, and spirals are sort

of pretty things too -- that shape which can be increased in one direction without altering its basic proportions. So the shell has the narrative of its individual growth pickled within its geometric form as well as the story of its evolution.

DAUGHTER: I know -- I looked at a cat's-eye once and saw the spiral, so I guessed it had come from something alive. And that's a story about our talking that did get into a metalogue.

FATHER: And then, you see, even though the conch has protrusions that keep it from rolling around the ocean floor, it's been worn and abraded, so that's still another story.

DAUGHTER: You mentioned the spinal column too, so that the stories of human growth and evolution are in the conversation as well. But even when you don't actually mention the human body, there are common patterns that become a basis for recognition. That's what I meant -- part of what I meant -- when I said years ago that each person is his own central metaphor. I like the conch because it's like me but also because it's so different.

FATHER: Hello, snail. Well, so I tell stories, and sometimes Gregory is a character in the story and sometimes not. And often the story about a snail or a tree is also a story about myself and at the same time a story about you. And the real trick is what happens when the stories are set side by side.

DAUGHTER: Parallel parables?

FATHER: Then there is that class of stories we call models, which are generally rather schematic and which, like the parables presented by teachers of religion, exist precisely to facilitate thought about some other matter.

DAUGHTER: Well, but before you go off on models, I want to point out that the stories about snails and trees are also stories about you and me, in combination. And I'm always responding to the stories you don't tell as well as the ones you do, and doing my best to read between the lines. But now you can tell me about models or even about Kevembuangga if you want to. That's safe enough -- I've heard it before.

<https://www.nytimes.com/1987/11/15/books/i-do-not-believe-in-ghosts.html>

ANGELS FEAR Towards an Epistemology of the Sacred. By Gregory Bateson and Mary Catherine Bateson. 224 pp. New York: Macmillan Publishing Company. \$18.95.

KENNETH BURKE once said, "A person has the right to worship God according to his or her own metaphor." Gregory Bateson's metaphor came to be "metaphor" itself, as his anthropology crept, like Yeats's rough beast, toward a new vision of religion. This is made interestingly plain by Mary Catherine Bateson's intelligent and loving editing of her famous father's last manuscript (he died in 1980), "Angels Fear."

At the end of his life, Bateson believed that "we are not going to get far unless we acknowledge that the whole of science and technology . . . springs out of and impinges on religion." The way was prepared for this view in "Mind and Nature," in which Bateson affirmed a holistic unity among human mental processes and culture and biology. He described there how this connection is only comprehensible metaphorically, particularly in metaphors which are familiar from religion.

For Bateson, "it becomes evident that metaphor is not just pretty poetry, it is not either good or bad logic, but is in fact the logic upon which the biological world has been built, the main characteristic and organizing glue of this world of mental process." Indeed, metaphor is the clue, the link to what others may find diverse and oppositional. "Metaphor" itself is thereby the metaphorical connection between science, cybernetics and epistemology, on the one hand ("this book is not much concerned with truths about things - only with truths about truths"), and, on the other hand, poetry, parable, anecdote, humor, play and myth ("it is time to reverse the trend which since Copernicus has been in the direction of debunking mythology"). As Mary Catherine Bateson properly remarks, her father's method is "insight through analogy." "Angels Fear" is an essay in discovery, an uncovering of "the natural history of the relations between ideas."

This is all bound to bother those who feel that the work attempts to reinvent the wheel of being, that it is one more instance of science coming late to what philosophers and theologians have known all along. It is also bound to irritate those who deem amateur philosophizing and theologizing hopelessly unsophisticated. Such readers will think that the ideas of Wittgenstein, W. V. O. Quine and John Searle render this book epistemologically beside the point, that Nietzsche, Heidegger and Derrida make it look naive in literary terms and that it is theologically simplistic in the face of the work of Mircea Eliade, Paul Tillich and Bernard Lonergan.

Continue reading the main story

Bateson anticipated those objections: "The logic boys say they have new and better models." But the fact is that, by reading this work of the Batesons through such prisms as are provided by conventional academic wisdom, a reader may rush foolishly to conclusions that even angels would fear. For in fact, "Angels Fear" is not one more instance of the cultured despisers of religion experiencing evangelical rebirth.

Bateson is holistic, to be sure, but he is not literal about that; "uniformity is surely one of those things that becomes toxic beyond a certain level," he says. He is against dualisms, but he is not using religion to fill the gap between mind and body, ideology and politics, subject and object, thinking and feeling. Rather, he

names the connection between these opposites with a paradoxical image borrowed from C. G. Jung, who in turn took it from ancient Gnosticism - "pleroma/creatura." Implied in this image is the idea that the fundamental connection is not between two substances, mind and matter. Rather, mind (or Bateson's "god") is the pattern and fabric, texture and weave (pleroma) in all matter (creatura).

Unlike the adherent of conventional piety (or conventional scientism, for that matter), Bateson affirms discontinuity and difference as an integral part of order in the world: "This gap is inevitable and necessary." "All knowledge has gaps." "Gaps are a characteristic of Creatura." Bateson knows that his perspective is metaphorical and indirect. He speaks eloquently and compellingly in praise of secrecy and noncommunication, precisely on behalf of the goal of openness and connection, and he gives many examples - from Coleridge, Greek myth and cybernetics - of metaphor in everyday life. For Bateson, the "angel" (the Greek word originally meant "messenger") appears in the gap rather than in the certainty. He detests the literalism of current cultural pieties: "I do not believe in spirits, gods, devas, fairies, leprechauns, nymphs, wood spirits, ghosts, poltergeists, or Santa Claus. (But to learn that there is no Santa Claus is perhaps the beginning of religion.)" "When the bagel is eaten, the hole does not remain to be reincarnated in a doughnut." In Bateson's religion, "in the asking of questions, there will be no limit to our hubris; and . . . there shall always be humility in our acceptance of answers. In these two characteristics we shall be in sharp contrast with most of the religions of the world. They show little humility in their espousal of answers but great fear about what questions they will ask."

BATESON lived in the gaps, betwixt and between. Not that he, or the book, idealizes the absurd. Mary Catherine Bateson has masterfully pulled together what must have been a hodgepodge of several years of reflections. As a connecting device, she engages her father in dialogue about the book and its ideas. The imaginary conversations are often constructed from notes of real ones, but just as often they are purely fictive. This strategy works. It aids the reader and is appropriate to the content of Bateson's argument.

Bateson's liminal stance is understood best when he speaks about the "unacceptable solutions" to the mind-body problem represented by supernaturalism and materialism: "Very simply, let me say that I despise and fear both of these extremes of opinion and that I believe both extremes to be epistemologically naive, epistemologically wrong, and politically dangerous. They are also dangerous to something which we may loosely call mental health." So he takes as his task "to explore whether there is a sane and valid place for religion somewhere between these two nightmares of nonsense." Especially, he hopes that the metaphoric view may provide "a new and badly needed humility."

I believe there is a clue to this humility, and to this book, in the shifting title. Bateson began the writing in 1978. His daughter tells us that it was to be called "Where Angels Fear to Tread," but that he often referred to it as "Angels Fear." She retained the latter. This title appropriately, if subtly, calls up notions of angelic reticence and humility rather than an image of fools rushing into religion. But there is also a hint of a missing apostrophe in the title, like the one omitted in Joyce's "Finnegans Wake." This opens the possibility that fears may be viewed as angelic. For in profound fears one may discover a response to the question the anthropologist shares with the Sphinx and the Psalmist: "What is the human?" Deep in such fears are the angels - "deep unconscious philosophies," as Bateson calls them. "The myths in which our lives are embedded . . . are built deeply into character, often below awareness, so that they are essentially religious, matters of faith." It would seem that Bateson knew both the humor and the truth in some wag's saying: "A man's reach should exceed his grasp, or what's a 'meta' for?"

<https://journals.sagepub.com/doi/abs/10.1177/092137408900200407?journalCode=cdya>

## 26 The Meta-Morphology of Evil Empires

The deep history of "evil empires" has its own his-story.

### 26.1 The Rise and Fall of the Klingon Empire

This may seem like a joke at first sight, but it isn't at all. Here I do a little *Meta-Morphology of the Deep History* of some Empires which were a special sort of Empires of a *Warrior Elite Class*. Most Empires of Antiquity were of this sort. Only in European history there arose an *Empire of the Merchant Class*, as was the case with the Netherlands Economical Empire, and the *Dutch East India Company* which was founded in 1602. (Dutch: *Verenigde Oostindische Compagnie* or VOC). It was the first-ever multinational corporation. And the British'ers emulated this success story with a few improvements here and there. So back to the history of empires. Most empires of humanity were of the type "*Warrior Elite Class*". And Gene Roddenberry knew his way around many things in the business of history and technology. So he modeled the Klingon Empire to closely resemble the Spartan or Roman or Mongolian ways of Politics and Power. The Klingon Empire was just a way of Gene Roddenberry to think the "What If". Meaning what if the Spartans had managed to form a Real Empire, which in the history they were never able to do. The reason for this is their method of a slave holding society which was quite without parallel even for all the slave holding societies of Antiquity. The usual case was that one imported his slaves from some far (or even near) away other populations of defeated enemies. But the Spartans did it the other way around. They had enslaved the

local autochthonous population of their territory to keep as self-reproducing slaves, which was more of a feat than the other slave-holders. And they based their society structure around this.

### 26.1.1 Gene Roddenberry

[https://en.wikipedia.org/wiki/Gene\\_Roddenberry](https://en.wikipedia.org/wiki/Gene_Roddenberry)

**Eugene Wesley Roddenberry** (August 19, 1921 – October 24, 1991) was an American television screenwriter, producer and creator of the original *Star Trek* television series, and its first spin-off *The Next Generation*. Born in El Paso, Texas, Roddenberry grew up in Los Angeles, where his father was a police officer. Roddenberry flew 89 combat missions in the Army Air Forces during World War II, and worked as a commercial pilot after the war. Later, he followed in his father's footsteps and joined the Los Angeles Police Department, where he also began to write scripts for television.

When Roddenberry pitched *Star Trek* to MGM, it was warmly received, but no offer was made.<sup>[49]</sup> He then went to Desilu Productions, but rather than being offered a one-script deal, he was hired as a producer and allowed to work on his own projects. His first was a half-hour pilot called *Police Story* (not to be confused with the anthology series created by Joseph Wambaugh), which was not picked up by the networks.<sup>[50]</sup> Having not sold a pilot in five years, Desilu was having financial difficulties; its only success was *I Love Lucy*.

<sup>[51]</sup> Roddenberry took the *Star Trek* idea to Oscar Katz, head of programming, and the duo immediately started work on a plan to sell the series to the networks. They took it to CBS, which ultimately passed on it. The duo later learned that CBS had been eager to find out about *Star Trek* because it had a science fiction series in development—*Lost in Space*. Roddenberry and Katz next took the idea to Mort Werner at NBC,<sup>[51]</sup> this time downplaying the science fiction elements and highlighting the links to *Gunsmoke* and *Wagon Train*.<sup>[50]</sup> The network funded three story ideas, and selected "The Menagerie", which was later known as "The Cage", to be made into a pilot. (The other two later became episodes of the series.) While most of the money for the pilot came from NBC, the remaining costs were covered by Desilu.<sup>[52][53]</sup> Roddenberry hired Dorothy Fontana, better known as D. C. Fontana, as his assistant. They had worked together previously on *The Lieutenant*, and she had eight script credits to her name.<sup>[51]</sup>

Roddenberry and Barrett had begun an affair by the early days of *Star Trek*,<sup>[52]</sup> and he specifically wrote the part of the character Number One in the pilot with her in mind; no other actresses were considered for the role. Barrett suggested Nimoy for the part of Spock. He had worked with both Roddenberry and Barrett on *The Lieutenant*, and once Roddenberry remembered the thin features of the actor, he did not consider anyone else for the part.<sup>[54]</sup> The remaining cast came together; filming began on November 27, 1964, and was completed on December 11.<sup>[55]</sup> After post-production, the episode was shown to NBC executives and it was rumored that *Star Trek* would be broadcast at 8:00 pm on Friday nights. The episode failed to impress test audiences,<sup>[56]</sup> and after the executives became hesitant, Katz offered to make a second pilot. On March 26, 1965, NBC ordered a new episode.<sup>[57]</sup>

### 26.1.2 More thoughts on Klingon Star Ship Technology

I give just some side thoughts on *Star Ship Technology*. The Klingon's had some pretty good engineers, to be sure. And that famous *Cloaking Device* was surely a nice invention. But only for the Star Trek Script writers who knew next to nothing how such a device works. We all know that there is *artificial gravity* on those Star Ships of the *Stellar Federation* and the Klingon's alike. Now when you create artificial gravity you must also create quite a huge deformation of the *Space Time Structure* around your ship, which is pretty impossible to shield, since gravity is the force that permeates all of the Universe. So it extends practically into infinity. And when you have such an artificial gravity device on your Star Ship, the *Gravity signature* of that will also extend practically into infinity. So the famous *Cloaking Device* is of no use at all when your enemy has a gravity detector on board. The problem is only that in order to detect another *Center of Gravity*, you must by the technical requirements, shut off your own *Gravity Generator*, or otherwise you can detect only your own Gravity field. This would of course make for some quite uncomfortable ride of your own Star Ship crew. It is pretty much the same business as with Sonar Devices on Submarines. When you emit any sound at all, this can be heard across the whole ocean for more than 1000 kilometers around.

### 26.1.3 Neutron Emissions

The same holds with the *Neutron Emissions*. The thermonuclear reactors on board of these Star Cruisers emit so many tons of Neutrons, and it is quite difficult to shield them. There is water and one other material: *Beryllium*.

[https://en.wikipedia.org/wiki/Neutron\\_radiation#Ionization\\_mechanisms\\_and\\_properties](https://en.wikipedia.org/wiki/Neutron_radiation#Ionization_mechanisms_and_properties)

Because neutrons are uncharged, they are more penetrating than alpha radiation or beta radiation. In some cases they are more penetrating than gamma radiation, which is impeded in materials of

high **atomic number**. In materials of low **atomic number** such as hydrogen, a low energy gamma ray may be more penetrating than a high energy neutron.

Neutron **radiation protection** relies on **radiation shielding**. Due to the high kinetic energy of neutrons, this radiation is considered the most severe and dangerous radiation to the whole body when it is exposed to external radiation sources. In comparison to conventional ionizing radiation based on photons or charged particles, neutrons are repeatedly bounced and slowed (absorbed) by light nuclei so **hydrogen-rich** material is more effective at shielding than **iron** nuclei. The light atoms serve to slow down the neutrons by **elastic scattering** so they can then be absorbed by **nuclear reactions**. However, **gamma radiation** is often produced in such reactions, so additional shielding must be provided to absorb it. Care must be taken to avoid using nuclei that undergo **fission** or **neutron capture** that causes **radioactive decay** of nuclei, producing gamma rays.

Neutrons readily pass through most material, and hence the absorbed dose (measured in **Grays**) from a given amount of radiation is low, but interact enough to cause biological damage. The most effective shielding materials are **water**, or **hydrocarbons** like **polyethylene** or **paraffin wax**. Water-extended polyester (WEP) is effective as a shielding wall in harsh environments due to its high hydrogen content and resistance to fire, allowing it to be used in a range of nuclear, health physics, and defense industries.<sup>[3]</sup> Hydrogen-based materials are suitable for shielding as they are proper barriers against radiation.<sup>[4]</sup>

Perhaps one would need about 1/2 Kilometer thickness of shielding. But how could one carry around a shield of 1/2 Kilometer of (beryllium or) water around the reactors in the Star Cruiser? It would weigh a few Megatons, and then the whole beast wouldn't be able to move at all, let alone moving at warp speed. So when your nice enemy has a neutron detector on board you are out of luck again. And by your own neutron emissions you can be tracked at around a distance of about 1/2 Parsec. But in the first place, the whole crew of the Star Ship would be cooked right away after about 10 seconds of running their Thermonuclear Reactors. Neutrons are pretty difficult to shield. And ironically the best shield is water, H<sub>2</sub>O. Now since humans are about 70% H<sub>2</sub>O, they don't exactly serve as shield, but they catch up most of the Neutrons that are flying about. *Humans are Neutron catchers* if you want to make a joke of this. It is also the way a Neutron bomb works. It doesn't have so much explosive energy, but converts most of its power into Neutrons. So when such a device explodes, it destroys very little in terms of technical infrastructure, but very much so, all those living things which have all about the same content of H<sub>2</sub>O, meaning 70%.

So I don't know if a Star Ship with this kind of reactor would ever be able to carry a human crew. Now some more bad facts about the Cloaking Device. It eats up so much of your thermonuclear power that you must shut it off, when you want to fire your weapons. This was amply made clear in so many Star Trek movies. At least the Script writers had understood this problem. So they had to uncloak themselves when they got ready to fire, and before you fire you should better do some aiming and that takes some valuable time. And this is the one thing the poor Script writers didn't understand clearly: The Cloaking Device device works both ways by the laws of Physics. So while you have it switched on, you are also not able to see anything. This is pretty bad news if you just have some Asteroid fields to navigate around. Then to sum it up: A Cloaking Device is a nice toy but altogether useless. This is the reason why the Federal Star Fleet Engineers never thought of such a technological imbecility.

#### **26.1.4 Back to the Klingon Empire of Gene Roddenberry**

So back to the Klingon Empire of Gene Roddenberry. It was the "what if" the Spartans had managed to form a Real Empire. These are or will (may) be the Klingons. They are the perfect slave holding society who had their slaves working their souls away in the Dilithium Mines. Pretty much the same as the Athenians did with their Silver Mines which were the foundations of Athenian power and wealth. Similar to the underground cave cities of the mines of the Carthagians. These folks literally created a Hades. The Roman mining business was not much better. And the best and richest mines of Antiquity were in Spain. That is why the Romans were so eager to take those possessions away from the Carthagians, and after a while they succeeded when they had done away with Hannibal and his brother Hasdrubal Barca.

[https://en.wikipedia.org/wiki/Hasdrubal\\_Barca](https://en.wikipedia.org/wiki/Hasdrubal_Barca)

**Hasdrubal Barca** (245 – 22 June 207 BC), a **latinization** of 'Azruba'al (**Punic**: 𐤀𐤃𐤁𐤁𐤀𐤁𐤓)<sup>[1]</sup> son of **Hamilcar Barca**, was a **Carthaginian** general in the **Second Punic War**. He was the brother of **Hannibal** and **Mago Barca**

### 26.1.5 The Dilithium Scourge

Now more on the Klingons: Gene Roddenberry knew his way around *Dilithium* quite well, since he knew a lot about the work of *Edward Teller*, who had practically invented the *Hydrogen Bomb* himself. What is not very well known even today, is that Lithium is a more important component of the *Thermonuclear Fusion Bomb* as it is more correctly called. There were a few little surprises when the USA tested a few of the early models of this type of bomb and they had miscalculated the effect of Lithium in the mixture. So the bomb was much stronger than expected and it did scare the hell out of those observers who had thought that they were a safe distance away. Unfortunately, it was not so safe. But by sheer luck, no-one was killed in that experiment. But some of the observation bunkers were quite a bit dented after the experiment. This is all in the wikipedia articles and no need to repeat it here. Dilithium was the answer that Gene Roddenberry came up with to do thermonuclear fusion without the incredible temperatures and pressures that one usually needs to keep a thermonuclear fusion going and continue it as long as the supply of Dilithium lasts. And this is quite a long time since it is such a dense energy source. Uranium 235 is also a quite dense energy source but it has much less energy density than the thermonuclear fusion which is the second most potent energy source in the whole of the universe. Except of course the complete annihilation of matter and antimatter which results in such a huge flash of lightning, that it is enough to illuminate half of the Galaxy for a microsecond or so. The famous *photon torpedoes* of the Star Fleet and of the Klingons also were made with this stuff. The small problem is only how to keep the antimatter away from reacting with ordinary matter at some unpredictable instant, like for example when there is a collision of Star Ships, and the ammunition gets bounced around quite a bit. This was the story of one of the childish novels by Dan Brown who had not the slightest idea what it means to first produce that anti-matter in any sizeable quantities, and then to store and handle it in some routine ways. So there still remain some unsolved problems when dealing with anti-matter. The other small problem is the same as with the fission of Plutonium, which is quite a different matter than Uranium 235, since you just cannot put a kilo or two of Plutonium together and wait for the fission reaction to produce some Kaboom. Plutonium is not so easy, since it tends to tear itself apart before the fission chain reaction really gets going. One has to come up with a lot of compression of the material to produce an Atomic Bomb. The trick is that you have to create an implosion before you have an explosion. Meaning that you have to compact the Plutonium in such a way that it will not tear itself apart before the chain reaction really starts. The same problem but some orders of magnitude more difficult is when you try to get enough matter and antimatter together before everything flies apart before they can properly react with each other. And it is easy to see that you cannot build explosive lenses for that, since these are just matter, and they will react with the antimatter also. So this may remain Science Fiction until some very intelligent Klingon or some very intelligent Vulkanian or some very intelligent Romulanian comes up with the technology to do this. This will probably happen more later than sooner, and even more probably never at all.

### 26.1.6 Slavery in Ancient Rome and the Klingons

AG: There is just a little side story to tell. We have all seen or heard about the movie *Gladiator*. What we surely haven't seen or heard about is how the good pre-Gladiator land-Owner (Latifundium) *Maximus Decimus Meridius* (Meritokratius / Meritokrassius of Plutokratik fame, see Patrice Ayme') had previously managed his estate in the province of Iberia or Espania. He had done this of course with a small army of slaves. And it didn't take a lot of ruffianism from the side of the good Commodus, to do the job. Just a small slave rebellion also did this perfectly. And slave rebellions were quite common in ancient times as much as in the European / US Slavery systems. The best known rebellions were in the French colony of *La Española* aka *Saint-Domingue*. The irony of history is that when the slaves were finally set free, they became so much worse oppressors of the rest of the populace of Haiti and other places.

<https://en.wikipedia.org/wiki/Haiti>

[https://en.wikipedia.org/wiki/Slave\\_rebellion](https://en.wikipedia.org/wiki/Slave_rebellion)

The most successful slave rebellion in history was the 18th-century *Haitian Revolution*, led by *Toussaint Louverture* and later *Jean-Jacques Dessalines* who won the war against their French colonial rulers, which founded the country formerly known as Saint Domingue.

In the ninth century, the poet-prophet Ali bin Muhammad led imported East African slaves in Iraq during the *Zanj Rebellion* against the *Abbasid Caliphate*; *Nanny of the Maroons* was an 18th-century leader who rebelled against the British in Jamaica; and the *Quilombo dos Palmares* of Brazil flourished under *Ganazumba* (Ganga Zumba). The 1811 *German Coast Uprising* in the *Territory of Orleans* was the largest rebellion in the continental United States; *Denmark Vesey* rebelled in South Carolina, and *Madison Washington* during the *Creole case* in the 19th century United States.

And the story of Gladiator has some common themes with the "*Gone with the Wind*" epos. The US-American South slave holding society was only marginally more humane than the Roman one. There was a popular joke in the US South states slave society around these times: When a slave wasn't behaving properly, there was no great punishment needed (like it was so grossly exaggerated in the novels and movies)... It was just sufficient to tell the poor slave that if he didn't behave better in the future, then his master would be forced to sell him to a slave manager in the plantations of the Dutch West Indies. This was enough of a threat to make every slave behave as (s)he should. I will not tell more of this joke, as not to spoil it. I will just give another literature hint: One justs read V.S. Naipaul: "*The Middle Passage*" (160-161).

Jan Jacob Hartsinck "*The story of the Slave Rebellion in Barbice*".

<https://www.emlc-journal.org/articles/10.18352/emlc.61/>

"Their power has been broken, the danger has passed." Dutch newspaper coverage of the Berbice slave revolt, Author: Esther Baakman

In February 1763 one of the largest and longest slave revolts erupted in the Dutch colony of Berbice. As the majority of the white population fled, colonial authorities were left behind with few, and mostly ill soldiers, and in no time the insurgents controlled the colony almost completely. This rebellion did not only shake the colonial government to the core, but also made a significant (media) impact in the Dutch Republic.

...

On 21 May 1763, the very last bulletin of the *Amsterdamsche Courant* brought news from the Dutch colony of Berbice (in modern-day Guyana) relaying that in February 'a revolt of the Negroes had taken place'. Due to the absence of any further particularities, however, it was unclear how severe the situation was.<sup>2</sup> As it turned out, a group of enslaved labourers, led by former house slave Coffij and his second-in-command Accarra, revolted in late February in protest against their harsh and inhumane treatment. Within days Dutch colonial authority completely collapsed and the rebellion was joined by the majority of the enslaved population. The colonists, well aware that they were outnumbered ten to one, panicked after the insurgents killed around thirty Europeans on the Peereboom plantation, one of the major Dutch sugar plantations about seventy miles upstream from the coast, and fled north rather than make a stand against the insurgency. With the help of reinforcements from Suriname, directly to the east of Berbice, the Dutch managed to regain control of the Dageraad plantation, about ten miles downriver from Fort Nassau, in early April (fig. 1).

[https://www.jstor.org/stable/3786300?seq=1#page\\_scan\\_tab\\_contents](https://www.jstor.org/stable/3786300?seq=1#page_scan_tab_contents)

"Slave insurrections were a usual rather than unusual symptom of disorganizations in these territories which embraced several slave systems."

Michael Craton: *Testing the Chains: Resistance to Slavery in the British West Indies*

[https://en.wikipedia.org/wiki/List\\_of\\_Latin\\_place\\_names\\_in\\_Iberia](https://en.wikipedia.org/wiki/List_of_Latin_place_names_in_Iberia)

[https://en.wikipedia.org/wiki/Gone\\_with\\_the\\_Wind\\_\(film\)](https://en.wikipedia.org/wiki/Gone_with_the_Wind_(film))

[https://en.wikipedia.org/wiki/Gladiator\\_\(2000\\_film\)](https://en.wikipedia.org/wiki/Gladiator_(2000_film))

Crowe portrays Hispano-Roman general Maximus Decimus Meridius, who is betrayed when Commodus, the ambitious son of Emperor Marcus Aurelius, murders his father and seizes the throne. Reduced to slavery, Maximus rises through the ranks of the gladiatorial arena to avenge the murders of his family and his emperor.

[https://en.wikipedia.org/wiki/Slavery\\_in\\_ancient\\_Rome](https://en.wikipedia.org/wiki/Slavery_in_ancient_Rome)

**Slavery in ancient Rome** played an important role in society and the economy. Besides manual labor, slaves performed many domestic services, and might be employed at highly skilled jobs and professions. Accountants and physicians were often slaves. Slaves of Greek origin in particular might be highly educated. Unskilled slaves, or those sentenced to slavery as punishment, worked on farms, in mines, and at mills. Slaves were considered property under **Roman law** and had no legal personhood. Unlike **Roman citizens**, they could be subjected to corporal punishment, **sexual exploitation** (prostitutes were often slaves), torture and **summary execution**. Over time, however, slaves gained increased legal protection, including the right to file complaints against their masters.

A major source of slaves had been Roman military expansion during the **Republic**. The use of former soldiers as slaves led perhaps inevitably to a series of *en masse* armed rebellions, the **Servile Wars**, the last of which was led by **Spartacus**. During the **Pax Romana** of the early **Roman Empire** (1st–2nd centuries AD), emphasis was placed on maintaining stability, and the lack of new territorial conquests dried up this supply line of **human trafficking**. To maintain an enslaved work force, increased legal restrictions on freeing slaves were put into place. Escaped slaves would be hunted down and returned (often for a reward). There were also many cases of poor people selling their children to richer neighbors as slaves in times of hardship. In his *Institutiones* (161 AD), the Roman **jurist Gaius** wrote that:

[Slavery is] the state that is recognized by the *ius gentium* in which someone is subject to the dominion of another person contrary to nature.

— Gaius, *Institutiones* 1.3.2<sup>[2]</sup>

The 1st century BC Greek historian [Dionysius of Halicarnassus](#) indicates that the Roman institution of slavery began with the legendary founder [Romulus](#) giving [Roman fathers](#) the right to sell their own children into slavery, and kept growing with the expansion of the [Roman state](#). Slave ownership was most widespread throughout the Roman citizenry from the [Second Punic War](#) (218–201 BC) to the 4th century AD. The Greek geographer [Strabo](#) (1st century AD) records how an enormous slave trade resulted from the collapse of the [Seleucid Empire](#) (100–63 BC).<sup>[3]</sup>

The [Twelve Tables](#), Rome's oldest legal code, has brief references to slavery, indicating that the institution was of long standing. In the tripartite division of law by the jurist [Ulpian](#) (2nd century AD), slavery was an aspect of the *ius gentium*, the customary [international law](#) held in common among all peoples (*gentes*). The "law of nations" was neither considered [natural law](#), thought to exist in nature and govern animals as well as humans, nor [civil law](#), belonging to the emerging bodies of laws specific to a people in Western societies.<sup>[4]</sup> All human beings are born free (*liberi*) under natural law, but slavery was held to be a practice common to all nations, who might then have specific civil laws pertaining to slaves.<sup>[4]</sup> In ancient warfare, the victor had the right under the *ius gentium* to enslave a defeated population; however, if a settlement had been reached through diplomatic negotiations or formal surrender, the people were [by custom](#) to be spared violence and enslavement. The *ius gentium* was not a [legal code](#),<sup>[5]</sup> and any force it had depended on "reasoned compliance with standards of international conduct."<sup>[6]</sup>

During the period of Roman imperial expansion, the increase in wealth amongst the Roman elite and the substantial growth of slavery transformed the economy.<sup>[19]</sup> Although the economy was dependent on slavery, Rome was not the most slave-dependent culture in history. Among the [Spartans](#), for instance, the slave class of [helots](#) outnumbered the free by about seven to one, according to [Herodotus](#).<sup>[20]</sup> In any case, the overall role of slavery in Roman economy is a discussed issue among scholars.<sup>[21][22][23]</sup>

[Delos](#) in the eastern [Mediterranean](#) was made a free port in 166 BC and became one of the main market venues for slaves. Multitudes of slaves who found their way to Italy were purchased by wealthy landowners in need of large numbers of slaves to labor on their estates. Historian Keith Hopkins noted that it was land investment and [agricultural production](#) which generated great wealth in Italy, and considered that Rome's military conquests and the subsequent introduction of vast wealth and slaves into Italy had effects comparable to widespread and rapid technological innovations.<sup>[3]</sup>

[Augustus](#) imposed a 2 percent tax on the sale of slaves, estimated to generate annual revenues of about 5 million [sesterces](#)—a figure that indicates some 250,000 sales.<sup>[24]</sup> The tax was increased to 4 percent by 43 AD.<sup>[25]</sup> Slave markets seem to have existed in every city of the Empire, but outside Rome the major center was [Ephesus](#).<sup>[24]</sup>

Estimates for the prevalence of slavery in the Roman Empire vary. Estimates of the percentage of the population of Italy who were slaves range from 30 to 40 percent in the 1st century BC, upwards of two to three million slaves in Italy by the end of the 1st century BC, about 35% to 40% of Italy's population.<sup>[26][27][28]</sup> For the empire as a whole during the period 260–425 AD, according to a study done by Kyle Harper, the slave population has been estimated at just under five million, representing 10–15% of the total population of 50–60 million+ inhabitants. An estimated 49% of all slaves were owned by the elite, who made up less than 1.5% of the empire's population. About half of all slaves worked in the countryside where they were a small percentage of the population except on some large agricultural, especially imperial, estates; the remainder the other half were a significant percentage 25% or more in towns and cities as domestics and workers in commercial enterprises and manufacturers.<sup>[29]</sup>

### 26.1.7 About Klingon Technology and Hitler

And since we all know our way around present-day technological history, we really soon find out about the famous Nazi German technologies of WWII, which were about as useless as that fancy *Klingon Technology*. Only the poor Hitler had no idea about any sorts of the true costs and the true value of those kinds of technology. So that he could be fascinated about some *super weapons* that would finally win the war for him. And the poor German engineers who concocted all those fabulous technologies had only one thing on their minds: How to avoid being drafted into the last bid for the *German Wehrmacht* to be thrown into the *meat grinder of the Ostfront*. So they had to come up with quite some creative thinking to impress the Fuehrer a little bit, since they knew full well that the dear Fuehrer had no idea at all what the logistics were all about, of the development, testing, and production, especially of the strategic metals, of these nice toys. The famed German Me 262 had no such strategic metals in their *jet engines* and their turbines burned out at about 20 hours of use. No *inconel* at hand at all. That was more the British way of doing jet engines. Also heat resistant ceramics. So it came to pass that the one-time socialist government of Great Britain had nothing

better to do than to sell a few of the pretty ingenious and infamous *Nene* engines to the Russians in 1946. What a nice technology transfer that was, especially when the *Mig-15*'s showed up as a nasty surprise for the Allies over the *Korean War* theater. And what the Russians lacked in terms of very heavy industrial power base, like the US did, they made up nicely with their master spies in the KGB. So when those nice KGB agents did a visit to the *Rolls Royce Nene* plant, where they were shown the milling machines that shaped the *Nene* turbine blades out of inconel flats, and they had shoes with extra spongy soles, and so they picked up some shavings with these soles and sent them back to the USSR to analyse them. And so they found out about the secrets of inconel which were pretty closely guarded secrets in the year 1946. Just to remind: The good Vladimir Putin had once been a master spy in East Germany. So he knows the German language and the German mind very well. So back to Nazi Jet Engine Technology: The Germans didn't have inconel so their jet engines burned out as quickly as they could.

<https://www.revolv.com/page/Rolls%252DRoyce-Nene>

### 26.1.8 Inconel

<https://en.wikipedia.org/wiki/Inconel>

**Inconel** is a family of **austenitic nickel-chromium-based superalloys**.<sup>[1]</sup>

Inconel alloys are **oxidation-corrosion-resistant** materials well suited for service in extreme environments subjected to pressure and heat. When heated, Inconel forms a thick, stable, **passivating** oxide layer protecting the surface from further attack. Inconel retains strength over a wide temperature range, attractive for high temperature applications where aluminum and steel would succumb to **creep** as a result of thermally induced crystal vacancies. Inconel's high temperature strength is developed by **solid solution strengthening** or **precipitation hardening**, depending on the alloy.<sup>[2][3]</sup>

Inconel alloys are typically used in high temperature applications. Common trade names for Inconel Alloy 625 include: **Inconel 625**, Chronin 625, Altemp 625, Haynes 625, Nickelvac 625 and Nicrofer 6020.<sup>[4]</sup> Inconel Alloy 600 include: NA14, N06600, BS3076, 2.4816, NCr15Fe (FR), NiCr15Fe (EU) and NiCr15Fe8 (DE). Inconel 718 include: Nicrofer 5219, Superimphy 718, Haynes 718, Pyromet 718, Supermet 718, and Udimet 718.<sup>[5]</sup>

The Inconel family of alloys was first developed in the 1940s by research teams at Wiggins Alloys (**Hereford, England**), which has since been acquired by **Special Metals Corporation**,<sup>[6]</sup> in support of the development of the **Whittle** jet engine.<sup>[7]</sup>

In June 2018, **SpaceX** CEO **Elon Musk** announced completion of work on a new Inconel **superalloy** called SX 300 developed for high-temperature, high-pressure, highly-**oxidative** environments in a **rocket engine**.<sup>[8]</sup>

### 27 Inconel Properties

Inconel alloys are **oxidation-** and **corrosion-**resistant materials well suited for service in extreme environments subjected to high pressure and **kinetic energy**. When heated, Inconel forms a thick and stable **passivating** oxide layer protecting the surface from further attack. Inconel retains strength over a wide temperature range, attractive for high-temperature applications where **aluminium** and **steel** would succumb to **creep** as a result of thermally induced crystal vacancies (see **Arrhenius equation**). Inconel's high temperature strength is developed by **solid solution strengthening** or **precipitation strengthening**, depending on the alloy. In **age-hardening** or precipitation-strengthening varieties, small amounts of **niobium** combine with **nickel** to form the **intermetallic** compound Ni<sub>3</sub>Nb or **gamma double prime** ( $\gamma''$ ). Gamma prime forms small cubic crystals that inhibit **slip** and creep effectively at elevated temperatures.<sup>[14]</sup> The formation of gamma-prime crystals increases over time, especially after three hours of a heat exposure of 850 °C, and continues to grow after 72 hours of exposure.<sup>[15]</sup>

### 28 Machining Inconel

Inconel is a difficult metal to shape and machine using traditional **cold forming** techniques due to rapid **work hardening**. After the first machining pass, work hardening tends to plastically deform either the workpiece or the tool on subsequent passes. For this reason, age-hardened Inconels such as 718 are machined using an aggressive but slow cut with a hard tool, minimizing the number of passes required. Alternatively, the majority of the machining can be performed with the workpiece in a **solutionized** form, with only the final steps being performed after age hardening.

External **threads** are machined using a **lathe** to "single-point" the threads or by rolling the threads in the solution treated condition (for hardenable alloys) using a **screw machine**. Inconel 718 can also be roll-threaded after full aging by using **induction heat** to 1,300 °F (700 °C) without increasing the grain size.<sup>[citation needed]</sup>

Holes with internal threads are made by threadmilling. Internal threads can also be formed using a sinker **electrical discharge machining** (EDM).

<https://www.quora.com/What-genius-in-the-British-govt-thought-it-was-a-great-idea-in-1946-to-give-the-Russians-the-best-jet-engine-at-the-time-in-the-world>

In 1946, the Cold War was not only not a thing, but still perfectly avoidable. As such, Clement Attlee's government authorised the export of 40 Rolls-Royce Nene engines to the USSR. Since the Nene was a conservative, underpowered centrifugal flow engine as opposed to the axial flow Avon the British were intending to use going forward, exporting the Nene was not thought to be a problem. Contrary to what the other answers state, Rolls-Royce was paid in full for the 40 engines they exported.

The Soviets studied the Nene, re-designed it to be bigger and more powerful and proceeded to produce it as the VK-1. They also helped the Chinese to set up production of the VK-1 where, in the late 50s, a bod from Rolls-Royce saw them, threw a strop and started demanding over 200m pounds in license fees. With the Cold War in full effect and given that Rolls-Royce never provided any of the tooling or technical materials to aid in production, needless to say those demands were not met.

The idea that this was some sort of massive error that gave the Soviets a massive advantage is a bit of a myth. They had their own research as well as access to research materials from the Germans (albeit not the actual scientists, who ended up in American hands one way or another). Moreover, by 1946 the trick wasn't necessarily designing the engine - how it was supposed to work was well-understood - but in how to manufacture it. This is what let the Germans down - they had little access to rare metals in order to produce alloys with the necessary qualities.

This myth arose largely as a result of MiG-15bis' superiority in the Korean War, but its fundamental advantage was the swept wing design and all the work that went into aerodynamics (the Gloster Meteor would for example become unstable at high speeds). The Nene engine was a shortcut, but anyone who can reverse-engineer something like that can also design it and the Soviet metallurgy solutions were original.

NB: This is a good spot to acknowledge Frank Whittle, who invented the engine that Rolls-Royce then licensed and developed, back in the mid 1930-s when it *was* a technological marvel.

[https://en.wikipedia.org/wiki/Rolls-Royce\\_Nene](https://en.wikipedia.org/wiki/Rolls-Royce_Nene)

The **Rolls-Royce RB.41 Nene** is a 1940s British [centrifugal compressor turbojet](#) engine. The Nene was a complete redesign, rather than a scaled-up [Rolls-Royce Derwent](#)<sup>[1]</sup> with a design target of 5,000 lbf, making it the most powerful engine of its era. It was [Rolls-Royce's](#) third [jet engine](#) to enter production, and first ran less than 6 months from the start of design. It was named after the [River Nene](#) in keeping with the company's tradition of naming its early jet engines after rivers.

The design saw relatively little use in British aircraft designs, being passed over in favour of the [axial-flow Avon](#) that followed it. Its only widespread use in the UK was in the [Hawker Sea Hawk](#) and the [Supermarine Attacker](#). In the US it was built under licence as the [Pratt & Whitney J42](#), and it powered the [Grumman F9F Panther](#). Its most widespread use was in the form of the [Klimov VK-1](#), a [reverse-engineered](#), modified and enlarged version which produced around 6,000 lbf of thrust, and powered the famous [Mikoyan-Gurevich MiG-15](#), a highly successful fighter aircraft which was built in vast numbers.

A more powerful slightly enlarged version of the Nene was produced as the [Rolls-Royce Tay](#).

The Nene was designed and built as a result of an early 1944 [Air Ministry](#) request for an engine of 4,200 lbf thrust, and an engine was schemed-out by [Stanley Hooker](#) and [Adrian Lombard](#) as the B.40. In the summer of 1944 Hooker visited the US and discovered that [General Electric](#) already had two engine types, an axial and a centrifugal, of 4,000 lbf thrust running. On returning to the UK Hooker decided to go for 5,000 lbf of thrust and, working with Lombard, Pearson and Morley, a complete redesign of the B.40 resulted in the B.41,<sup>[1]</sup> later to be called the Nene.

The double-sided [impeller](#) was 28.8 inches in diameter, compared to 20.68 for the Derwent I, to produce an airflow of 80 lb/s, while the overall diameter of the engine was 49.5 inches. A scaled up Derwent would have a 60-inch diameter. The compressor casing was based on Whittle's Type 16 W.2/500 compressor case which was more aerodynamically efficient than that on the Derwent but also eliminated cracking. Other design advances included nine new low pressure-drop/high efficiency [combustion chambers](#) developed by [Lucas](#) and a small impeller for rear bearing and turbine disc cooling.<sup>[2]</sup> The first engine start was attempted on 27 October 1944. A number of snags delayed the run until nearly midnight, when with almost the entire day and night shift staff watching, an attempt was made to start the engine, without the inlet vanes, which had not yet been fitted. To everyone's dismay the engine refused to light - positioning the igniter was a trial-and-error affair at the time. On the next attempt, Denis Drew unscrewed the igniter and as the starter motor ran the engine up to speed, lit the engine with an [oxy-acetylene torch](#). The engine was run up to 4,000 lbf and more, and a cheer went up around the assembled personnel. Upon Hooker's arrival next morning, and informed that the inlet vanes had been fitted during the night, Hooker was satisfied to see the thrust gauge needle registering 5,000 lbf, making the B.41 the most powerful jet engine in the world. Weight was around 1,600 lb.<sup>[3]</sup>

<https://www.secretprojects.co.uk/threads/what-if-the-soviet-union-did-not-recvie-rr-derwent-nene-turbojets.18002/>

The Mig 15 would have been much later as a reliable engine would have taken much longer to develop than copying the Nene/Derwent engine sent to USSR. At the time people had not woken up to how relations would develop and change in late 40s so a left leaning UK government would not have realised how things would develop. The transfer of German prisoners-civilians who were on gas turbine teams in WWII were quite numerous. On the night of Oct 22 1946 250 BMW and 350 Junkers specialists were transferred to USSR.

The BMW task was to improve and support BMW 003 production at 2,200 lbt rating. Rotten turbine material meant the life and integrity of the blades was low and only a small number were built. The Junkers group worked on developing a 6,700 lbt jet based on the Jumo 012; again turbine blade integrity meant the engine could not pass the Russian 100 hr type test and development was stopped in 1948. The combined Junkers/BMW team were then tasked with developing a 6,000hp turboprop. Nikolai Kuznezow was the chief designer who ensured test beds and rigs were constructed while German specialists...

Alfred Schreiber and Josef Vogts supervised development, Ferdinand Brandner- the construction of prototypes and Karl Prestel supervised test bed trials.

### 28.1.1 Some more Harrowing Stories about Dilithium

Now we come to some more harrowing stories about that strange element *Deludium*, er I mean *Dilithium*. I had said it, Gene Roddenberry knew something about *Thermonuclear Fusion*, since he had read the story of Edward Teller diligently. What only few people know is that Dilithium is in the atomic formula:  $Li(2)$ . Now that is quite strange. Because Hydrogenium exists only as  $H(2)$ . There is no such thing as a single Atom of Hydrogenium. And the good Gene Roddenberry did some really clever analogous thinking. So he had probably thought to himself: When Hydrogenium only comes as  $H(2)$ , why don't we try this with Lithium. And here things become interesting. By analogous thinking he arrived at the speculative conclusion, that if there is *Dual Lithium*, one could use this property to stack Lithium Atoms together  $Li(2)$ , and they would have the fabulous property that you can stack them together like so many Lego blocks. So you take two  $Li(2)$ 's and you stack them together, then you suddenly have something even more strange. Because it is now  $Li(2) ** Li(2)$ . The **\*\*** are shorthand for exponential. Then you take two pairs of  $Li(2) ** Li(2)$  and then another  $Li(2) ** Li(2)$ . You suddenly get something really complicated and it becomes quite difficult to write it as a formula. Because it now becomes something even stranger:

### 28.1.2 $Li(2) ** Li(2) **** Li(2) **** **** Li(2) **** **** **** **** ...$

Because the more often you stack this together, it becomes more of an exponential function. So once you have stacked enough of them together, about 30 times, you already can initiate a pretty good thermo-nuclear process with very little Energy input. Now this is pure speculation of my mInd running wild. But as I always have some good intuition, when I do things like that... I know what an exponential is, and it multiplies itself like wildfire. I have already demonstrated this with the Exponential of Fire of human Intelligence, copyright by our good Heraklitos. It is just too bad that next-to-no-one in the whole of humanity (Die Letzten Menschen), is able to think this. And I quote again the good Patrice Ayme'.

<https://patriceayme.wordpress.com/2018/04/23/super-earths-or-how-the-exponential-function-can-matter/>

<https://patriceayme.wordpress.com/2019/03/26/thermonuclear-fusion-as-a-moral-imperative-to-avoid-ultimate-climate-catastrophe/>

<https://patriceayme.wordpress.com/2018/09/12/prediction-the-arctic-will-melt-suddenly/>

<https://patriceayme.wordpress.com/2018/03/25/emperor-constantine-christian-terrorist-325-ce-fall-of-rome-part-x/>

Patrice Ayme' is about as good as yours truly (I mean me) to think the Exponential. So we are just some oddballs in the whole of humanity. Especially because I have never seen or heard about a journalist who had had the slightest idea about what an exponential is. A nuclear chain reaction is also always an exponential of the kind of the  $Li(2)$  experiment mentioned above. First you have 2 Neutrons, then you have 4, then you have 8 ... and then when you get to around at about 30 or so Exponential'izations, the whole thing goes kaboom! This is the mechanism of an Atomic Bomb in about 30 words or less. Even Edward Teller could not have given you a shorter story. I am quite sure of that. See also:

<http://www.noologie.de/energie.htm>

### 28.1.3 The Superior Techology of the 2300's to 2500's

Only the script writers of Star Trek were sure that the superior techology of the 2300's to 2500's would come up with an answer. I think it will be round about the 23.000's that we have to wait for, if it ever comes to

pass, since there is a good chance that about the time of 2170 there will be no more humanity around to invent anything at all. The *Star Trek* movie *First Contact* (1996) enlarges a little bit on the possibility of how any-one of humanity could come up with the first warp drive. And this is such a ridiculous idea that only the *Star Trek* Script writers could come up with. Unfortunately Gene Roddenberry wasn't around any more or he would have surely stopped such a ridiculous idea.

#### **28.1.4 The Mindset of a Slave Holding Society**

Now this is all Science Fiction but there are still a few valuable lessons to be learned. And some of these lessons are of technological nature. As I had said it in another of my articles on the mindset of a slave holding society, that the elite becomes complacent and haughty and aloof when you let the slaves do all the menial ie. manual work for you and you just do the thinking and directing and ordering around the slaves. This was essentially the downfall of ancient Greek society and also of the Romans. And the prototypical example of this haughtiness and aloofness was our poor Platon, who was so aristocratic, that he would never touch any dirty, heavy, and sordid matter, not even with a one meter-long stick. And unfortunately the poor Roman Catholic Christians after the 3rd century or so, had nothing better to do than make the poor Platon their Leitgeist or their Zeitgeist. As the Freudians would say it: The Spiritus Rectum. (This is just a little dirty Freudian joke). The GIGO principle states: When you start out with Garbage, you will also faithfully continue to re-produce Garbage, which was pretty much the whole of Christian Philosophy in the gist of what Whitehead had stated: Most of Christian philosophy is just a series of footnotes to Platon. This means: Most of Western Christian philosophy (ancilla theologiae) just belongs to the rubbish heap of bad ideas carried to their logical extremes in the form of the Suprematization of the theology. And Peter Sloterdijk in "Gottes Eifer" had some very intelligent things to say about that pitfall in the history of Christian Thinking right from the start. I have just enlarged a little bit about the haughtiness of thinking philosophy only and leave the dirty work to the slaves.

<http://www.noologie.de/zeno.htm>

#### **28.1.5 The Klingon Empire, Spartans and Romans**

Now coming back to the Klingon Empire. The Klingon's were pretty much the same as the ancient Greeks, especially the Spartans, and also very much like the Romans. They also considered it beneath their dignity to do any menial work at all, since the Klingon's had their slaves for this business, and so they were the Super-Spartans and Romans of the Galaxy. Of course the *Star Trek* movies rarely spell this out in all the gory details. But there was this one scene with James T. Kirk who was made prisoner on one of the many Prison Planets of the Klingon Empire. And we can be pretty sure that the Klingon's had quite a lot of Prison Planets. We can make a rough estimate by extrapolating the number of slaves in the Roman Empire, and they were about about 35% to 40% of Italy's population. I am always surprised how detailed and thoroughly researched the US wikipedia articles are. And the German wikipedia is just a bunch of crap in comparison. So back to the Klingon Empire. We may safely assume that it had about 100 to 1000 planets under its iron (er Dilithium) rule. Otherwise it would just have been no Galaktik Empire at all. So we make the extrapolation that there must have been proportionately as many as 40 prison planets up to 400 prison planets, comprising the surprising number of... There must have been a slave population of  $400 * 10$  billion slaves in the whole of the Klingon Empire. When we roughly calculate about 10 billion slaves per slave planet. So this is it what you get, when you have a slave holding Empire out of all proportions. And since you need to have around one slave guardian for every 100 slaves... Well I can't get the numbers in the wikipedia any more. I think that I have exhausted the wikipedia.

#### **28.1.6 The Star Trek Script Writers on the Implosion of the Klingon Empire**

... So the the *Star Trek* script writers really did a good job with this Klingon Empire even if they didn't show us the exact figures. But with some extrapolating the slave statistics of the Roman Empire, we get to some very plausible numbers. And now we can do a little Double-Thinking to get to more dirty details. And the Klingon's would have vanished out of the Galaxy just by their own doing, just like the Spartans and the Romans did. It was the same bloody numbers calculation that led to the undoing of the Roman Empire. When the expansion of the Roman Empire stopped cold in its tracks after the times of about Marcus Aurelius, this was the end of the expansion and the beginning of the collapse or one may better call it The Implosion. There were no more fresh streams of slaves flowing into the Roman economy, that means the whole business plan of the Roman Empire collapsed altogether with the slave population. So I hope that I made the point correctly that it was REALLY NOT the Christians who were the culprits for the Roman collapse.

### 28.1.7 The Complete Destruction of the last Vestiges of Antiquity

What I am saying here about "the Christians" should be taken with a large table spoonful of "Cum Grano Salis". As it is always in humanity, there were some *intelligent religious believers* and some very stupid ones. Unfortunately, a horde of about 100 very *stupid religious believers* in about 100 days, can do so much more ever-lasting damage, than it would take 1000 intelligent ones about 1000 years to amend the damage. And this example doesn't come out of thin air. Because it really took the European civilization about 1000 years after the complete destruction of the ancient civilization (around 400 CE) to re-build something even moderately close after the year 1400 CE. Such was the wholesale and wanton destruction of Antiquity, and we will never know the true extent of it, since all the records were also destroyed of what had been there before the destruction.

### 28.1.8 The Implosion of the Ancient Roman Power Structure

So when the implosion of the ancient Roman power and civilization structure was really quite complete, (some of) the good Christians did what they could to destroy even the last vestiges of Ancient Roman Civilisation. Which was around the time of the Emperor Theodosius around 395 CE, and then the DARK AGES REALLY BEGAN, the wholesale Cultural Memory Loss of the Ancient Civilization. And for this the Christians were MOST CERTAINLY THE CULPRITS. We should not believe the euphemistic stories of the Anachorettes in the Egyptian Desert, like for example in the "Glasperlenspiel" of Hermann Hesse. This is pure propaganda of the finest Christian Sort. And even the good Lenin and the good Trotzki and the good Stalin wouldn't have been able to produce a better (or worse) propaganda. Because the Christian Anachorettes were more likely the CircumCelliones, and they liked to loot and pillage, to burn and tear down, and to rape, and drink and even suicide themselves en masse so that they became proverbial for the next 1800 years or so. The CircumCelliones and their ilk took bloody revenge on the remaining heathen population of the former Roman Empire. Whereas the Christian Martyr victims on the whole never exceeded more than about 1000, the CircumCelliones and their ilk took the lives of at least 10.000, give or take a few 10.000 more.

<https://www.jstor.org/stable/pdf/23960151.pdf>

<https://www.princeton.edu/~pswpc/pdfs/shaw/020603.pdf>

[https://en.wikipedia.org/wiki/Sectarian\\_violence\\_among\\_Christians](https://en.wikipedia.org/wiki/Sectarian_violence_among_Christians)

[https://en.wikipedia.org/wiki/Sectarian\\_violence](https://en.wikipedia.org/wiki/Sectarian_violence)

<https://en.wikipedia.org/wiki/Sectarianism>

<https://www.google.com/search?>

[source=hp&ei=3NsTXbuRCczOwQKSkIygDA&q=circumcellions+and+monks&oq=circumcelli&gs\\_l=psy-ab.3.2.0j0i30i5j0i5i10i30j0i5i30.820.5547..9360...1.0..0.483.2276.3j6j4-3.....0....1.gws-wiz.....0.z4SuaNkOxd4](https://www.google.com/search?source=hp&ei=3NsTXbuRCczOwQKSkIygDA&q=circumcellions+and+monks&oq=circumcelli&gs_l=psy-ab.3.2.0j0i30i5j0i5i10i30j0i5i30.820.5547..9360...1.0..0.483.2276.3j6j4-3.....0....1.gws-wiz.....0.z4SuaNkOxd4)

### 28.1.9 Collapse is a Natural Law of the Exponential

The Collapse is just the inverse of the natural law of the exponential which cannot go on forever, and it suddenly turns into the inverse, or a Minus Sum Game to phrase it in the terminology of *John von Neumann's* theory of *games and economic behaviour*. I have read the new title "Collapse" by Jared Diamond, and it is clear that the good Jared does the same spelling out the dire message that I am just expounding. See also the very enlightening work of *Patrice Ayme'* who goes much deeper into the dirty details than I do. He rightly calls it the *Iron Law of the Exponential* and the *Law of Plutocracy* which is pretty much the same. Unfortunately I couldn't come up with more quotations of the deeds of the Emperor Theodosius, since the good Patrice dwells upon the Emperor Constantine much more.

[[And now I do some wondering: Just the same day when I wrote this, the good Patrice just happened to come up with an article featuring the Emperor Theodosius. I was quite surprised when I read his article, and I came quite close to believe in C.G. Jung Synchronicity.

]]

Now the good Patrice is not an *Übermensch* and it is not the destiny of us humans to know everything in those huge large expanses of the Universe of our Knowledge. So we must at some times pretend that we are Sokrates, and we know that we know next to nothing about this huge the Universe of our Knowledge. And as Newton had rightly stated it: What we know is a drop, and what we don't know is the Ocean. I will immediately believe him. And just as a little side thought, the good Patrice Ayme' had mis-understood Sokrates completely since he had read only the Platon version of Sokrates and not the Xenophon version, where Sokrates is quite completely a very different person at all. The good Patrice cannot read all the works of the history of philosophy and neither can I. I am very humble to confess this right here and now.

<https://patriceayme.wordpress.com/?s=augustine>

<https://patriceayme.wordpress.com/?s=exponential>  
<https://patriceayme.wordpress.com/?s=plutocracy>

### 28.1.10 Theodosius I

[https://en.wikipedia.org/wiki/Theodosius\\_I](https://en.wikipedia.org/wiki/Theodosius_I)

**Theodosius I** (Latin: *Flavius Theodosius Augustus*;<sup>[1]</sup> Greek: Θεοδόσιος Α'; 11 January 347 – 17 January 395), also known as **Theodosius the Great**, was a Roman Emperor from 379 to 395, and the last emperor to rule over both the Eastern and the Western halves of the Roman Empire. On accepting his elevation, he campaigned against Goths and other barbarians who had invaded the Empire. His resources were not sufficient to destroy them or drive them out, which had been Roman policy for centuries in dealing with invaders. By treaty, which followed his indecisive victory at the end of the Gothic War, they were established as *foederati*, autonomous allies of the Empire, south of the Danube, in Illyricum, within the Empire's borders. They were given lands and allowed to remain under their own leaders, a grave departure from Roman hegemonic ways. This turn away from traditional policies was accommodationist and had grave consequences for the Western Empire from the beginning of the century, as the Romans found themselves with the impossible task of defending the borders and deal with unruly federates within. Theodosius I was obliged to fight two destructive civil wars, successively defeating the usurpers Magnus Maximus in 387–388 and Eugenius in 394, though not without material cost to the power of the Empire.

He issued decrees that effectively made Nicene Christianity the official state church of the Roman Empire.<sup>[2]</sup>

<sup>[3]</sup> He neither prevented nor punished the destruction of prominent Hellenistic temples of classical antiquity, including the Temple of Apollo in Delphi and the Serapeum in Alexandria. He dissolved the Order of the Vestal Virgins in Rome. In 393, he banned the pagan rituals of the Olympics in Ancient Greece. After his death, Theodosius's young sons Arcadius and Honorius inherited the east and west halves of the empire respectively, and the Roman Empire was never again re-united, though Eastern Roman emperors after Zeno would claim the united title after Julius Nepos's death in 480.

Theodosius is considered a saint by the Armenian Apostolic Church and Eastern Orthodox Church<sup>[4]</sup>, and his feast day is on January 19.<sup>[5]</sup>

In 325, Constantine I convened the Council of Nicaea, which affirmed the doctrine that Jesus, the Son, was equal to God the Father and "of one substance" with the Father (*homoousios* in Greek). The Council condemned the teachings of Arius, who believed Jesus to be inferior to the Father.

Despite the council's ruling, controversy continued for decades, with several christological alternatives to the Nicene Creed being brought forth. Theologians attempted to bypass the Christological debate by saying that Jesus was merely like (*homoios* in Greek) God the father, without speaking of substance (*ousia*). These non-Nicenes were frequently labeled as Arians (i.e., followers of Arius) by their opponents, though not all would necessarily have identified themselves as such.<sup>[33]</sup> For lack of a better name, they are known to history as *Semi-Arians*.<sup>[34]</sup>

The Emperor Valens had favored the group who used the *homoios* formula; this theology was prominent in much of the East and had under Constantius II gained a foothold in the West, being ratified by the synod of Rimini, though it was later abjured by a majority of the western bishops (after Constantius II's death in 361).

<sup>[35]</sup> The death of Valens damaged the standing of the Homoian faction, especially since his successor Theodosius steadfastly held to the Nicene Creed which was the interpretation that predominated in the West and was held by the important Alexandrian church.

The Christian persecution of Roman religion under Theodosius I began in 381, after the first couple of years of his reign in the Eastern Roman Empire. In the 380s, Theodosius I reiterated Constantine's ban on some practices of Roman religion, prohibited haruspicy on pain of death, decreed magistrates who did not enforce laws against polytheism were subject to criminal prosecution, broke up some pagan associations and tolerated attacks on Roman temples.

Between 389–392 he promulgated the Theodosian decrees<sup>[40]</sup> (instituting a major change in his religious policies),<sup>[41]:116</sup> which removed non-Nicene Christians from church office and abolished the last remaining expressions of Roman religion by making its holidays into workdays, banning blood sacrifices, closing Roman temples, confiscating Temple endowments and disbanding the Vestal Virgins.<sup>[42]</sup> The practices of taking auspices and witchcraft were punished. Theodosius refused to restore the Altar of Victory in the Senate House, as asked by non-Christian senators.<sup>[41]:115</sup>

In 392 he became sole emperor. From this moment till the end of his reign in 395, while non-Christians continued to request toleration,<sup>[43][44]</sup> he ordered, authorized, or at least failed to punish, the closure or destruction of many temples, holy sites, images and objects of piety throughout the empire.<sup>[45][46][47][48][49][50]</sup>

In 393 he issued a comprehensive law that prohibited any public non-Christian religious customs,<sup>[51]</sup> and was particularly oppressive to Manicheans.<sup>[52]</sup> He is likely to have discontinued the ancient Olympic Games,

whose last record of celebration was in 393, though archeological evidence indicates that some games were still held after this date.<sup>[53]</sup>

### 28.1.11 The Haughty Greek Philosophers

I have written something about the haughty Greek philosophers in this article:

<http://www.noologie.de/zeno01.htm>

So now for a little backtrack: The Greek engineers were not in the same hierarchical societal class structure of Greece as the ancient Greek philosophers were. We recall that Sokrates was a Stone Mason by his profession. And the ancient Greek Stone Mason's were quite a bit like the Freemasons, except that they *Really Knew* their business of *Temple Archi-Tecture*, and then some more of Ancient Sacred -Architecture, -Geometry, -Geomancy, and Sacred- Musicology. I have expounded this a a little bit more in my Wagner article. So I don't know if Platon just wanted to tell us a joke about Sokrates confessing that he knew nothing. When one is an initiate of the sacred traditions of the above crafts and initiations, then it is quite impossible to not know something. As I said this already a few times. The good Sokrates is a person around whom so many bad stories had been concocted, especially by our good Platon. And it was the greatest disservice he did for humanity that he pictured Sokrates in a wholly confusing and distorted way. One needs to restore the real Personality or the Daimonos of Sokrates behind this false Persona that Platon had concocted. We may recall that the ancient meaning of *Persona* just means *Per-Sonare*, and this is called to "Sound Through a Per-Son" the *Message of the Divine*. And by this, a worse misreading and distortion of the *daimonos of Sokrates* than what Platon did, was not sprematiz-able, as Peter Sloterdijk would call it in "Gottes Eifer".

<http://www.noologie.de/wagner.htm>

<http://www.noologie.de/wagner.pdf>

[https://www.google.com/search?](https://www.google.com/search?q=tanjore+temple+architecture+secrets&tbm=isch&source=hp&sa=X&ved=2ahUKEwjG-cKwuO7iAhVOCewKHxvwBCgQsAR6BAgEEAE&biw=1380&bih=707)

[q=tanjore+temple+architecture+secrets&tbm=isch&source=hp&sa=X&ved=2ahUKEwjG-cKwuO7iAhVOCewKHxvwBCgQsAR6BAgEEAE&biw=1380&bih=707](https://www.google.com/search?q=tanjore+temple+architecture+secrets&tbm=isch&source=hp&sa=X&ved=2ahUKEwjG-cKwuO7iAhVOCewKHxvwBCgQsAR6BAgEEAE&biw=1380&bih=707)

<https://haribhakt.com/secrets-of-the-tanjore-thanjavur-big-temple-built-by-rajachola/>

### 28.1.12 Some Thoughts about the Ancient Greek Engineers

And all those very clever engineers that the Greeks had, like the fellows who built the *Antikythera Mechanism* or like *Archimedes of Syracuse*, or the steam toy of *Heron of Alexandria*, which was just used to do some plaything like a little temple door-opener magic. The haughty Greek philosophers just couldn't think of anything useful to do with those inventions until about 2000 years later in the late 1600's, when the first seeds of the Industrial Revolution were sown. Interestingly enough the French scientists were about as haughty as the Greek philosophers, and they left the *Industrial Revolution* to the British'ers, much to their later chagrin. The *French Academy* head honchos were about as much aloof as the ancient Greeks were. And for our surprise the *French Salons* were a pretty exact copy of the ancient *Greek Symposion's*. With about as much wine and then some *Hashish*, some *Opium*, and later some *Cocaine*. The only thing different from the Greeks was that the Salons mostly were managed by the women of society who were a sort of *Soap Opera Conductors*. So they had a little different role than that of the ancient *Greek Hetairae*.

[https://en.wikipedia.org/wiki/French\\_art\\_salons\\_and\\_academies](https://en.wikipedia.org/wiki/French_art_salons_and_academies)

From the seventeenth century to the early part of the twentieth century, artistic production in France was controlled by artistic **academies** which organized official exhibitions called **salons**. In France, **academies** are institutions and learned societies which monitor, foster, critique and protect French cultural production.

Academies were more institutional and more concerned with criticism and analysis than those literary gatherings today called **salons** which were more focused on pleasurable discourse in society, although certain gatherings around such figures as **Marguerite de Valois** were close to the academic spirit.

Academies first began to appear in France in the **Renaissance**. In 1570 **Jean-Antoine de Baif** created one devoted to poetry and music, the **Académie de poésie et de musique**, inspired by Italian models (such as the academy around **Marsilio Ficino**).

The first half of the seventeenth century saw a phenomenal growth in private learned academies, organized around a half-dozen or a dozen individuals meeting regularly.<sup>[1]</sup> By the middle of the century, the number of private academies decreased as academies gradually came under government control, sponsorship and patronage.

The first private academy to become "official" and to this day the most prestigious of governmental academies is the **Académie française** ("French Academy"), founded in 1634 by **Cardinal Richelieu**. It is concerned with the **French language**. In the fine arts, the **Académie de peinture et de sculpture** ("Academy of Painting and Sculpture") was founded by **Cardinal Mazarin** in 1648 and was soon followed by a number of

other officially instituted academies: the [Académie royale de danse](#) ("Royal Academy of Dance") in 1661; the [Académie royale des inscriptions et médailles](#) ("Royal Academy of Inscriptions and Medals") in 1663 [renamed the Académie royale des inscriptions et belles-lettres ("Royal Academy of Inscriptions and Literature" or "Royal Academy of Humanities") in 1716]; the [Académie royale des sciences](#) ("Royal Academy of Sciences") in 1666; the [Académie d'Opéra](#) ("Academy of Opera") in 1669 [renamed the Académie royale de musique ("Royal Academy of Music") in 1672 and the Académie de musique in 1791]; and the [Académie royale d'architecture](#) ("Royal Academy of Architecture") founded by [Jean-Baptiste Colbert](#) in 1671.<sup>[1][2]</sup>

[https://en.wikipedia.org/wiki/Acad%C3%A9mie\\_royale\\_de\\_peinture\\_et\\_de\\_sculpture](https://en.wikipedia.org/wiki/Acad%C3%A9mie_royale_de_peinture_et_de_sculpture)

[https://en.wikipedia.org/wiki/Acad%C3%A9mie\\_des\\_Beaux-Arts](https://en.wikipedia.org/wiki/Acad%C3%A9mie_des_Beaux-Arts)

<https://arthistoryunstuffed.com/french-academy/>

[https://en.wikipedia.org/wiki/French\\_Academy\\_of\\_Sciences](https://en.wikipedia.org/wiki/French_Academy_of_Sciences)

The **French Academy of Sciences** (French: *Académie des sciences*) is a [learned society](#), founded in 1666 by [Louis XIV](#) at the suggestion of [Jean-Baptiste Colbert](#), to encourage and protect the spirit of French [scientific research](#). It was at the forefront of scientific developments in Europe in the 17th and 18th centuries, and is one of the earliest [Academies of Sciences](#).

Currently headed by [Sébastien Candel](#)<sup>[out of date?]</sup> (President of the Academy), it is one of the five Academies of the [Institut de France](#)<sup>[1]</sup>.

<https://www.britannica.com/topic/Academy-of-Sciences-French-organization>

Academy of Sciences, French Académie des Sciences, institution established in Paris in 1666 under the patronage of [Louis XIV](#) to advise the French government on scientific matters. This advisory role has been largely taken over by other bodies, but the academy is still an important representative of French science on the international stage. Although its role is now predominantly honorific, the academy continues to hold regular Monday meetings at the Institut de [France](#) in Paris.

The [Academy of Sciences](#) was established by Louis's financial controller, [Jean-Baptiste Colbert](#), to formalize under government control earlier private meetings on scientific matters. In 1699 the Academy received a formal constitution, in which six subject areas were recognized: [mathematics](#), [mechanics](#), [astronomy](#), [chemistry](#), [botany](#), and [anatomy](#). There was a [hierarchy](#) of membership, in which the senior members (known as pensioners, who received a small remuneration) were followed by associates and assistants.

The Academy organized several important expeditions. For example, in 1736 [Pierre-Louis Moreau de Maupertuis](#) led an expedition to Lapland to measure the length of a degree along the meridian. His measurement verified [Isaac Newton's](#) [contention](#) that the Earth is an oblate spheroid (a sphere flattened at the poles).

### 28.1.13 The Historical Lessons of the Downfall of the Klingon Empire

So back to the lessons that the downfall of the Klingon Empire will surely tell us in the near of even not so far future. The Klingon's would have surely managed their own extinction, when their expansion came to a halt, just the same fate that befell the Ancient Romans. As *George Santayana* had put it succinctly:

**Those who cannot remember the past are condemned to repeat it.**

[https://en.wikiquote.org/wiki/George\\_Santayana](https://en.wikiquote.org/wiki/George_Santayana)

And if the Klingon's would just have had a few more 100 years of exponential growth and then the inevitable collapse to really experience their own kind of fall of their Empire. And so we heed the lessons of his-story and we just witness the collapse of our own exponential growth not-so civilization. We are already quite a good way into the total biospheric collapse, and the human population collapse. And by the year 2170 or so, there may be just about 500 million of "Die Letzen Menschen" left over on our once beautiful planet, which by then will be ravaged and pillaged beyond any recognition. So the *Matrix story of the Wachowski's* is just some kind of prophesy, except that they got the scenario totally wrong. I would have never been able to think of a more hare-brained theory than that of the Matrix: The sole source of energy would be huge bee-hives of warm human bodies. Because the human bodies, and especially their brains, are the biggest consumers of energy, in the whole of the Galaxy. I don't like to make prophesies because they are pretty hard, especially when they concern the future, which I always like to say. But one thing is for sure: The kind of technology the we have now is no way out, and neither are the sorry attempts at solar and wind power. The good Patrice always says that we direly need *Thermonuclear Power*. But I still don't have any idea how we could get that without an ample supply of *Dilithium*.

### 28.1.14 Star Trek first Contact

[https://en.wikipedia.org/wiki/Star\\_Trek:\\_First\\_Contact#Themes](https://en.wikipedia.org/wiki/Star_Trek:_First_Contact#Themes)

Frakes believes that the main themes of *First Contact*—and *Star Trek* as a whole—are loyalty, friendship, honesty and mutual respect. This is evident in the film when Picard chooses to rescue Data rather than evacuate the ship with the rest of the crew.<sup>[12]</sup> The film makes a direct comparison between Picard's hatred of the Borg and refusal to destroy the *Enterprise* and that of Captain Ahab in Herman Melville's novel *Moby-Dick*. The moment marks a turning point in the film as Picard changes his mind, symbolized by his putting down his phaser.<sup>[12]</sup> A similar *Moby-Dick* reference was made in *Star Trek II: The Wrath of Khan*, and although Braga and Moore did not want to repeat it, they decided it worked so well they could not leave it out.<sup>[16]</sup>

In *First Contact*, the individually inscrutable and faceless Borg fulfill the role of the similarly unreadable whale in Melville's work. Picard, like Ahab, has been hurt by his nemesis, and author Elizabeth Hinds said it makes sense that Picard should "opt for the perverse alternative of remaining on board ship to fight" the Borg rather than take the only sensible option left, to destroy the ship.<sup>[71]</sup> Several lines in the film refer to the 21st-century dwellers being primitive, with the people of the 24th century having evolved to a more utopian society. In the end it is Lily (the 21st-century woman) who shows Picard (the 24th-century man) that his quest for revenge is the primitive behavior that humans had evolved to not use.<sup>[16]</sup> Lily's words cause Picard to reconsider, and he quotes Ahab's words of vengeance, recognizing the death wish embedded therein.<sup>[71]</sup>

The nature of the Borg, specifically as seen in *First Contact*, has been the subject of critical discussion. Author Joanna Zylińska notes that while other alien species are tolerated by humanity in *Star Trek*, the Borg are viewed differently because of their cybernetic alterations and the loss of personal freedom and autonomy. Members of the crew who are assimilated into the Collective are subsequently viewed as "polluted by technology" and less than human. Zylińska draws comparisons between the technological distinction of humanity and machine in *Star Trek* and the work of artists such as Stelarc.<sup>[72]</sup> Oliver Marchart drew parallels between the Borg's combination of many into an artificial One and Thomas Hobbes's concept of the Leviathan.<sup>[73]</sup> The nature of perilous first contact between species, as represented by films such as *Independence Day*, *Aliens* and *First Contact*, is a marriage of classic fears of national invasion and the loss of personal identity.<sup>[74]</sup>

### 28.1.15 About Atom Bombs

[https://en.wikipedia.org/wiki/Fat\\_Man](https://en.wikipedia.org/wiki/Fat_Man)

"**Fat Man**" was the codename for the nuclear bomb that was detonated over the Japanese city of Nagasaki by the United States on 9 August 1945. It was the second of the only two nuclear weapons ever used in warfare, the first being *Little Boy*, and its detonation marked the third nuclear explosion in history. It was built by scientists and engineers at Los Alamos Laboratory using plutonium from the Hanford Site, and it was dropped from the Boeing B-29 Superfortress *Bockscar* piloted by Major Charles Sweeney.

The name Fat Man refers to the early design of the bomb because it had a wide, round shape; it was also known as the Mark III. Fat Man was an implosion-type nuclear weapon with a solid plutonium core. The first of that type to be detonated was the Gadget in the Trinity nuclear test less than a month earlier on 16 July at the Alamogordo Bombing and Gunnery Range in New Mexico. Two more were detonated during the Operation Crossroads nuclear tests at Bikini Atoll in 1946, and some 120 were produced between 1947 and 1949, when it was superseded by the Mark 4 nuclear bomb. The Fat Man was retired in 1950.

Oppenheimer brought John von Neumann to Los Alamos in September 1943 to take a fresh look at implosion. After reviewing Neddermeyer's studies, and discussing the matter with Edward Teller, von Neumann suggested the use of high explosives in shaped charges to implode a sphere, which he showed could not only result in a faster assembly of fissile material than was possible with the gun method, but which could greatly reduce the amount of material required, because of the resulting higher density.<sup>[8]</sup> The idea that, under such pressures, the plutonium metal itself would be compressed came from Teller, whose knowledge of how dense metals behaved under heavy pressure was influenced by his pre-war theoretical studies of the Earth's core with George Gamow.<sup>[9]</sup> The prospect of more-efficient nuclear weapons impressed Oppenheimer, Teller, and Hans Bethe, but they decided that an expert on explosives would be required. Kistiakowsky's name was immediately suggested, and Kistiakowsky was brought into the project as a consultant in October 1943.<sup>[8]</sup>

## 29 Edward Teller

[https://en.wikipedia.org/wiki/Edward\\_Teller](https://en.wikipedia.org/wiki/Edward_Teller)

**Edward Teller** (Hungarian: *Teller Ede*; January 15, 1908 – September 9, 2003) was a Hungarian-American theoretical physicist who is known colloquially as "the father of the hydrogen bomb" (see the Teller–Ulam design), although he did not care for the title.<sup>[1]</sup> He made numerous contributions to nuclear and molecular

physics, spectroscopy (in particular the [Jahn–Teller](#) and [Renner–Teller](#) effects), and [surface physics](#). His extension of [Enrico Fermi's](#) theory of [beta decay](#), in the form of [Gamow–Teller transitions](#), provided an important stepping stone in its application, while the [Jahn–Teller](#) effect and the [Brunauer–Emmett–Teller \(BET\) theory](#) have retained their original formulation and are still mainstays in physics and chemistry.<sup>[2]</sup> Teller also made contributions to [Thomas–Fermi theory](#), the precursor of [density functional theory](#), a standard modern tool in the [quantum mechanical](#) treatment of complex molecules. In 1953, along with [Nicholas Metropolis](#), [Arianna Rosenbluth](#), [Marshall Rosenbluth](#), and his wife [Augusta Teller](#), Teller co-authored a paper that is a standard starting point for the applications of the [Monte Carlo method](#) to [statistical mechanics](#).

<sup>[3]</sup> Throughout his life, Teller was known both for his scientific ability and for his difficult interpersonal relations and volatile personality.

Teller was born in Hungary and emigrated to the United States in the 1930s. He was an early member of the [Manhattan Project](#), charged with developing the first [atomic bomb](#); during this time he made a serious push to develop the first [fusion-based](#) weapons as well, but these were deferred until after [World War II](#). After his controversial testimony in the [security clearance](#) hearing of his former [Los Alamos Laboratory](#) superior, [J. Robert Oppenheimer](#), Teller was ostracized by much of the scientific community. He continued to find support from the U.S. government and military research establishment, particularly for his advocacy for [nuclear energy](#) development, a strong nuclear arsenal, and a vigorous [nuclear testing](#) program. He was a co-founder of [Lawrence Livermore National Laboratory](#) (LLNL), and was both its director and associate director for many years.

### 30 Thermonuclear Weapon

[https://en.wikipedia.org/wiki/Thermonuclear\\_weapon](https://en.wikipedia.org/wiki/Thermonuclear_weapon)

A **thermonuclear weapon**, or fusion weapon, is a second-generation [nuclear weapon design](#). Its greater sophistication over pure fission weapons may afford it vastly greater destructive power than first-generation [atomic bombs](#), a more compact size, a lower mass or a combination of these benefits. Modern fusion weapons consist essentially of two main components: a [nuclear fission](#) primary stage (fueled by [uranium-235](#) or [plutonium-239](#)) and a separate [nuclear fusion](#) secondary stage containing thermonuclear fuel: the heavy hydrogen isotopes deuterium and tritium, or in modern weapons lithium deuteride. For this reason, thermonuclear weapons are often colloquially called **hydrogen bombs** or **H-bombs**.<sup>[1]</sup>

A fusion explosion begins with the detonation of the fission primary stage. Its temperature soars past approximately one hundred million [Kelvins](#), causing it to glow intensely with thermal X-radiation. These X-rays flood the void (the "radiation channel" often filled with [polystyrene foam](#)) between the primary and secondary assemblies placed within an enclosure called a radiation case, which confines the X-ray energy and resists its outward pressure. The distance separating the two assemblies ensures that debris fragments from the fission primary (which move much slower than X-ray photons) cannot disassemble the secondary before the fusion explosion runs to completion.

### 31 Castle Bravo

[https://en.wikipedia.org/wiki/Castle\\_Bravo](https://en.wikipedia.org/wiki/Castle_Bravo)

**Castle Bravo** was the first in a series of high-yield thermonuclear weapon design tests conducted by the United States at [Bikini Atoll](#), [Marshall Islands](#), as part of [Operation Castle](#). Detonated on March 1, 1954, the device was the most powerful [nuclear device](#) detonated by the United States and its first [lithium deuteride](#) fueled [thermonuclear weapon](#).<sup>[1][2]</sup> Castle Bravo's yield was 15 megatons of TNT, 2.5 times the predicted 6.0 megatons, due to unforeseen additional reactions involving <sup>7</sup>Li,<sup>[3]</sup> which led to the unexpected radioactive contamination of areas to the east of Bikini Atoll.

[Fallout](#) from the detonation fell on residents of [Rongelap](#) and [Utirik](#) atolls and spread around the world. The inhabitants of the islands were not evacuated until three days later and suffered [radiation sickness](#). Twenty-three crew members of the Japanese fishing vessel [Daigo Fukuryū Maru](#) ("Lucky Dragon No. 5") were also contaminated by fallout, experiencing [acute radiation syndrome](#). The blast incited international reaction over atmospheric thermonuclear testing.<sup>[4]</sup>

The device was called **SHRIMP** and had the same basic configuration (radiation implosion) as the [Ivy Mike](#) wet device, except with a different type of [fusion](#) fuel. *SHRIMP* used [lithium deuteride](#) (LiD), which is solid at room temperature; *Ivy Mike* used [cryogenic](#) liquid [deuterium](#) (D<sub>2</sub>), which required elaborate cooling equipment. *Castle Bravo* was the first test by the United States of a practical deliverable [fusion bomb](#), even though the TX-21 as proof-tested in the Bravo event was not weaponized. The successful test rendered obsolete the cryogenic design used by *Ivy Mike* and its weaponized derivative, the [JUGHEAD](#), which was slated to be tested as the initial *Castle Yankee*. It also used a 7075 aluminum 9.5 cm thick ballistic case. Aluminum was used to drastically reduce bomb's weight and simultaneously provided sufficient radiation confinement time to raise yield, a departure from the heavy stainless steel casing (304L or MIM 316L) employed by contemporary weapon-projects.<sup>[6]:54:237<sup>[9]</sup></sup>

### 31.1.1 Heron of Alexandria

[https://en.wikipedia.org/wiki/Hero\\_of\\_Alexandria](https://en.wikipedia.org/wiki/Hero_of_Alexandria)

Heron described<sup>[12]</sup> the construction of the *aeolipile* (a version of which is known as *Heron's engine*) which was a [rocket-like reaction engine](#) and the first-recorded [steam engine](#) (although [Vitruvius](#) mentioned the aeolipile in *De Architectura* some 100 years earlier than Heron). It was created almost two millennia before the [industrial revolution](#). Another engine used air from a closed chamber heated by an altar fire to displace water from a sealed vessel; the water was collected and its weight, pulling on a rope, opened temple doors.<sup>[13]</sup> Some historians have conflated the two inventions to assert that the aeolipile was capable of useful work.<sup>[14]</sup>

The first [vending machine](#) was also one of his constructions; when a coin was introduced via a slot on the top of the machine, a set amount of holy water was dispensed. This was included in his list of inventions in his book *Mechanics and Optics*. When the coin was deposited, it fell upon a pan attached to a lever. The lever opened up a valve which let some water flow out. The pan continued to tilt with the weight of the coin until it fell off, at which point a counter-weight would snap the lever back up and turn off the valve.<sup>[15]</sup>

A windwheel operating an organ, marking the first instance in history of wind powering a machine.<sup>[4][5]</sup>

Heron also invented many mechanisms for the Greek [theater](#), including an entirely mechanical play almost ten minutes in length, powered by a binary-like system of ropes, knots, and simple machines operated by a rotating cylindrical cogwheel. The sound of [thunder](#) was produced by the mechanically-timed dropping of metal balls onto a hidden drum.

The [force pump](#) was widely used in the [Roman world](#), and one application was in a fire-engine.

A [syringe](#)-like device was described by Heron to control the delivery of air or liquids.<sup>[16]</sup>

In optics, Heron formulated the [principle of the shortest path of light](#): If a ray of light propagates from point A to point B within the same medium, the path-length followed is the shortest possible. It was nearly 1000 years later that [Alhacen](#) expanded the principle to both reflection and refraction, and the principle was later stated in this form by [Pierre de Fermat](#) in 1662; the most modern form is that the path is at an [extremum](#).

A standalone fountain that operates under self-contained hydrostatic energy ([Heron's fountain](#))

A programmable cart that was powered by a falling weight. The "program" consisted of strings wrapped around the drive axle.<sup>[17]</sup>

## 32 The History of the Steam Engine

[https://en.wikipedia.org/wiki/History\\_of\\_the\\_steam\\_engine](https://en.wikipedia.org/wiki/History_of_the_steam_engine)

The 1698 *Savery Steam Pump* - the first commercially successful steam powered device, built by [Thomas Savery](#)

The first recorded rudimentary [steam engine](#) was the [aeolipile](#) described by [Heron of Alexandria](#) in 1st-century [Roman Egypt](#).<sup>[1]</sup> Several steam-powered devices were later experimented with or proposed, such as [Taqi al-Din's steam jack](#), a [steam turbine](#) in 16th-century [Ottoman Egypt](#), and [Thomas Savery's steam pump](#) in 17th-century England. In 1712, [Thomas Newcomen's atmospheric engine](#) became the first commercially successful engine using the principle of the piston and cylinder, which was the fundamental type steam engine used until the early 20th century. The steam engine was used to pump water out of coal mines. During the [Industrial Revolution](#), [steam engines](#) started to replace water and wind power, and eventually became the dominant source of power in the late 19th century and remaining so into the early decades of the 20th century, when the more efficient steam turbine and the [internal combustion engine](#) resulted in the rapid replacement of the steam engines. The [steam turbine](#) has become the most common method by which electrical power generators are driven.<sup>[2]</sup> Investigations are being made into the practicalities of reviving the reciprocating steam engine as the basis for the new wave of [advanced steam technology](#)

## 33 Some Side Thoughts about Stealth Aircraft

Picking up some dangling bits and pieces of the *Klingon Cloaking Device*. Pretty much the same thinking holds for present-day *Stealth Aircraft* which are not so stealthy at all. You can see them pretty well as they are flying around in the skies. Stealth is completely a matter of frequency or better the wavelength of electromagnetic radiation. The technology of Stealth Aircraft does one thing only. They make it difficult for the X-band radars of your friendly enemy to track and home in on you, and just at this exact wavelength of the X-band radars. It just makes the tracking and homing of anti-aircraft missiles a little more difficult. On anything with a longer wavelength you are pretty well visible. So in the VHF and UHF bands of conventional radars you are about as visible as a Christmas tree with so many flashlights. So no stealth at all. And this gives a stealthy aircraft just some valuable seconds or minutes before they are detected anyhow. And when it comes to the wavelength of visible light you are out of luck totally. And the North Koreans have in their arsenals some 10,000 old anti-aircraft guns from surplus USSR armories which they had bought very cheaply. And when you have a couple 1000 anti-aircraft guns with nothing else than optical sights, which

cannot be deceived at all by stealth, you just need some good eyeball technology version 1.0 and then some lucky shots, and then goes the Stealth Aircraft down with Kaboom - Bång - Bång. Of about 200 Million \$\$\$ over-the-counter price. And we add some surprising biological data: Because the North Koreans are so poor, they don't have so much in terms of Television. That translates directly into a superior eyesight. Nowadays more than half of the children in the West and in China need glasses, because of TV, Gaming Computers, and pretty bad on top of this, the new LCD lights and the LCD screens that emit light wavelengths that can make you blind. Because of the very high percentage of blue light of 7000 Kelvin. And this kind of light will just eat away your Melatonin, and this causes pretty bad insomnia.

And the intelligent forecasters of Aviation Technology are pretty well able to predict: There will come a day when the combined Air Forces of the USA will be able to pay for ONE aircraft only. Then they have to share it: The Air Force can have it to fly from 06:00 in the morning until 14:00 sharp, and then the Navy Air Force will have it until 12:00 midnight. Since the Navy Air Force usually has better training for their pilots to do Night-Time landings. To take off at Night-time is no problem at all. But landing at Night-time on a heaving, lurching and wavering Aircraft Carrier flight deck is quite another kind of business. And the Marine Air Force can use the plane every leap year or so.

### 33.1.1 The Dutch Golden Age

[https://en.wikipedia.org/wiki/Dutch\\_Golden\\_Age](https://en.wikipedia.org/wiki/Dutch_Golden_Age)

The **Dutch Golden Age** (Dutch: *Gouden Eeuw* Dutch pronunciation: [udə(n) eu]) was a period in the history of the Netherlands, roughly spanning the 17th century, in which Dutch trade, science, military, and art were among the most acclaimed in the world. The first section is characterized by the [Eighty Years' War](#), which ended in 1648. The Golden Age continued in peacetime during the [Dutch Republic](#) until the end of the century.

The transition by the Netherlands to the foremost maritime and economic power in the world has been called the "Dutch Miracle" by historian [K. W. Swart](#).<sup>[1]</sup>

Several other factors also contributed to the flowering of trade, industry, the arts and the sciences in the Netherlands during this time. A necessary condition was a supply of cheap energy from windmills and from [peat](#), easily transported by canal to the cities. The invention<sup>[4]</sup> of the windpowered [sawmill](#) enabled the construction of a massive fleet of ships for worldwide trading and for military defense of the republic's economic interests.

Birth and wealth of corporate finance

In the 17th century the Dutch — traditionally able seafarers and keen mapmakers — began to trade with the [Far East](#), and as the century wore on, they gained an increasingly dominant position in world trade, a position previously occupied by the [Portuguese](#) and [Spanish](#).<sup>[5]</sup>

In 1602, the [Dutch East India Company](#) (Dutch: *Verenigde Oostindische Compagnie* or [VOC](#)) was founded. It was the first-ever [multinational corporation](#), financed by shares that established the [first modern stock exchange](#). The Company received a Dutch monopoly on Asian trade, which it would keep for two centuries, and it became the world's largest commercial enterprise of the 17th century. Spices were imported in bulk and brought huge profits due to the efforts and risks involved and seemingly insatiable demand. This is remembered to this day in the Dutch word *peperduur* (as expensive as pepper), meaning something is very expensive, reflecting the prices of spices at the time. To finance the growing trade within the region, the [Bank of Amsterdam](#) was established in 1609, the precursor to, if not the first true [central bank](#).<sup>[6]</sup>

Although the trade with the Far East was the more famous of the VOC's exploits, the main source of wealth for the Republic was in fact its trade with the Baltic states and Poland. Called the "Mothertrade" (Dutch: "Moedernegotie"), the Dutch imported enormous amounts of bulk resources like grain and wood, stockpiling them in Amsterdam so Holland would never lack for basic goods, as well as being able to sell them on for profit. This meant that unlike their main rivals the Republic wouldn't face the dire repercussions of a bad harvest and the starvation it accompanied, instead profiting when this happened in other states (bad harvests were commonplace in France and England in the 17th century, which also contributed to the Republic's success in that time). In time the Dutch traders gained such a dominant position in Poland and the Baltic they all but turned into de facto satellite states.

### 33.1.2 Some more Strange Things about the Spartans

The Spartans were a pretty extreme ethnos in the whole of the ancient world. Their society was entirely based on and geared to One Thing Only: War. Even the famed Samurai of Japan could not come close to that Warrior Ethos of the Spartans. So they also serve as a good model for the Klingon Empire. It is like an "if it were that the Spartans had built an Empire". Which of course was impossible for the Spartans.

### 34 The Crypteia

The Spartans also had an interesting ritual called the Crypteia. It was a kind of initiation ritual for the young warriors to become full-fledged Spartan warriors. Because the young candidate had to kill a Helot. And this was so easy that it could not be called a great deed at all. Since the Helots were forbidden to carry any sort of weapon, they were easy prey. But it is very doubtful that the Crypteia served any practical purpose or was it just some sardonic theater to inflict some terror on the poor Helots? Even catching a hare was much more difficult compared to this. In other not-so cultures it was pretty much more of an initiation ritual because that necessitated to kill a member of an opposing tribe. And since the opposing tribe knew that very well, that when the time of the initiation ritual came up, you should better be aware not to go anywhere alone. And you always better carry your weapons around with you. This was the state of constant war-fare of every tribe against every other tribe in New Guinea. So it came to pass that no-one in his right mind would go anywhere alone, not even to the toilet. So the going to the toilet was also a community ritual. The island of New Guinea was not such a nice place to live in, and the only one who had no idea what was going on, was the good Jared Diamond. At least I had never found in all of his books any two words about that constant warfare. To the contrary, the good Jared did everything he could do to explain that the New Guinean's were as intelligent as all the rest of humanity. Which is really true, but since the New Guinean's were always on the war path (as Karl May would have said it) ... They just didn't have any time at all to spare than to think about the next blood revenge to revenge some distant relative of poor you, who had been killed by the (not-so-) friendly neighboring tribe. So as a corollary, when you think all the time about killing and not being killed yourself, you have practically no time to do anything creative. Like inventing an aeroplane, for example. There are some nice anthropological tales to tell about the Cargo Cult of these islands. But this is another matter. One can get it quite easily when one googles "Cargo Cult".

<https://en.wikipedia.org/wiki/Crypteia>

The **Crypteia** or **Krypteia** (Greek: κρυπτεία *krupteia* from κρυπτός *kruptós*, "hidden, secret things") was an ancient Spartan state institution involving young Spartan men. Its goal and nature are still a matter of discussion and debate among historians, but some scholars (such as [Henri-Alexandre Wallon](#)) consider the Krypteia to be a kind of [secret police](#) and state security force organized by the [ruling class](#) of Sparta, whose purpose was to terrorize the servile [helot](#) population. Others (including [Hermann Köchly](#) and [Wilhelm Wachsmuth](#)) believe it to be a form of military training, similar to the Athenian [ephebia](#).

Certain young Spartan men who had completed their training at the [agoge](#) with such success that they were marked out as potential future leaders would be given the opportunity to test their skills and prove themselves worthy of the Spartan polity through participation in the Krypteia.

Every autumn, according to [Plutarch](#) (*Life of Lycurgus*, 28, 3–7), the Spartan [ephors](#) would *pro forma* declare war on the [helot](#) population so that any Spartan citizen could kill a helot without fear of punishment. At night, the chosen *kryptes* (κρύπτες, members of the Krypteia) were sent out into the [Laconian](#) countryside armed with knives with the instructions to kill any helot they encountered and to take any food they needed. They were specifically told to kill the strongest and best of the helots. This practice was instigated to prevent the threat of a rebellion by the helots and to keep their population in check.

According to [Cartledge](#), Krypteia members stalked the helot villages and surrounding countryside, spying on the servile population. Their mission was to prevent and suppress unrest and rebellion. Troublesome helots could be summarily executed. Such brutal repression of the helots permitted the Spartan elite to successfully control the servile agrarian population and devote themselves to military practice. It may also have contributed to the Spartans' reputation for stealth since a *kryptes* (κρύπτης) who got caught was punished by whipping.<sup>[1]</sup>

Only Spartans who had served in the Krypteia as young men could expect to achieve the highest ranks in Spartan society and army. It was felt that only those Spartans who showed the willingness and ability to kill for the state at a young age were worthy to join the leadership in later years.

[Plato](#) (*Laws*, I, 633), a scholiast to Plato, and [Heraclides Lembos](#) (*Fr. Hist. Gr.*, II, 210) also describe the krypteia.

On the battlefield

In his *Cleomenes*, [Plutarch](#) describes the Krypteia as being a unit of the Spartan army; during the [battle of Sellasia](#), the Spartan king Cleomenes "called Damoteles, the commander of the Krypteia, and ordered him to observe and find out how matters stood in the rear and on the flanks of his army".<sup>[2]</sup> Various scholars have speculated on the presence and function of the Krypteia on the battlefield, describing it as a reconnaissance, [special operations](#), or even [military police](#) force.<sup>[2]</sup>

As rite of passage

Jeanmaire points out that the [bushranger](#) life of the Krypteia has no common point with the disciplined and well-ordered communal life (see [Homonoia](#)) of the Spartan [hoplite](#), but as it is only a short part in a very long and thorough training, this could precisely fit an additional skill useful when separated from one's unit. Jeanmaire suggests that the Krypteia was a [rite of passage](#), possibly pre-dating the classical military organisation, and may have been preserved through Sparta's legendary religious conservatism. He draws comparison with the [initiation](#) rituals of some African secret societies (wolf-men and [leopard men](#)).<sup>[3]</sup>

## 35 Helots and Krypteia

<https://en.wikipedia.org/wiki/Helots>

<https://medium.com/interesting-histories/interesting-histories-helots-the-slaves-of-sparta-46b70ebfdc05>

<https://www.ancient-origins.net/history-important-events/helots-slave-warriors-ancient-sparta-003184>

<https://en.wikipedia.org/wiki/Krypteia>

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[Plato](#) (*Laws*, I, 633), a scholiast to Plato, and [Heraclides Lembos](#) (*Fr. Hist. Gr.*, II, 210) also describe the krypteia.

### 35.1.1 About Japanese Samurai and Yamabushi and Shingon

I am now telling another tall story: Even the fearsome Japanese Samurai couldn't manage to completely enslave their peasant population since the Samurai always needed an Over-Lord to command them and whom they followed into their deaths, which happened quite often. When the Over-Lord was killed, it was the honorable occasion for the all the good Samurai troops in his entourage to commit wholesale Sepukku, meaning Harakiri. Because as a honorable Samurai, to be out of an Overlord (being a Ronin), was the ultimate disgrace. And that could only be absolved by committing Sepukku. One of the best chroniclers of the Japanese Samurai Ethos was Akira Kurosawa whose movies are still considered as timeless masterpieces.

[https://www.youtube.com/results?search\\_query=akira+kurosawa+playlist](https://www.youtube.com/results?search_query=akira+kurosawa+playlist)

[https://www.youtube.com/watch?v=uwR2kVOcwNI&list=PLjp9cDM5tPpUUbai4r1ybum\\_Usb--JNH](https://www.youtube.com/watch?v=uwR2kVOcwNI&list=PLjp9cDM5tPpUUbai4r1ybum_Usb--JNH)

[https://www.youtube.com/watch?v=IOdvuGb\\_wx8&list=PLGKf-FbNKYAUREzpz3JGV3ipKTLpKQ\\_Yt](https://www.youtube.com/watch?v=IOdvuGb_wx8&list=PLGKf-FbNKYAUREzpz3JGV3ipKTLpKQ_Yt)

The Japanese Overlords just nearly kept the Japanese peasant class as their personal slaves, but there were limits to their power, because of the Shinto Way of Life, and the Yamabushi (Shinto) and Shingon (Buddhist sort-of) sects. These were some quite strange Anachorettes who lived in the mountains. They also practiced the High Art of Self-Mummification, of which I have reported in Part I. And there are quite a few shrines where you can see them and visit them. Fortunately I have some youtube videos about this, otherwise no-one would believe me. And the mountains were sacred spaces in the Japanese Shinto mInd. Since Japan is more or less a collection of Volcanoes on the Pacific Rim of Fire, there are consequently a few more mountains in Japan than there is flat arable land. And so it came to pass, that the Overlords and their Samurai dominated

the plains and the rice fields of the peasants, but they did better to avoid the mountains. Besides being sacred and being hard to get into them, it was much more difficult to get out of them. As the saying goes: Some things are easier to get into, than to get out of. And especially in the southern islands of Japan where the vegetation is sub-tropical. It was very easy to get totally lost there and wander around for a few days without food and water, and this was it. People disappeared without any trace left. So it was said that the spirits of the mountains had taken care of them. And the Yamabushi's and later the Shingon's dominated the mountains and the Over-Lords of the plains couldn't do anything about them. There was another quirk to it. Only the Samurai were privileged to carry their swords, the Katana. And for all the other people it was forbidden at the punishment of death to carry weapons. But the Japanese were inventive as usual. Instead of a sword they carried an iron fan. They were quite handy and very unsuspecting because everyone in Japan carried a fan. So they used the fans as weapons and then could defeat even the Samurai.

### 36 The Hoe: How to Defeat some Samurai

hoe noun / Hacke f /

A hoe is a tool used for gardening. Eine Hacke ist ein Werkzeug, das zum Gärtnern verwendet wird.

Haue f / hoeAE

There was just another famous story of a peasant son who carried his steel rake or hoe as he was working the field of his father. And there came along two Samurai who were quite drunk. And they threatened the poor guy. So what he did with his hoe, he hacked the Samurai to pieces. Such good use one can make of a peasant's tool. Of course the authorities could not allow such a thing, because a peasant may never do anything against a Samurai even in self-defence. So this poor guy had to flee into the mountains, and there he became a famous Yamabushi or Shingon saint. This story is from Part I of this book. I will look this up the next time when I have some time to spare. Another tall story is that of Musashi. He was the greatest warrior, er slaughterer of his day. What very few people know today is that he almost never used a sword (katana) in his fights. He either used a wooden stick (bokken) or some other ad-hoc weapon. So he took his opponents quite by surprise because they had known only the tactics to use against another sword or a lance.

[https://en.wikipedia.org/wiki/Miyamoto\\_Musashi](https://en.wikipedia.org/wiki/Miyamoto_Musashi)

<https://en.wikipedia.org/wiki/R%C5%8Dnin>

A **rōnin** (浪人, "drifter" or "wanderer")<sup>[1][2]</sup> was a **samurai** without a lord or master during the **feudal period** (1185–1868) of **Japan**. A samurai became masterless upon the death of his master, or after the loss of his master's favor or **privilege**.<sup>[3]</sup>

In modern Japanese usage, sometimes the term is used to describe a **salaryman** who is **unemployed** or a **secondary school graduate who has not yet been admitted to university**.<sup>[4][5]</sup>

[https://en.wikipedia.org/wiki/Forty-seven\\_r%C5%8Dnin](https://en.wikipedia.org/wiki/Forty-seven_r%C5%8Dnin)

The revenge of the **forty-seven rōnin** (四十七士 *Shi-jū-shichi-shi*, forty-seven samurai), also known as the **Akō incident** (赤穂事件 *Akō jiken*) or *Akō vendetta*, is an 18th-century historical event in Japan in which a band of *rōnin* (leaderless **samurai**) avenged the death of their master. The incident has since become legendary.<sup>[1]</sup>

The story tells of a group of samurai who were left leaderless (becoming *rōnin*) after their *daimyō* (feudal lord) **Asano Naganori** was compelled to perform *seppuku* (ritual suicide) for assaulting a court official named **Kira Yoshinaka**, whose title was *Kōzuke no suke*. After waiting and planning for a year, the *rōnin* avenged their master's honor by killing Kira. In turn, they were themselves obliged to commit *seppuku* for committing the crime of **murder**. This true story was popularized in Japanese culture as emblematic of the loyalty, sacrifice, persistence, and honor that people should preserve in their daily lives. The popularity of the tale grew during the **Meiji** era, in which Japan underwent rapid modernization, and the legend became entrenched within discourses of national heritage and identity.

Fictionalized accounts of the tale of the Forty-seven Rōnin are known as *Chūshingura*. The story was popularized in numerous plays, including *bunraku* and *kabuki*. Because of the **copyright** laws of the **shogunate** in the **Genroku era**, which forbade portrayal of current events, the names were changed. While the version given by the playwrights may have come to be accepted as historical fact by some,<sup>[who?]</sup> the first *Chūshingura* was written some 50 years after the event, and numerous historical records about the actual events that predate the *Chūshingura* survive.

The *bakufu*'s copyright laws had relaxed somewhat 75 years later in the late 18th century, when Japanologist **Isaac Titsingh** first recorded the story of the forty-seven *rōnin* as one of the significant events of the **Genroku era**.<sup>[2]</sup> To this day, the story continues to be popular in Japan, and each year on December 14,

[Sengakuji Temple](#), where Asano Naganori and the *rōnin* are buried, holds a festival commemorating the event.

### **37 So many Overlords of Sorts**

So back to the Spartans. They managed the upkeep of this superior warrior class and they were the Overlords of the Helots. And this was a very interesting type of Slave Holder Society. But they never managed to form an empire. Because this kind of society was in a sense self-limiting. The poor Spartans just didn't have the political wits and acumen to subjugate the whole of ancient Greece as their slaves. And finally they were defeated by the sacred band of Thebes who outfought the Spartans by a narrow margin. The ancient Greeks were of course Aryans and as such they were fiercely independent warriors, so they could not be subjugated for long until they rose again. Like the Persians had to find out to their detriment. The Helot population of the Spartans were not the Aryan Greeks at all but they were the autochthonous indigenous population of that area on the Peloponnes. Their societal and spiritual system was of the much much older type that Marija Gimbutas had described in her works. So there are some parallels with ancient Vedic Indian body politics since the untouchables were also the indigenous Dravidic population whereas their Overlords were the Aryans who had invaded India some millennia back in the dark depths of Pre-history. The Vedas especially the Rig Veda depict quite vividly those battles that the Aryans fought against the Dravidic's. And this is quite a good piece of political propaganda, where the Dravidic's were always the dark dark bad guys. And this is quite literally so, since "autochthonous" derives from chthon, and this was the dark mother goddess, the Kali in Vedic terms. But she had also found her rightful place in the Pantheon of the Vedics, since they knew well enough that one cannot exorcise the dark gods. So the vedics preserved the rite and the cults of the dark Mother Kali and that just was the Cult of the Thugees or Thugs.

[[Like the Zoroastrians, Manichaeans, and the Gnostics, and finally the Christians tried to extinguish the older Goddesses, but in vain. And I have come up with quite a remarkable parallel to the Kali, and this was the Black Madonna. Not even the Christians could exorcise the black Mother Goddess completely, even if the good Church Fathers tried as much as they could. She faithfully re-appeared in just another (dis-) guise.

]]

## 38 Some Excerpts from Design und Zeit

### 38.1 Die Diamant-Metapher der Noologie

Hier bringe ich einige Zitate aus:

<http://www.noologie.de/diadenk.htm>

Die Analogie von Licht und Geist kann man noch einen Schritt weitertragen, zu der Diamant-Metapher der Noologie. Diese wurde aus folgenden Gründen gewählt. Erstens, weil der Diamant ein optisch so aussergewöhnliches Material ist.<sup>[83]</sup> Zweitens, weil er das härteste ist. Der *Diamant-Weg* der Noologie ist somit auch der härteste *Übungsweg* im Sinne von Sloterdijks DMDL. Ein weiteres, eher zufälliges Thema der Diamant-Metapher ist der Kontrapunkt zu Sloterdijks "Sphären". Wenn die Sphären das rundeste Denk-Ding im menschlichen *Gedanken-Kósmos*<sup>[84]</sup> sind, so sind Diamanten das eckigste. Denn die hohe Kunst des Diamanten-Schleifens<sup>[85]</sup> besteht darin, dem Stein so viele Ecken und Kanten wie möglich zuzufügen. Die besondere optische Eigenschaft des Diamanten basiert darauf, dass er (fast) nicht mit Licht interagiert (also seine extrem hohe Transparenz) und der extrem hohe Refraktionsindex, der bei 2.419 liegt.<sup>[86]</sup> Diese Kombination ist eine Ausnahme gegenüber aller sonst noch bekannten Materie. Wasser und Glas sind zwar auch transparent, aber haben einen wesentlich geringeren Refraktionsindex, zwischen 1,3 und 1,5. Betrachten wir nun einen absolut klaren, lupenreinen, geschliffenen Diamanten, einen *Brillianten*. In seinen Tausenden von Facetten bricht und spiegelt sich das Licht in unzähligen unendlich bunten Reflexen. Das Phänomen dahinter ist die *Reflexion / Refraktion* und *Interferenz* des Lichts. Der Diamant selber ist völlig klar, durchsichtig, transparent, und völlig unbeeinflusst von dem ihn durchfliessenden Licht. Für den Diamanten ist das *Licht Nichts*, er ist völlig *Licht-leer*. Er ist ein *absolut reines Kristallgitter*. Und für das Licht scheint völlig er Materie-leer zu sein, beinahe ein *absolutes Nichts*. In normaler Materie würde sich das Licht irgendwo absorbieren, und damit sich verlieren, und den entsprechenden Materiepunkt entweder erwärmen oder zu einem Farbpunkt werden lassen.

Nehmen wir nun einen grossen Opal. Auch hier sehen wir Lichtbrechungen in unzähligen unendlich bunten Reflexen. Aber der Opal ist praktisch undurchsichtig, milchig, und das Prinzip der Erzeugung der Farben ist ein etwas anderes: Es ist die *Interferenz des Lichts in Nano-Schichten*. Einen ähnlichen Effekt sehen wir bei bestimmten *Schmetterlingsflügeln* der Gattung *Schillerfalter* oder *Morpho*. Auch hier ist es die Interferenz, oder *Wellenbrechung des Lichtes*, die die schillernden Farben erzeugt.

Neben seinen optischen Eigenschaften ist der Diamant das *härteste Mineral des Universums*,<sup>[87]</sup> aufgrund seiner perfekten *Tetraeder-Kristallstruktur* mit *dreiecksförmigen Seiten*. Der Tetraeder ist der erste und der einfachste der *Platonischen Körper*, d.h. es ist die erste mögliche 3-d Struktur. Deshalb stand er auch in der *Heiligen Geometrie* und im Timaios an erster Stelle.<sup>[88]</sup> Kepler hat in "Mysterium Cosmographicum" sogar ein Modell der Planetenbahnen aus den ineinandergeschachtelten Platonischen Körpern konstruiert.<sup>[89]</sup> Kant verwendete in seinen mathematischen Betrachtungen ebenfalls das Bild des Diamanten als Metapher.<sup>[90]</sup> *Dreiecke* sind, wie wir aus der Geometrie wissen, *un-ver-rückbare* Figuren, und *Tetraeder* sind das *un-ver-rückbare 3-D Körper*- Pendant dazu.<sup>[91]</sup> Die *Un-ver-Rückbarkeit* übersetzt sich physikalisch in *Unvergänglichkeit*. So ist der Diamant auch die im physikalischen Universum perfekteste *Manifestation der Ewigkeit*. D.h. ein Diamant, der heute existiert, wird bis ans *Ende des Universums* weiter bestehen bleiben.<sup>[92]</sup> Im *Alt-Griechischen* heisst das: *A-Tropos*,<sup>[93]</sup> im *Gegen-Satz* zu *En-Tropos*, oder *En-Tropie*.<sup>[94]</sup>

## 39 Wolfgang Amadeus Mozart

### 39.1 To be a Genius, you must be Mad

[http://www.scielo.org.co/scielo.php?script=sci\\_arttext&pid=S0034-74502017000200110](http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0034-74502017000200110)

### 39.2 Introduction

Wolfgang Amadeus Mozart (1756-1791) is considered by many to be the best composer of all time.<sup>1</sup> He left behind over 600 pieces of work, including more than 50 symphonies, 27 vocal concertos, 26 works for string quartets, 25 piano concertos, 21 operas, 17 piano sonatas, 15 masses and 12 violin concertos. Several of his works are considered some of humankind's best musical creations.<sup>2</sup> However, despite his genius and fame, Mozart's life was short and he suffered great financial difficulties and multiple diseases, including scarlet fever, smallpox and typhus. It is said that he used a language (spoken and written) associated with behaviours that have led several authors to consider the possibility that the Austrian genius may have

suffered from Gilles de la Tourette syndrome, described by the French neurologist after whom it was named in 1885. The main characteristics of this condition are: simple and complex vocal and motor tics, which arise between 2 and 15 years of age and persist for over 12 months. Onset should not occur after 18 years of age. Coprolalia, coprographia and copropraxia may be present in 30% of cases. Symptoms decrease with the passage of time and are significantly reduced in adult life.<sup>3,4</sup>

This article draws a parallel between the life of the musical genius and the main findings that indicate this possibility.

#### Biographical data

Wolfgang Amadeus Mozart was born on 27 January 1756 in Salzburg. He was the son of Leopold Mozart (1719-1787), a composer at the Salzburg court, and Anna Maria Pertl (1720-1778). His parents married in 1747 and had six children, only two of whom reached adulthood: Maria-Anna, known as "Nannerl" (1751-1829), and Wolfgang Amadeus (Amadeus means "loved by God")<sup>5</sup> (Fig. 1). Wolfgang married Constanze Weber (1763-1842) in 1782 and the couple had two sons, Karl (1784-1858), who was a trader, and Wolfgang (1791-1844), a composer and pianist.<sup>1</sup>

#### Variations of the genius's name

It is well known that Mozart introduced himself with different variations of his name depending on the region, era or a particular whim at the time. His middle name, Amadeus, as we know it today, seems to be a "joke" or, rather, another of his uncontrollable and amusing impulses. The most common are "Wolfgango Amadeo", as he called himself in Italy in 1770, and from 1777 onwards, "Wolfgang Amad ", which was possibly his favourite, as this was the name he used to sign his certificate of marriage to Constanze.<sup>5</sup>

However, other more exotic variants included "Wolfgang Gottlieb" and "Trazom" (Mozart backwards). He only used "Wolfgangus Amadeus Mozartus" as a joke or gag, as seen in letters where, as well as his name, both the date and other words end in -us, which is ironic, given that it ended up being the name that stuck after the 19th century to the present day.<sup>5</sup>

If we examine this situation in detail, it can be inferred that perhaps this custom of using multiple names was not only an eccentric trait, but also evidence of uninhibited complex tics and impulses that could be explained by Tourette's.<sup>5</sup>

Mozart's early life was marked by his artistic genius. Figures as important as Goethe, Grimm, Haydn, Wagner, Kierkegaard and Barth spoke in glowing terms of his extraordinary talent.<sup>1</sup>

As soon as his father discovered his musical skills, he decided he would do everything he could to turn him into a great musician and to devote the rest of his existence to educating his children.<sup>1</sup>

Fortunately for humanity, Leopold was an excellent teacher. Although he was always strict when imparting lessons to his children, instilling a sense of ethics and effort, he managed to make music lessons fun. This enabled both of them to excel, at least in principle, alongside each other.<sup>6</sup>

Mozart had virtually no other teacher. At 6 years of age, he played short pieces of music that his father carefully turned into scores (minuets K. 1, 2, 3, 4, 5). By then, Leopold felt it was time to perform at the courts of Europe.<sup>1</sup>

The trips were exhausting, the weather conditions sometimes harsh and Mozart had ill health. He is known to have suffered from scarlet fever, recurring tonsillitis, smallpox and typhus. He ate irregularly and undertook excessive physical and intellectual work, which affected him considerably. He also suffered from symptoms of jaundice, which were probably linked to viral hepatitis (Table 1).<sup>7-9</sup>

Later, he followed Hieronymus, the Prince-Archbishop of Salzburg, to Vienna, who mistreated him. Following an altercation, he decided to move into the Weber family home in the capital. In 1782, he married Constanze Weber. He then began to encounter significant financial difficulties, which would last for the rest of his life.<sup>1</sup>

Mozart had great successes, such as the opera *The Marriage of Figaro*, which premiered in Vienna on 1 May 1786. He would enjoy even greater and more lasting success in Prague. In this city, Mozart had admirers like in no other. His triumphs were celebrated and sessions are described in which he demonstrated his extraordinary improvisation skills. A music impresario by the name of Bondini asked him to write another opera, and thus *Don Giovanni* was born, which he premiered and conducted on 29 October 1787, with extraordinary success.<sup>1</sup>

He returned to Vienna, where his poor financial circumstances persisted, in addition to his wife's health issues. Mozart was also named the Emperor's chamber composer, but his earnings remained insufficient. He sought to improve them by undertaking different music-related activities, including composing, teaching and conducting, but the conditions were extremely difficult.<sup>1</sup>

The last three years of his life were marked by enormous financial and emotional hardship, but were, from an artistic point of view, the most fruitful.

His last three symphonies, considered by experts to be the most beautiful, were composed over a six-week period in 1788. *Cos  fan tutte* ("Women are like that") was written in Vienna in 1790, and he composed three other important pieces in 1791 simultaneously: *The Magic Flute* and *The Clemency of Titus*, for the coronation of Leopold II in Prague, and *Requiem*, a piece commissioned by a mysterious character who wished to remain anonymous.<sup>1</sup>

Between 1780 and 1790, the great composer started to present significant depression. He was visited by a mysterious character who entrusted him with composing a requiem mass in exchange for 30 ducats. The

master composer accepted the proposal.<sup>8</sup> He suffered episodes of loss of consciousness, probably syncopal, and started to think that he was writing his own requiem mass, that his days were numbered, he was being poisoned and that his deterioration was evident. At the end of November, in a state of dismay, he worked a bit more on composing the piece, but while working on the Lacrymosa, he burst into tears and felt he was unfit to finish it. Mozart issued instructions to his student Süssmayr, with whom he spent most of his time in the final few months. Mozart was convinced he had been poisoned, and even claimed it had been with Aqua Tofana, a substance containing lead.<sup>8</sup>

With admirable talent and respect, Süssmayr, following the death of his teacher, filled the gaps in the work (only Requiem and Kyrie were completely finished) and wrote Sanctus and Agnus.<sup>1</sup>

Aged 36, the greatest genius in the history of music died on 5 December 1791 at around one o'clock in the morning. His death certificate stated "miliary fever" as the cause of death.<sup>1</sup> However, subsequent analysis of his medical history, which has been extensively studied by various authors, reveals that the most probable cause of death was actually chronic nephritis and, in turn, end-stage kidney disease.<sup>7</sup>

Mozart's personality has been described as frivolous, eccentric, restless and unpredictable, and he expressed himself with exaggerated grimaces and gestures. His friend Joseph Lange, the husband of Aloysia Weber, saw Mozart's need to expose himself and his radical decision to let himself go as a way of escaping all that had been denied to him throughout his life. His music did not communicate his state of mind, but rather his process of self-control.

## 40 Philosophen im Spannungsfeld ...

von Thymos, Eros und Logos

Es existiert ein interessantes Spannungsfeld, zwischen **Thymos, Eros und Logos** gerade bei den Philosophen selber, die ihr Leben ja dem Dienst des Logos verschrieben haben. Von ihren Vitae wissen wir, dass ein sehr grosser Prozentsatz der Philosophen ein ziemlich gespaltenes Verhältnis zum Eros hatten. Siehe dazu: "Die Liebhaber der Sophie"<sup>[311]</sup> Man kann die grossen Philosophen, die ein geregeltes Sex-Leben hatten, wohl an einer Hand abzählen:

**Hegel:** Er hatte eine sehr junge Frau, für die er wohl aber eher Vater-Figur war.

**Gotthard Günther** (der wegen seiner jüdischen Frau emigrieren musste).

**Whitehead**<sup>[312]</sup>

**Heidegger**, der war zwar durch & durch "Normalo" bürgerlich, aber auch nicht so ganz geregelt: Da er sich mit seinen Studentinnen vergnügte, ich glaube es war Hannah Arendt.<sup>[313]</sup>

**Kant** gehört hier zwar überhaupt nicht rein, weil der absolut gar kein Sex-Leben hatte, eber als so ca. grösster aller deutschen Philosophen, ist er bekannt wegen seines berühmten Ausspruchs zur Ehe: Die bürgerliche Ehe ist ein Vertrag zum gegenseitigen Gebrauch der Geschlechtsteile.

**Moses Mendelssohn**,

von dem eine wahrhaft rührende Story überliefert ist, wie er seine Frau gewann.

<http://www.wisdomportal.com/Romance/Mendelssohn-Gugenheim.html>

**Sartre:** war ein wahres Sex-Monster, wohl auch nicht so ganz geregelt.<sup>[314]</sup>

[http://en.wikipedia.org/wiki/Simone\\_de\\_Beauvoir](http://en.wikipedia.org/wiki/Simone_de_Beauvoir)

**Rousseau** war zwar auch verheiratet, aber er schrieb seitenlange Elegien über seine Masturbations-Erlebnisse.<sup>[315]</sup> Seine Kinder (es waren eine ganze Menge) gab er übrigens beim Waisenhaus ab.

**Marx:** Aber seine Frau litt unter Dauer-Depressionen. Irgendwo war das Sex-Leben trotz der vielen Kinder nicht ganz so harmonisch gewesen wie man denken könnte. Es war damals (und ist auch noch heute) der Brauch bei orthodoxen Juden, dass zur höheren Ehre Gottes eben jedes Jahr ein Kind gezeugt, und dem Volk der Juden zugeführt wurde.

**Peirce:** Eine eher traurige Geschichte, denn er liess sich von seiner ersten Frau scheiden, die war die Tochter des Präsidenten von Harvard. Damit war er seinen Job los, und bekam auch nie wieder einen, dank der freundlichen Unterstützung des Präsidenten von Harvard. Und dann heiratete er seine wirklich- und wahre Geliebte, und fortan lebten sie glücklich, aber in bitterster Armut.

**Michel de Montaigne**

[http://de.wikipedia.org/wiki/Michel\\_de\\_Montaigne](http://de.wikipedia.org/wiki/Michel_de_Montaigne)

**Aristoteles** (war aber wohl auch nicht so ganz geregelt)<sup>[316]</sup>

**Sokrates:** Er soll aber viel Streit mit seiner Frau Xantippe gehabt haben, aber zum Trost bekam er von den Hetären öfter mal eine Freifahrt spendiert.<sup>[317]</sup>

**Diogenes** ist für mich deswegen Philosophie-Geschichtlich bedeutsam, weil er sexuall so ziemlich auto-poiatisch war, also eben ein *Existenzialist*. Einmal masturbierte er öffentlich auf dem Athener Marktplatz, der Agora. Da fragten ihn die aufgebrachten Athener Bürger, was er denn da mache. Allso sagte er da: Ich will euch nur vorführen, wieviel einfacher das Leben wäre, wenn man Hunger hat, bräuchte man sich nur den Bauch zu reiben, und schon wäre man satt.

## 40.1 Die meisten früheren Philosophen

... aber waren entweder christlich Zölibatär,  
Abaelard war gezwungenermassen enthaltsam, dank des kleinen Messerchens,  
Origines hatte sich da wohl selber nachgeholfen.  
ewige Singles (Kierkegaard),  
unglücklich verliebt (Nietzsche, in Lou Salome)<sup>[318]</sup>  
Frauen- Hasser / -Verächter, (wie Plato und Schopenhauer)  
Jenseits von Gut & Böse (Plotin, Kant)  
Vollkommene Meister der Ataraxia (die Stoiker)  
Schwul (Wittgenstein)  
oder  
Syphilitisch. <sup>[319]</sup>

## 40.2 Heutige Philosophie

Heutzutage aber führen die meisten Universitäts-Philosophen ein durchaus bürgerliches Leben, sind verheiratet, haben eine Familie, oder sie sind schwul. Das ist dem heutigen akademischen Selektions-Verfahren geschuldet, denn wer es durch ca 6-8 Jahre Philosophie-Studium inclusive Doktorat schaffen will, muss vor allem *Ausdauer* haben, eine sehr notwendige Qualität in der heutigen bürgerlichen Gesellschaft, und *Anpassungsfähig* an seinen/ihren jeweiligen Doktor-Vater oder -Mutter sein, denn ansonsten sind die Karriere-Chancen eher mässig, weil man/frau heutzutage nur noch über das Protektions-System in eine akademische Philosophie-Karriere kommen kann. Ebenfalls hat die Promotion auch viel mit *Leidensfähig* zu tun, insb. der Willkür des Doktor-Vaters / der ---Mutter.

## 41 Technical Issues of Hypertext Data Base Design

### 41.1.1 Some Tech Talk on the side effects of Encrypted Files

I don't know any better place to put this. The original file became too big, even for my very big computer to handle it. Which had in the .rtf format about 10 Megabytes. This is a little tradeoff or "drawback" when using the .rtf format. It is so much larger than the compacted .doc format. And since the .doc format becomes so easily corrupted, it is safer to use .rtf, which is a text file, of sorts. And the since the .docx format is also encrypted, ONE MAY NEVER USE .DOCX EITHER!!! You will come to regret it some day, when your term paper is due, or your whole dissertation, and then your computer goes kaboom! And then you have lost so much precious lifetime.

**Never trust the MS- Data Protection Schemes. You have been warned!**

**They are only there to protect the MS patent and trade secrets.**

And to handle the .rtf format with about 10 Megabytes is only possible with present-day computers. Even 15 years ago, a 10 Megabyte MS Word .rtf file would have been difficult to handle. I know this since the XP computer on which I am presently running MS Word 2000, is of 2006 or so vintage. Of course when I bought the computer, it was a HP Elitebook 2730p. It was the smallest, the fastest, and the most expensive tablet Computer of the time. And it even had a pen to write the input on the LCD touch screen. It was quite a marvel for its time. I know this because it originally had MS Win Vista as OS. The first thing I did with the computer, was to rip out MS Vista, and install MS Win XP. Some time later I even put MS Win 7 on top of that. It all ran, and still runs like a charm.. And I had bought it used and quite cheap, at about 1/4 of the original price. Since I always buy my computers used, and since I run on them Win 7 maximum, they also run quite a bit more fast than today's super duper computers with Win 10.

<https://www.laptopmag.com/reviews/laptops/hp-elitebook-2730p>

The **HP EliteBook 2730p** offers strong performance and endurance with a well-rounded feature set and a good pen experience. Its \$1,599 **price** is very competitive, considering the Lenovo ThinkPad X200 Tablet starts at \$1,884 and the Dell Latitude XT costs north of \$1,700. Apr 2, 2009

## 42 MS Win Vista as crappy as any OS can ever get

[https://en.wikipedia.org/wiki/Windows\\_Vista](https://en.wikipedia.org/wiki/Windows_Vista)

**Windows Vista** is an [operating system](#) that was produced by [Microsoft](#) for use on personal computers, including home and business [desktops](#), laptops, [tablet PCs](#) and [media center](#) PCs. [Development was completed](#) on November 8, 2006,<sup>[2]</sup> and over the following three months, it was released in stages to computer hardware and software manufacturers, business customers and retail channels. On January 30, 2007, it was [released worldwide](#)<sup>[3]</sup> and was made available for purchase and download from the [Windows Marketplace](#); it is the first release of Windows to be made available through a [digital distribution platform](#).<sup>[7]</sup> The release of Windows Vista came more than five years after the introduction of its predecessor, [Windows XP](#), the longest time span between successive releases of [Microsoft Windows](#) desktop operating systems.

### 42.1.1 Handling Very Large Data Sets

So we do some more tech-talk. We are dealing with the methods of handling the very large Data Sets of Project Noologie and Meta-Morphology. The techniques used are Hypertext and the Logics of Data Base Design. Because to build an extremely large Data Base like the present project is something quite different from, lets say a commercial Data Base. See the passage below where we do some exploration of the Amazon Data Base and how it is used. Now the Data of the Project Noologie and Meta-Morphology are unstructured. They are texts, articles, books, pictures, and videos. And the Hypertext Data Base has to ensure that they can be accessed, and most importantly, we need some categories by which they are ordered. And here comes the Warburg Library. I refer to the relevant information in the articles on the Aby Warburg Library:

<http://www.noologie.de/aby.htm>

<http://www.noologie.de/aby.pdf>

<http://warburg.libguides.com/classification>

<http://www.noologie.de/warburg-class.html>

[[As an introjection, here is some information how Amazon builds and maintains its Data Base. There we have a quite strictly defined data structure and an Item Number. Each item has to have its unique number. Then there is a set of data connected to the items that be stored and retrieved. Like a huge mass of items (wares) in an inventory of a (very) huge store like Amazon. One has a very long list of these items, where they are stored in the warehouse, how many of them, what they cost, and many more data on the items or

things that are to be sold. Then one has another list, which is the customer list. All the data on and about them. What they bought, what they also bought, what payment, and a very important information, WHERE they live. Is it an affluent neighborhood, or a poor one? When people buy cars or sports equipment, or even book some (Amazon sponsored) leisure activities, this is the place where Amazon can really cash in. Because this will give them a psychological profile of their customers. Anyone who has ever bought anything from Amazon, may be surprised how much Amazon knows about their customers.

<https://www.investopedia.com/articles/insights/090716/7-ways-amazon-uses-big-data-stalk-you-amzn.asp>

<https://www.investopedia.com/terms/p/predictive-analytics.asp>

<https://www.investopedia.com/terms/s/social-networking-service-sns.asp>

<https://www.investopedia.com/terms/s/socialcapital.asp>

<https://www.investopedia.com/terms/b/big-data.asp>

<https://www.bernardmarr.com/default.asp?contentID=712>

<https://www.forbes.com/sites/mikesands1/2018/03/02/how-amazon-is-minting-a-new-generation-of-customer-data-obsessed-companies/#3d81ec8228ed>

<https://www.zerohedge.com/news/2017-06-17/new-patent-amazon-will-collect-much-customer-data-google>

<https://www.enginecommerce.com/consumer-data-collection-ecommerce-amazon/>

<https://www.quora.com/What-database-does-Amazon-use-to-store-product-information>

I can't really divulge too much, but reading the other answers I want to make sure people don't get the wrong impression.

As most people correctly wrote, Amazon *does not* use an RDBMS (a traditional relational DB, e.g. Oracle) to store product data. RDBMSs simply don't support the required scale (amount of data and query throughput/latency).

According to external sites (e.g. this one[1]) Amazon has on the order of half a *billion* products for sale, and that's just the main US site (admittedly the biggest). According to this[2], it serves roughly 1B pages per day, which is roughly 10,000 pages per second on average, and much higher at peak.

As someone else observed, there is also no single DB used throughout Amazon. That was actually true in the very early days, when a single Oracle instance stored *everything*: product data, user accounts, orders, inventory... This hasn't been the case for many, many years now.

However, there is a single "conceptual" DB that stores the vast majority of product information displayed on the site. It's huge, super-fast, and extremely available.

This DB *isn't* DynamoDB, or any other DB publicly available on AWS (RedShift, Aurora, etc.) It's proprietary and private. This isn't to say that you *couldn't* build our catalog on top of one of those; I honestly don't know.

*Edit:* thanks to Vipul Patel, who works on the team that owns the database in question, for pointing out the team page on the Amazon Jobs site[3] that includes the following excerpt (my emphasis):

We own one of the largest NoSQL databases in the world, serving **trillions of requests daily**. And we develop world-class solutions leveraging AWS technologies where we can (and build our own where we cannot).

#### Footnotes

[1] [How Many Products does Amazon Sell? - August 2017](#)

[2] [amazon.com Traffic Statistics](#)

[3] [Fast Data Technologies](#)

<https://www.scrapehero.com/number-of-products-on-sale-at-amazon-com-august-2017/>

Amazon has a total of 536,641,219 products on sale.

In comparison. Amazon had [372 million products](#) on June 20th, 2017.

<https://www.amazon.jobs/en/teams/fast-data-technologies>

<https://www.quora.com/What-database-technology-does-Amazon-use>

### 43 Here is some more detail on building an SQL Data Base

<http://www.noologie.de/db/db-nrm.htm>

[http://www.noologie.de/db/db-nrm\\_c.htm](http://www.noologie.de/db/db-nrm_c.htm)

End of introjection.

]]

#### 43.1.1 The Headlines of the Present Text are the Topmost or the Root Level

The Headlines of the present text (xxx.pdf and xxx.htm) are the Topmost or the Root Level of the Hierarchic Deep Structure of the Project Noology. It is the top of so many levels of Hierarchy extending and expanding into the present text and then into the deep www. It is an Associative Hypertext Database. This is because the Table of Contents (Inhalts-Verzeichnis) is also a Hypertext Mechanism. By clicking on any entry in the Table of Contents, we can jump immediately to the corresponding subsection of the text. The reason why we have so many headlines is that we can jump to all these subsections by using the Hypertext Methods of MS Word

and the MS Word Outline Folding Mechanism. When one has a very large text like this, the Outline Folding is an essential tool to manage this. In a flat text without the Deep Outline Structure this would be utterly impossible. And it also gives a very easy way to re-organize the text. In this manner, it is exactly a Mind Mapping tool. Only the term Mind Mapping is a very obscure and obfuscating way to describe a Hierarchical Nesting Associative Data Structure. There is one crucial difference between MS Word and most other programs that have "a kind of" outlining feature: In most other programs one must click on each outline to open up its sub-outlines. And this is an extremely tedious process when you have a deeply nested structure with some 5-10 nesting levels. I have no idea how any programmer worth his salt would come up with such an insanity. Fortunately, the good MS people who designed MS Word did at least once, something right. This outline feature was already present in MS Word 2.0 of 1992 or so. That one ran on the Win 95 OS which was based on DOS. And they just ported it to the Win NT, then Win 2000, and finally Win XP. But as I said it, it doesn't fit too well into Win 7, and none at all in Win 8 and Win 10. Too bad. So much for some Hellish Programming at the behest of ...

### **43.1.2 Finally, a few Good Words about Microsoft**

And then the MS Word .html conversion the Hypertext gives us immediately the .htm file Structure. I don't like the MS folks so much because of their Business Politics. But the MS Word is a stroke of Genius. It is the best Word Processor in the world. Nothing comes close to it. We just may look at the sorry Open Office or Libre Office. This is just a bunch of crap compared with MS Word. And I am strictly using MS Word 2000, all the later versions of MS Word are again a bunch of crap. In German there is a proverb which says: Verschlimm-Besserung, meaning something like Up-Down-Down-Grading. The good people at MS decided to "Upgrade" the good old MS Word 2000 Program to something much much worse.

[See also the Matrix Trilogy by the Wachowski's about "upgrading". I never thought that the Wachowski's were such good programmers, and that they knew the mInd of Bill Gates inside and out. But since the Matrix is a computer program, the Wachowski's may have known a bit about this business.]

Unfortunately, the problem is that of a world simulation. We may take the "Kant und das Schnabeltier" as a quite good bad example that Umberto Eco had concocted. The good Umberto was (he is dead by now) a quite good philosopher and semiotician and more. But he was NOT SO GOOD AT COMPUTER SCIENCE. And at that I am better than the good Umberto. It is entirely impossible to do a simulation on a computer that goes bottom up from the Subatomic level, into Atoms, then Molecules and then Cells, and then Living Life. This is a problem of computational complexity. Because to simulate the Universe, one needs about 10\*\*xyz\*\*zyx more Simulation Bytes, than the whole Universe contains atoms. This is the pitfall of the Matrix movies, it is just technically impossible to "Second Source" or "Reverse Engkineer" the complexities of Mother Nature Herself. (The Matrix is the Mater, therefore the Mother Nature). So the Wachowski's just lost out, and only 12-year old kids will believe the nonsense that they had concocted.

### **43.1.3 The MS "Upgrading Principle"**

And this is the MS "Upgrading Principle": With every new "upgraded" version the MS Office became more and much worse. And MS Word 2000 unfortunately doesn't run on Win 7 very well and it doesn't run at all on Win 8 or Win 10. Therefore for my own work, I have to use a separate computer with Win XP running on it, and it is connected via local network to my main working computer, which runs Win 7. So this is the trouble that one has to put up with, because the good MS people had decided that there is no such thing as "Backwards Compatibility" in the MS Business Plan. Of course they want to sell all their new (upgraded) software with the new OS's 8 and 10. And so they decided that the old Win XP software doesn't run (too well or at all) any more in Win 8 and Win 10. There is an age-old wisdom of programmer lore: If your program is running alright, YOU MUST NEVER UPGRADE. You will always invite some more trouble.

[I have this saying that MS is so successful because it sells to the poor Users of the world some solutions for problems that the poor Users in all of the world wouldn't have, if they didn't use MS products at all. (Success means Suck-Cess-Pool or Suck-Seed which means Fellatio).

]

There is another good side to MS Word 2000. It doesn't need a registration with MS. So one can have as many copies of the program on as many computers as one likes. MS doesn't know anything at all about those many copies. And I can give a more detailed picture of how I work: I have two computers, one running XP and the other Win 7. Each computer has a separate monitor on its second video output. So I have 4 monitors around me. I have some real problems, not with the monitors themselves but with the 7000 Kelvin of their Luminescence Spectrum. 7000 Kelvin eats up the Melatonin in your brain, and one gets very heavy insomnia from staring all day into those monitors. This is what is called a "job hazard". One may even can become

blind from that. But there are as many studies that state that this is not true. When the Guardian says something, we should better take this with a little Grain of Salt. (Cum Grano Salis).

<https://www.theguardian.com/society/2018/aug/09/blue-light-from-phone-screens-accelerates-blindness-study-finds>

<https://www.theverge.com/2018/8/17/17724658/screen-time-blue-light-blindness-science>

<https://www.preventblindness.org/blue-light-and-your-eyes>

#### **43.1.4 My (un-) usual Work Environment: 2 Computers, 4 Monitors**

And hopefully no-one will believe me, when I am saying this. I have two work computers: One is the HP EliteBook 2730p with a high-res screen of 22\*17 cm, the other is quite a Behemoth of a Schlepptop. This thing is Really Heavy. The Asus X93SM-YZ125V 46,7 cm (18,4 Zoll) Notebook with a high-res screen of 30\*23 cm. This is about the biggest and heaviest Schlepptop Computer that was ever produced. So because no-one will believe me, I have included some photos of my two computers and four monitors.

<http://www.noologie.de/comp-sml/comp1.jpg>

<http://www.noologie.de/comp-sml/comp2.jpg>

<http://www.noologie.de/comp-sml/comp3.jpg>

<http://www.noologie.de/comp-sml/comp4.jpg>

<https://www.notebookcheck.net/Review-Asus-K93SM-YZ085V-Notebook.73450.0.html>

**Big item.** When looking at the voluminous package of the Asus K93SM-YZ085V, the first thing that springs to mind won't be a notebook. More likely than not, you might expect an HD receiver or a Blu-ray player.

Nevertheless, the box contains a notebook with an 18.4 inch display - surely not a device for everyone.

"The air is thinner at the top" - this also applies to desktop replacement notebooks with a display size upwards of 18 inches. Our reviewed device, the Asus K93SM-YZ085V, certainly doesn't have a lot of competition in terms of size at the moment. ...

With Asus in on the other hand, 18.4 inch devices apparently appear to belong to the standard repertoire.

There definitely doesn't seem to be any other way of explaining the fact that the Taiwanese manufacturer has only recently thoroughly overhauled the K93 series. Asus has proclaimed the four new models which can perform the tasks of a PC as high performance all-round notebooks, which can be considered to be full-scale desktop replacement notebooks for this reason. The price range of the current K93 series spans a range between 849 and 1149 Euros, whereby the K93SM-YZ085V we have for review is the top model with an Intel Core i7-2670QM processor.

18 inch tinderbox: Asus K93SM 18 inch tinderbox: Asus K93SM

The case of the Asus K93SM-YZ085V above all else stands out due to its sheer size. With dimensions of 441 x 295 x 42-55 millimeters, it could also serve a purpose as a small table top. The weight of 4.1 kilograms predestines the device more for an evening workout than for mobile use, although it clearly wasn't developed for this purpose as a self-proclaimed desktop replacement. The distance between the office desk and the living room can still easily be traversed with this sizeable device.

#### **43.1.5 Why I produce such huge .htm files**

This is not because I am such a maniac about huge .htm files but because a full text search is quite tedious when you have split it up in about 20 small files. I have learned this the hard way in my dissertation (of 1999) first Noologie I project (of 2995). And I had a quite hard time to find all my quotes. I had to use the Google www-site search function to find anything at all. And quite often it occurred that the Google couldn't locate it even though I knew that it was right there in that .htm file. And it is very tedious when the Google gives you some results, but it doesn't tell you where exactly in the .htm file you have to go. As far as I know the .htm definition has no function that gives the entry point by line numbers, because there are no line numbers in a .htm file. Because every browser makes its own formatting. It could be done with the <br> tag. And perhaps I have just not been able to find the appropriate function. The command for the site: search goes like this. Unfortunately MS Word doesn't do a .html conversion for this format:

xyz site:<http://www.noologie.de>

#### **43.1.6 Some nuts and bolts about Using the MS Word Outline Mode**

The MS Word Outline Mode is an extremely powerful tool if applied in the right way. (This means that one needs to write a few Macros to make it work efficiently). There exist on the SW market some tools called Mind Mapping. This is exactly the same as the MS Word 2000 Outline Mode. But because no-one knows this (except me of course), the people, who are all the Rest of Us, have no idea how to use this feature. "Mind Mapping" is just a fancy term for "Structured Nested Hierarchical Thinking". And the former term totally obfuscates what the essence of this method is. I just call it by its "Real Name". Anyhow, a programmer who cannot do "Structured Hierarchical Thinking", is no programmer at all. (I also call this

Objective Programming, which is somewhat related to but not identical with "Object Oriented Programming"). See a further discussion in a later chapter.

<https://www.ayoa.com/how-to-mind-map/>

[gclid=EAIaIQobChMInYGHwa2A4wIVmM13Ch0CVQz6EAAYAiAAEgKxivD\\_BwE](https://www.ayoa.com/how-to-mind-map/?gclid=EAIaIQobChMInYGHwa2A4wIVmM13Ch0CVQz6EAAYAiAAEgKxivD_BwE)

<https://miro.com/>

<https://www.makeuseof.com/tag/8-free-mind-map-tools-best-use/>

MindApp is a **mind mapping tool** available in-browser or as a Windows desktop app. It features a drag and drop interface, keyboard shortcuts, children's options, and **map** and text formatting. You can save **mind maps** online in your free personal account or as images on your desktop, which can be used in other applications.

[https://www.google.com/search?](https://www.google.com/search?q=Mind+Mapping+tool&tbm=isch&source=hp&sa=X&ved=2ahUKEwjVoJvBrYDjAhXBJFAKHQjcBCcQsAR6BAgFEAE&biw=1447&bih=837)

[q=Mind+Mapping+tool&tbm=isch&source=hp&sa=X&ved=2ahUKEwjVoJvBrYDjAhXBJFAKHQjcBCcQsAR6BAgFEAE&biw=1447&bih=837](https://www.google.com/search?q=Mind+Mapping+tool&tbm=isch&source=hp&sa=X&ved=2ahUKEwjVoJvBrYDjAhXBJFAKHQjcBCcQsAR6BAgFEAE&biw=1447&bih=837)

### 43.1.7 NEVER USE the MS Word .doc or .docx format

And I have some good advice to add on top of that: NEVER USE the .doc or .docx format. You must not do this, because when your computer goes "kaboom", or when there is an EMP surge, then your whole day's (or week's) work will be lost in Nirvana. Never trust the MS recovery procedures. It always happens in the right moment, when your term paper is due or even your dissertation, and the computer inevitably goes "kaboom". I have a nice joke about that: "Jesus Saves" further down. YOU MUST ALWAYS use the .rtf format. This is a sort of very primitive .xml, long before XML was invented. And it looks pretty strange when you put it into a programmer's editor. But it is just the same as XML, converted into a strange MS format. The { ... } are the markup signs just like the <xyz> and </xyz> in XML. This is what it looks like. One can immediately see that it is a deeply nested structure just like XML. The difference between XML and HTML is that HTML is a sort of Pidgin XML, since in HTML one doesn't always need to exactly balance the <xyz> with the corresponding </xyz>.

### 43.1.8 Comparing .rtf with .xml

```
{\rtf1\ansi\ansicpg1252\uc1 \deff0\deflang1031\deflangfe1031
{\fonttbl
{\f0\froman\fcharset0\prq2
{\*\panose 02020603050405020304}
Times New Roman
{\*\falt Times New Roman};
}
{\f1\fswiss\fcharset0\prq2
{\*\panose 020b06040202020204}
Arial
{\*\falt Arial};
}
{\f2\fmodern\fcharset0\prq1
{\*\panose 02070309020205020404}
Courier New
{\*\falt Courier New}
;}
{\f3\froman\fcharset2\prq2
{\*\panose 05050102010706020507}
Symbol;
}
{\f4\froman\fcharset0\prq2
{\*\panose 02020603050405020304}
Times
{\*\falt Times New Roman};
}
```

### 44 This compares nicely with the .html format:

```
<head>
<meta http-equiv=Content-Type content="text/html; charset=windows-1252">
<meta name=ProgId content=Word.Document>
```

```

<meta name=Generator content="Microsoft Word 9">
<meta name=Originator content="Microsoft Word 9">
<link rel=File-List href="/.hagia-Dateien/filelist.xml">
<link rel=Edit-Time-Data href="/.hagia-Dateien/editdata.mso">
<!--[if !mso]>
<style>
v\:* {behavior:url(#default#VML);}
o\:* {behavior:url(#default#VML);}
w\:* {behavior:url(#default#VML);}
.shape {behavior:url(#default#VML);}
</style>
<![endif]-->
And so on...

```

#### 44.1.1 The Methods of using MS Word and HTML Hypertext

We have four Interlocking and Complementing Methods of Access for the Hypertext:

- 1) The headlines in MS Word, which allow Hypertext Jumping.
- 2) The MS Word Outline Folding Mechanism allows us to display any levels 1 or 2 or 3 or 5 or more of the Headlines. But 5 Levels of Outline are enough for practical usage. This for the ergonomics of human memory.
- 3) MS Word automatically converts any URLs given in the text into real .htm Hypertext links according to the definition of the HTML specification.
- 4) MS Word converts a Word text into a www HTML page.

So one can design a printable .pdf text and the same time a www .htm file, which comes in quite handy because now it is possible to use the Word text in parallel with the HTML method. So these are also complementary methods with large and deeply structured texts, and even more deeply structured Hypertexts. As I have said, the Project Noologie contains about 400 .htm files in ca. 50 megabytes. This is an immense amount of data. With normal paper-and typewriter methods this would be utterly impossible to manage. And even when using a conventional Text Processor (Like Open Office or Libre Office) without the Outline Folding and the Hypertext jumps this would also be quite difficult and tedious and therefore next to impossible to manage. An abbreviated version of the Hypertext Design Principles is given in these files:

<http://www.noologie.de/hytxt-design.htm>

<http://www.noologie.de/hytxt-design.pdf>

#### 44.1.2 A Structure Similar to the Warburg Library

So we have all the essential tools for ordering and managing our Hierarchic Associative Hypertext Database. As I say it in the text, it is a Structure similar to the original Library Structure of Aby Warburg to which I owe so much.

[The following is similar to the original Structure of the Warburg Design. It is present in the catalogue of the Computerized Warburg Library.

<https://wdl.warburg.sas.ac.uk/browse/subject>

<https://wdl.warburg.sas.ac.uk/>

<http://www.noologie.de/warburg-class.html>

]

Aby Warburg constructed this Structure in the 1920's. All that without computers. At his time it was a quite super-human task. With the full power of present day Hypertext and Outline folding, this has become not only possible but also quite efficient and even easy. Of course one needs to be able to use the available computer tools to their maximum effectiveness. See also the more in-depth research about the Warburg Library.

<http://www.noologie.de/aby.htm>

<http://www.noologie.de/aby.pdf>

In a further section we will do some more in-depth exploring of the Design Principles of a very deeply structured Hierarchical Associative Hypertext Database.

## 44.2 On Hypertext Database Design

### 44.2.1 The Hierarchical Method of Designing a Hypertext Structure

So the Zettelkasten was a very powerful mnemonic tool in those olden times. Until the computer came around. There you have something better than the Zettelkasten, and this is called Hypertext. In a Zettelkasten, things must necessarily be in some sequential order, one Zettel and then the next. If you do it in alphabetic manner, the success of this method depends on what kind of keywords you use. This sort of ordering is also a very hot topic of library science. We find many different classification methods for use in libraries. They all have their advantages and their drawbacks. And it happens more often than not that a book gets lost in the nooks and crannies of a classification system. I know something about this since I had studied classification systems also.

[https://en.wikipedia.org/wiki/Dewey\\_Decimal\\_Classification](https://en.wikipedia.org/wiki/Dewey_Decimal_Classification)

These are the subtitles of my paper for the ISKO Conference. Unfortunately they don't exist on the www any more since the person who had administered the ISKO website, is not there any more and so it fell out of the www. But the ISKO website still exists. But these old articles don't since it now resides on a different www.

<http://www.isko.org/>

The Hierarchy and Histio-logy of Noo-logy.

Hypertext as a practical method for balancing the Hierarchy and Histio-logy of Knowledge.

<http://www.noologie.de/isko.htm>

<http://www.noologie.de/symbol23.htm#Heading430>

<http://www.noologie.de/neuro.htm>

<http://www.noologie.de/symbol22.htm>

In a Hypertext structure, one can order things in a hierarchical manner also. This is also the structure of the Warburg library. See the appendix: "The Hierarchical Structure of the Warburg Library". So when we do Hypertext, we can computerize "The Hierarchical Structure", and then things become much faster. There is only one thing to take great care of: The Hierarchical Structure must be designed correctly, or one will just get lost in Hypertext. Now this is similar to the Business of Objective Programming which I deal with further down. One has to come up with a clean set of Categories, or Patterns of Thinking (just another Morphology), and these Categories must fulfill some very strict requirements:

- 1) They must not intersect, meaning what is in one Category must never be in another Category.
- 2) There must be a Hierarchical Order. So that you can have a Hierarchical Tree of Sub- Categories.
- 3) The Hierarchy and the Category width, meaning that one cannot keep in one's mind more than 10 Categories, better it is to have just 5 or 7. So there is some human memory capacity / economy to heed.

Since all the philosophers could not come up with more than 10 Categories, this shows the limitations of human Category thinking. And it is entirely useless to have many more Categories. Because there is also a logical demand: The Categories must be combinable. This is pretty heavy business, and I will spare that for later, how to combine Categories logically. This is very much like Boolean logic, but when you have xyz-many Categories, this is not two-valued, but exactly so xyz-valued, how many Categories you have. Gotthard Günther had devised something like that: He called it Kontexturen (Contextures). I will deal with this in more depth in the chapter on Gotthard Günther. Kontexturen are what I have called Categories in the above text. Perhaps it is better to drop the term Categories altogether and use Kontexturen, because then there will be no problem of confusion with all those Categories that all those Philosophers had come up with. Since each Philosopher who did some Categori'zing, had come up with a different set of Categories, so that there is quite a lot of confusion in Philosophy, what Categories really are. So one should altogether stay clear of this potential philosophical mine field.

"The Hierarchical Structure of the Warburg Library" is something like a blueprint pattern (just another morphae) for building up a Hypertext Database. Aby Warburg had done all the groundwork in the 1920's and 1930's, I have read the most important works that are mentioned there: Ernst Cassirer, Giulio Camillo's *L'idea del teatro*, *The Theater of Memory*, and *Mnaemosynae*. (I use a little different spelling than in conventional philosophy, since I believe that the aeta in Greek is pronounced like the German ä, but there is only one other philosopher whom I know, who has the same interpretation about the pronunciation of aeta: Arno Baruzzi).

... And a little personal note. I knew all that literature of Aby Warburg very well. The only problem was that Bazon Brock, my nominal "Doktorvater" had none whatsoever idea what that was. Because Bazon Brock

had never done a doctorate. He was, so to say, *Professor Humoris Causa*. And I mean this in all sincerity. Because, as much as I know about this, his post at the University of Wuppertal was paid for by Hubert Burda. Bazon Brock and Burda were close friends, and if you want to have a friendship of Three, there also in there belonged Peter Sloterdijk. This was the friendship structure behind the scenes. I have read an autobiographical book by Peter Sloterdijk, where he mentions exactly this. If I have the time, I will get the proper literature quote. But since I have this in my memory (the *Mnaemosynae*) this is enough for now. Back to my doctorate. So I had all the literature and everything, the only problem was that Bazon Brock had no idea whatsoever of all this. Perhaps, if he had talked to Peter Sloterdijk, there could have been a connection. But this was not to happen. So I had my doctorate, so to say, hanging in thin air. Ein Titel ohne Mittel ist auch nix wert. This was 20 years ago in 1999. In those times, the www was still in some infancy, compared to today. And this vital literature was not yet accessible to me.

<http://www.nologie.de/aby.htm>

<http://www.nologie.de/aby.pdf>

<https://www.academia.edu/30644838/>

[MNEMONICS\\_MNEME\\_AND\\_MNEMOSYNE.\\_ABY\\_WARBURG\\_S\\_THEORY\\_OF\\_MEMORY?auto=download](#)

But this is it now. And it just proves everything that I have done in the last 20 years or so, that I had been on the right track. So, this is better than having it post-humously. I finally had the reassurance that my thinking of the *Mnaemosynae*, did exactly what Aby Warburg had done in the 1920's to 1930's. There was just the unfortunate circumstance that Aby (Abraham) Warburg and Ernst Cassirer were Jews. And so the Nazis were quite successful in eradicating their work from the Cultural Memory of the Deutsche Intelligenzia. And therefore, there was no-one Professor of Philosophy or Cultural History, or anything like that in the Whole of Deutschland, after 1945, who had any idea what Aby Warburg and Ernst Cassirer had concocted. Poor old Deutschland! This was Cultural Amnesia at its best. This was another reason, why my whole doctorate was hovering in thin air. Now I don't complain. It could have been worse, if I had lived around the year 1600 or so. I am pretty sure, that I would have surely shared the same fate as Giordano Bruno. Mind you, the works of Giordano Bruno were at the center of the work of Aby Warburg and the Warburg Institute. It is surely better to be forgotten than to be grilled like so much as a piece of Hamburger on the Grill. (This is just a joke, since the Warburg Institute resided originally in Hamburg). This is a quote from the above:

P. 385

Already in 1936, however, two years after the Kulturwissenschaftliche Bibliothek Warburg had moved from Hamburg to London and re-opened as the Warburg Institute...

P. 392

The design he received was indeed later carved into the lintel of the foyer at Heilwigstrasse 116 in Hamburg.(2)

As I state it: There is a Dialectics of Form and Inhalt. I use the German word "Inhalt" instead of the Contents. The Inhalt is a technical term so that it will not get confused with the Contents. This is a kind of Heideggerian reasoning. I will explain this in a later chapter. For now, we call the Form also the Structure. This is "kind of" similar to the Phenomenology of Hegel, and sometimes I say something good about Hegel. There is also a dialectics when one looks at the work of Hegel, and I just don't believe in his Idealism, as I point it out again and again. I don't like WHAT he says, his Inhalt. For example that he admired Napolium [I spell it this way with intention.] as an objectivation of the Geist, nor do I like his adulation of the Prussian state for the same reason. But I REALLY LIKE it HOW he says this. He is an extremely structured thinker. And so NOW this time is the right time to say SOMETHING GOOD about Hegel.

[I would just think that his way of thinking was a typical example of a "Schwabe". The Schwaben's may be not the brightest people on Planet Earth, but when they are doing something, they do with the utmost diligence and precision. I have found this out to my own dismay when I came up against the "Schwäbische Kehrwoche". There is a German expression for this: penibel. [[Undoubtedly this word is etymologically related to "penis" meaning to penetrate. Penibel is a method that is penetrating. Undoubtedly this is also related to "pain" (German: Pein), poena, penitentia, and something of the like in Latin.

]]

We may give as an example, a Schwarzwald Cuckoo Clock. Such was also the most prominent character trait of Hegel. See my jokes about the Schwaben's. Nietzsche war quite the opposite. I like very much WHAT Nietzsche says in his "sort of" philosophy. But he is totally unstructured, and therefore I call this "Pop Philosophy". Another interesting example is Heidegger. In his "Sein und Zeit" he is extremely structured, but

in his late works he becomes more like a freewheeling thinker. And similarly with Wittgenstein. His "Tractatus" is extremely structured and later in his life he turned just into the opposite. So we can even speak of a "Meta-Noia" of the philosophers.

]

Back to Hegel: because when thinking the "Geist" only and nothing else, this is also a "kind of" Thinking in Structure. The metaphysical meaning of "Geist" can be interpreted as an empty Structure, in the terms of the Shunyata and the Kenoma. An empty Structure is about as close as one can get, to think about Emptiness in a complicated way. So the metaphysical meaning is that even though the Emptiness is empty, but it can also have a Structure. This is the metaphor that I use here, like an Empty Database System. So we get quite another Dimension of Emptiness. And this necessitates that one starts from a completely different vantage point about thinking Emptiness. The common thinking about Emptiness is that it cannot have a Structure, that it may be just a Chaos or Tohu Wa Bohu as it says in the Bible. (Chaos in the Ancient Greek sense, the gaping, yawning). This may be correct in many cases. But there are some cases where there can be a Structure of Emptiness. And this is exactly what I am doing here.

I will repeat my favorite quote from Nagarjuna to make the point a little bit clearer because on-one in all the history of human thought was better able to formulate this than Nagarjuna:

#### **44.2.2 The five Skandhas**

**Hier, O Sariputra, Form (rupa) ist Leere (shunyata) und gerade die Leere ist Form; Leere ist nicht verschieden von Form, und Form ist nicht verschieden von Leere; was auch immer Form ist, das ist Leere, was auch immer Leere ist, das ist Form, und dasselbe betrifft Gefühle (vedana), Sinneswahrnehmungen (samjna), Impulse (samskara), und Aufmerksamkeit (vijnana).**

#### **44.2.3 The Deep Structure of Form**

The Structure is a specific kind of Form. One could call it the Deep Structure of Form. This enlarges the common idea of Form a little bit more. Usually one thinks of the Form as some kind outline, or a view from the outside, like the form of a coffee cup. What we do when we look at the Structure, we look at it from the inside. This is similar to a Mathematical Topology, because we have a lattice of points that are connected. A topology can be stretched and bent whichever way one may like, but the lattice of points cannot be changed, if one wants to do Topology. It is quite easy to see the Structure when we think of a Computer Database System. The Database System must be there before it can take up some data. And the Form of the Computer Database System may never change, because if that happens, all your precious Data will be gone, with the wind as the saying goes. So we need to do some heavy thinking about the Form, before we can fill it with the Data. In Computer Science, the Design of a Database System is a crucial affair. One must not commit any errors in that. And since I am a Computer Scientist, I am well versed in this art. Because it really is an art. One cannot let a machine do this. Because the deep Structure of the Inhalt determines the Logical Structure. Here is some www material on that.

#### **45 www-Materials on Topology**

<https://en.wikipedia.org/wiki/Topology>

<http://mathworld.wolfram.com/Topology.html>

<https://www.math.colostate.edu/~renzo/teaching/Topology10/Notes.pdf>

<https://www.ntnu.edu/imf/research/topology>

<https://brilliant.org/wiki/topology/>

#### **46 www-Materials on Data Base Design**

[https://en.wikipedia.org/wiki/Database\\_design](https://en.wikipedia.org/wiki/Database_design)

[https://en.wikipedia.org/wiki/Database\\_design#Logically\\_structuring\\_data](https://en.wikipedia.org/wiki/Database_design#Logically_structuring_data)

[https://en.wikipedia.org/wiki/Database\\_design\\_-\\_ER\\_diagram\\_\(entity-relationship\\_model\)](https://en.wikipedia.org/wiki/Database_design_-_ER_diagram_(entity-relationship_model))

<http://www.noologie.de/db/db-nrm.htm>

[http://www.noologie.de/db/db-nrm\\_c.htm](http://www.noologie.de/db/db-nrm_c.htm)

#### **46.1.1 On Thinking in the Trees: A Multimedia Database Structure**

On Thinking in the Trees. I have just used an odd mode of expression. This is not a joke at all. It means to think in hierarchical Tree Structures. As a computer scientist one must be quite good at Thinking in the Trees, meaning some hierarchical data structures like a Balanced Binary Tree. This is one of the Essences of Data Base design. Now the requirements for memory trees like the Aby Warburg Library are quite different from that what one does in Computer Science. The Computer Science Tree has to be balanced for Optimal

Access Time vs. Computer Resources. In the case of doing Thinking Trees, it is a little different. One needs to keep an overview which is limited by the display size of the Computer Screen. This has about 39 lines for my Computer. And the newer models of laptops are not as good any more, because of the craze of having a TV compatible display which just gives you some more columns, but not any more lines. And the display of the lines is what counts when you want to have the overview. So there is a Tree width, which should not exceed the number of lines that you can display. Doing a lot of scrolling up and down is not a good way to keep an overview. I give an example for the base of such an Associative Tree. This is the root level of the Video Archive of the Noologie project. Here you can see the main categories by which I subdivide the many different subjects of the first or the root level of the tree. You may notice that this tree is not balanced at all, because the design depends on the depth of the subtrees that you have under each root level heading. There is no patent recipe how to subdivide a knowledge Data Base. I am sure that Aby Warburg had a better subdivision. But here the requirements are different since I also include a lot of Entertainment Videos, and then a lot of Music Videos. And then some Natural Science and Technology Videos, which was not the purpose of the Warburg Library. So the scope in the present Database is so much wider.

<http://www.noologie.de/aby.htm>

<http://www.noologie.de/aby.pdf>

\video\doku-craft-handwerk-art  
\video\doku-geo  
\video\doku-hist  
\video\doku-hist-antik  
\video\doku-nat-astro  
\video\doku-natwiss  
\video\doku-paleo  
\video\doku-rel  
\video\doku-rel-anthro-ethno  
\video\doku-rel-esoteric  
\video\doku-sozwiss  
\video\doku-tech  
\video\film-comic  
\video\film-hist  
\video\film-scifi  
\video\film-video  
\video\komiker-deutsch  
\video\music  
\video\music-antik  
\video\music-asien-indien  
\video\music-esoteric  
\video\music-ethno  
\video\music-klass  
\video\music-modern  
\video\music-other  
\video\music-rel  
\video\philosophy  
\video\wagner-film  
\video\wagner-music  
\video\wagner-other

### **46.1.2 Some more Computer Tree Branches**

One of the earliest application of the balanced tree structure was the Mumps Database. It ran on something like a PDP 11. Which could roughly be compared to the Apollo Guidance Computer. Here is some Computer Gobble-De-Gook, it is all Greek to Us. Since this was a long gone era, of 1969, which has now in 2019, quite exactly a 50-year Jubilee. Quite interesting I would say to write something like that for the 50-year Jubilee. And it is June now. So I am probably the only one in the Whole of Germany who is still surviving with a living memory from that era.

## 47 Fractal Trees

The Branching of Trees is part of the Science of Fractals. There are some very nice pictures which of course give us so much more than 10,000 words.

[https://www.google.com/search?](https://www.google.com/search?q=tree+branches+fractal&tbm=isch&source=hp&sa=X&ved=2ahUKEwikzcK3ku7iAhUHPVAKHU5ACRwQsAR6BAgFEAE&biw=1380&bih=707)

[q=tree+branches+fractal&tbm=isch&source=hp&sa=X&ved=2ahUKEwikzcK3ku7iAhUHPVAKHU5ACRwQsAR6BAgFEAE&biw=1380&bih=707](https://www.google.com/search?tbm=isch&q=tree+branches+fractal&chips=q:tree+branches+fractal,online_chips:fractal+patterns&sa=X&ved=0ahUKEwj12Ne4ku7iAhUMrxoKHVVaD8UQ4IYLigE&biw=1380&bih=707&dpr=1.13)

[https://www.google.com/search?](https://www.google.com/search?tbm=isch&q=tree+branches+fractal&chips=q:tree+branches+fractal,online_chips:fractal+patterns&sa=X&ved=0ahUKEwj12Ne4ku7iAhUMrxoKHVVaD8UQ4IYLigE&biw=1380&bih=707&dpr=1.13)

[tbm=isch&q=tree+branches+fractal&chips=q:tree+branches+fractal,online\\_chips:fractal+patterns&sa=X&ved=0ahUKEwj12Ne4ku7iAhUMrxoKHVVaD8UQ4IYLigE&biw=1380&bih=707&dpr=1.13](https://www.rosettacode.org/wiki/Fractal_tree)

[https://www.rosettacode.org/wiki/Fractal\\_tree](https://www.rosettacode.org/wiki/Fractal_tree)

<https://fractal.foundation.org/OFC/OFC-1-1.html>

A fractal is a pattern that repeats at different scales, and examples are all around us. Technically, we call shapes like this "Self-Similar" because a little piece of the shape looks similar to itself. This fern shows a rough self-similarity, being made of little copies of the same overall shape.

Fractal Trees

The plant kingdom is full of fractal patterns, and while we have only started calling these patterns 'fractal' since the 1970's, people have been observing these kinds of patterns for much longer. Perhaps the first description of a fractal pattern in nature came from the great artist and scientist Leonardo da Vinci in the 15th century.

Leonardo wrote in his notebooks: "All the branches of a tree at every stage of its height when put together are equal in thickness to the trunk [below them]." This was a logical inference, and has come to be known as Leonardo's Rule for Branches. This came from the idea that branches act as pipes to move fluid, and the total cross-sectional area must be the same at different levels of the tree. This rule has actually been shown to be not entirely correct (Ref), but it is a good initial model.

<http://mwskirpan.com/FractalTree/>

Make Your Own Fractal Tree!

Using the parameters below you can grow your own trees using fractals (well, approximately a fractal). The tree is generated by starting with a trunk of a certain length and then adding two branches that split off at a specified angle and length that is a ratio of the trunk. We continue adding these split branches for every branch that is drawn, up to a certain depth. If you were to repeat this process, as the limit approached infinity, you would have a set of numbers that were of a fractional dimension and had a self-repeating structure.

Namely, a fractal set.

Below, I provide access to some parameters so that you can draw one of your own trees by: (1) controlling the number of layers you compute, (2) changing the length ratio of the branches to their parent branch, and (3) shifting the angles where the branches emerge. You can also set the width and length of the trunk, which will change the look of your whole tree (making it thicker and taller). You also have a color choice. The branches get filled in on a color spectrum where the starting color is your trunk's hue and the ending color is your leaf's hue. Lastly, I made some little flower buds that you can add. The code is all done in JavaScript's D3 library, and can be found on my GitHub.

Suggestions on Parameters

## 48 Data on Fir Tree Branches in the woods

The following article gives some data on fir tree branches but I didn't get the branching level.

[https://www.researchgate.net/profile/Ulrich\\_Kohnle/publication/](https://www.researchgate.net/profile/Ulrich_Kohnle/publication/288471456_Models_on_branch_characteristics_of_wide-spaced_Douglas-fir/links/569de23008ae16fdf079af6e/Models-on-branch-characteristics-of-wide-spaced-Douglas-fir.pdf)

[288471456\\_Models\\_on\\_branch\\_characteristics\\_of\\_wide-spaced\\_Douglas-fir/links/](https://www.researchgate.net/profile/Ulrich_Kohnle/publication/288471456_Models_on_branch_characteristics_of_wide-spaced_Douglas-fir/links/569de23008ae16fdf079af6e/Models-on-branch-characteristics-of-wide-spaced-Douglas-fir.pdf)

[569de23008ae16fdf079af6e/Models-on-branch-characteristics-of-wide-spaced-Douglas-fir.pdf](https://www.researchgate.net/profile/Ulrich_Kohnle/publication/288471456_Models_on_branch_characteristics_of_wide-spaced_Douglas-fir/links/569de23008ae16fdf079af6e/Models-on-branch-characteristics-of-wide-spaced-Douglas-fir.pdf)

This is more of a kind of joke:

<http://www.realchristmastrees.org/dnn/Education/Tree-Varieties/Noble-Fir>

NCTA: The Professional Organization for The Real Christmas Tree Community

The National Christmas Tree Association (NCTA) is the national trade association representing the Christmas tree industry. NCTA represents more than 700 active member farms, 29 state and regional associations, and more than 4,000 affiliated businesses that grow and sell Christmas trees or provide related supplies and services. Members are located throughout North America, as well as in South America and Europe. It is estimated that those affiliated with the NCTA produce roughly three-quarters of the farm-raised Christmas trees in the United States.

The need for a recognized, nationwide Real Christmas Tree community – with the desire to have its voice heard – has never been stronger. The NCTA represents the Real Christmas Tree community with one voice to protect and advocate on the industry's behalf.

Vision

NCTA's vision is that a farm-grown tree is a part of every Christmas celebration.

Mission

NCTA's mission is to protect and advocate for the farm-grown Christmas Tree industry.

#### Guiding Principles

The National Christmas Tree Association will:

Conduct its affairs with honesty and integrity

Advocate for all segments of the industry

Include members and state/regional associations in issue and policy development

Communicate fully and accurately with members, state associations and related industries on a continuous and timely basis.

### 48.1.1 The philosophical principle of the complementarity of Form and Inhalt

I also apply the philosophical principle of the complementarity of Form and Inhalt in all of my philosophical / or rather: Metaphysical thinking. Because the abstract concept of Form and Inhalt is metaphysical. In the whole of the Physical Universe there cannot exist such a thing like a Form without an Inhalt. I think that this is quite logical. Anyhow, in the Physical Universe there just doesn't exist anything like a Form without an Inhalt. Because a Form is a figment of the mind or better, of the imagination.

### 48.1.2 The Hypertext Structure of Noology as spelled out in .htm files

First we have the important bibliography files in the .htm files.

<http://www.noologie.de/denk-bib.htm>

<http://www.noologie.de/bib.htm>

[http://www.noologie.de/bib\\_c.htm](http://www.noologie.de/bib_c.htm)

This is the Noology Archive of Video Collections. These are about 4 Terabytes.

<http://www.noologie.de/video.txt>

AG-Dissertation

Design und Zeit: Kultur im Spannungsfeld von Entropie, Transmission, und Gestaltung

<http://elpub.bib.uni-wuppertal.de/edocs/dokumente/fb05/diss1999/goppold/>

<http://www.noologie.de/desn.htm>

On Extra-Verbal Cultural Traditions

<http://www.noologie.de/desn23.htm>

In the following is a more or less complete collection of all the project noologie files that are quoted in the present text. It is quite next to impossible to get them into any systematic order at all, since this covers about 30 years of work, and I had started working with personal computers quite at the very time when they were invented and available with some kind of reliability. This was around and about 1978 on some CP/M computers which were then featured in the Byte Magazine. There were so many Computer Assembling Garage Enterprises in that era. Until the IBM PC came around and that was the end of all those Garage Enterprises, except of course the Apple Computers, and some "sort of" computers like the Amiga and some other oddballs that were produced for those kids who didn't have the money to buy a real CP/M or IBM PC computer.

I have never used an Apple Computer, even though I had one sitting in my basement for some time. I then donated this to some charity organization to help some poor children in Upper Volta to get some basic Computer experience. I even got a letter of thanks from some remote place in Upper Volta. They said that the Apple Computer was nice, but because of the Electricity Conditions in Upper Volta, they could use it only one hour a day, so their improvement in Computer Experience was not so Revolutionary. In order that you may not be confused, this paragraph is a kind of joke that I like to pull off some time or another.

First come what I would call the Core Files. When I have the time I will write some descriptions for them. But unfortunately I don't have the time.

I have in the Noology Archive all the videos of the Dance Traditions that I reference here. The Dance Traditions are extra-verbal, and **No Verbal Description can tell us about: That, Which is Un-Describable in words and Only in Dance.** There is a lot of Verbal Material in the Derra-De-Moroda Dance Library at the University of Salzburg. I have read extensively in this Library, but reading so many books, doesn't help understand the dances. In this case, **One Video can convey a Message**, that 10.000 words can never convey. This is the power of Modern Multi Media Technology. All the videos referenced here, are also in the Noology Video Archive. These are under:

<http://www.noologie.de/video.txt>

Of Phonosemantics and Fuzzy Categorization

[http://www.noologie.de/diadenk.htm#category\\_system](http://www.noologie.de/diadenk.htm#category_system)

Phonosemantics: The Semantic Fields, and Sem{e/aio}phonic Rhizomes

[http://www.noologie.de/diadenk.htm#phono\\_semantics](http://www.noologie.de/diadenk.htm#phono_semantics)

Die Denk-Technik der semantischen Spannungsfelder

[http://www.noologie.de/diadenk.htm#semant\\_spannung](http://www.noologie.de/diadenk.htm#semant_spannung)

Ein Versuch, die Logik der Hl. St. Dreifaltigkeit nachzuvollziehen

[http://www.noologie.de/diadenk.htm#\\_Toc512641957](http://www.noologie.de/diadenk.htm#_Toc512641957)

Das pneumatische "Wir" und der ethnotechnische Genius

[http://www.noologie.de/diadenk.htm#sub\\_obj\\_sem](http://www.noologie.de/diadenk.htm#sub_obj_sem)

### 48.1.3 On The Application of the "A" in Morphology

The Indo-Aryan-European and Vedic Indian Sanskrit language have a common Linguistic Operator for Negation. This is the "A" operator. And this is quite a trick of Linguistic Magick. Every time you put an "A-" in front of any word, you instantly turn it into the opposite or its Negation. Like A-Dvaita which means non-Dual or un-divided like in the Advaita Vedanta. Then one can come up with A-Laetheia, which means a "sort of" enlightenment, but this is not the original meaning. It just means the opposite of Laetheia, and Laetheia means "Endarkenment" or "Forget(ful)ness". The ancient myth states that when one dies, one has to go to the river Laethe, and drink some water from it. This causes immediate Amnesia. A-Mnesia just means the Negation of Mnesia or Mnaemae, which is the Memory or the Reminiscence. Aristoteles wrote a quite enlightening piece of work titled "Peri Mnaeme kai Ana-Mnaesis". This appears in the contemporary word Anamnesis which means Ana-mnaesis. Ana means Uphill, like the Ana-Basis of Xenophon.

### 48.1.4 The Inversion Technique of Meta-Morphology

But we can even do one better. Because there is not just Negation, but also Inversion. This is a term for a particular application of Meta-Morphology. One can make an Inversion of some Morphable Structure, and this is like one takes a glove and turns it inside out. So when it fits on your right hand in its original configuration, when you turn it inside out, it suddenly fits on your left hand. This is called in Mathematics a Topological operation. Topology means that all the points in a net stay connected. So when we take a different kind of glove, like a chain mail or net glove, and then we turn this inside out, we see clearly how the connectivity of the net chain stays right the same. This time not even doing anything particular like topological stretching, but only Inverting. There are of course fotos on the www, of such chain mail gloves.

[https://www.google.com/url?](https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&ved=2ahUKEwjh17P594jjAhVHr6QKHT1cBvAQjRx6BAGBEAU&url=https%3A%2F%2Fwww.ebay.com%2Fitm%2FButted-Chainmail-Gauntlet-Pair-Glove-Armor-Medieval-Knight-Steel-Gloves-%2F263049017013&psig=AOvVaw0snew5bVZhn74WuA-2q3ff&ust=1561699893079703)

[sa=i&rct=j&q=&esrc=s&source=images&cd=&ved=2ahUKEwjh17P594jjAhVHr6QKHT1cBvAQjRx6BAGBEAU&url=https%3A%2F%2Fwww.ebay.com%2Fitm%2FButted-Chainmail-Gauntlet-Pair-Glove-Armor-Medieval-Knight-Steel-Gloves-%2F263049017013&psig=AOvVaw0snew5bVZhn74WuA-2q3ff&ust=1561699893079703](https://www.ebay.com/itm/Butted-Chainmail-Gauntlet-Pair-Glove-Armor-Medieval-Knight-Steel-Gloves-/263049017013)

<https://www.ebay.com/itm/Butted-Chainmail-Gauntlet-Pair-Glove-Armor-Medieval-Knight-Steel-Gloves-/263049017013>

javascript;

And I call this a Topological Inversion Process of Meta-Morphology. This is probably something that one cannot think with the usual Negation Operator of the A- or Ant-Agonism. So it is quite outside of the thinking range of all of conventional thinking that hu-manity has practiced in the last 3000 years or so. It truly is a Terra Incognita of Thinking. We may also call this the Brave New Age of thinking Morphology.

<http://www.noologie.de/neuro07.htm>

<https://en.wikipedia.org/wiki/Anamnesis>

<https://de.wikipedia.org/wiki/Anamnesis>

<https://perspektiefe.privatsprache.de/platon-die-anamnesislehre/>

<https://anthrowiki.at/Anamnesis>

<https://www.textlog.de/platon-3.html>

### 48.1.5 Noology and Computer Assisted Philosophy

My project of Noology is an advanced application of Computer Assisted Philosophy. I have written extensively about that in the Volume Noology III: Der Diamantweg der Noologie. (2011 bis 2017)

<http://www.noologie.de/diamant.htm>

But I have also kept a secret Volume Noology III: Which is quite no-name, because there is only a provisional title for that work. I don't want to reveal all that to humanity, until the right time comes. If it comes at all, and if not, so may be it. It is not listed in the root URL:

<http://www.noologie.de>

<http://www.noologie.de/diadenk.htm>

And so if you don't know its URL you will not be able to find it in the Google. Which suits me very well.

The secret title is:

"Die Kultur-Mythen-Analyse und Die Ethno-Kybernetik: Das Fraktal-Denken der Noologie".

This title is of no use whatsoever, because not so many people know about Fractals, and even fewer know about thinking in Fractals. I believe I am the only one who does this. So this is just a bad marketing idea. Until I come up with a better title. Ethno-Kybernetik is also not so very well known. Except if one knows the works of Peter Sloterdijk in and out. He speaks in his works about Ethno-Techniken. Which is about the same as Ethno-Kybernetik. Since I don't want to plagiarize Sloterdijk all the time, I had just thought up this new word. Kultur-Mythen-Analyse is also not very well known, because today, people are not so much interested in Mythology, and when they are, they just think of some new sequels to the Star Wars endless sequel series, or of Star Trek, or of the Matrix, or of the Prometheus in the Alien sequels, or something in this genre. I have written more extensively in my article about the Mythology in the Ring of Wagner, and then some.

<http://www.noologie.de/wagner.htm>

And in Appendix III: Die Denk-Technologie der Noologie

I write everything there is to write about the: WWW- Hypertext- Computer- Technik, of the Noology.

I just give some headlines of this, so you can get an idea what I am talking about:

Die Noologie- Navigations- Hilfen: Die Google-Erinnerung

Die WWW- und Google-Methoden der Noologie

Die Noologie als philosophische Wissensbasis

Die Hyper- Text- Aesthetik- Theorie der Noologie

Die Kunst der rekursiven Fuss-Note

A Hypothetical Sem{e/aio}phonic Rhizome Network of Aoide Vocabulary

I have already said some things about: The Hierarchical Method of Designing a Hypertext Structure. So I don't need to repeat this. But it just fits in here as well. But since you should not step in the same river more than once, I just refer to the above chapter about Right-Thinking. And the structure of the Warburg library.

## 48.2 The Hierarchical Hypertext Structure

The whole of The Project Noologie and Hagia Sophia has a volume of about 57 Megabytes in ca. 400 .htm files. This is an immense mass of data to juggle around. The .htm format is a Hypertext "of sorts" and therefore it is tremendously practical to do most of the Literature References by linking into the Deep Structure of the www. I have come to value the US wikipedia as very good source of references, they are usually well researched and documented. So they should be regarded as trustworthy source. Since I know the material of so many wikipedia articles by my own researches into the deeper recesses of the Classical Literature of Antiquity, I can assure that the sources are correct. And the other good thing about the US wikipedia is that they usually give a good abstract of the larger text. And this is very handy when I cut and paste those abstracts in my own text. This saves a lot of work, and I am thankful to those nameless authors who have devoted so much of the time of their lives to do the research for the articles. What if all those thinkers of Antiquity and the Renaissance up to 1990 had had a personal computer and www access?

The good Thomas Aquinas, Athanasius Kircher, Marsilio Ficino, Picco della Mirandola, and the good Giordano Bruno, and the good Leibniz, and the good Goethe, and the good Oswald Spengler, and the good Aby Warburg, and the good Umberto Eco... They all would have just jumped out of their minds at the phenomenal perspective to get a computer for some Universal and Encyclopaedic Knowledge. And I have to qualify that this is just a very special Encyclopaedic knowledge about some very special subjects which are all in the collection of the Warburg Library. But nowadays you can find some good selections of the Warburg Library on the www. If you know where and how to look for it, and use the Google in some clever ways. And so I am able in just around 1/10 to 1/20 the fraction of the precious lifetime to do a research on some things that the poor book-reading students of philosophy would need countless hours to pore through library catalogs, then go to the library, and schlep the books home, do some readings, do some annotations, do some excerpting and quoting... And so on. I just have so much pity for those poor students who do not know how to use the Computer and the www and the Google to go fishing for precious information, with a dragnet. And I would be curious if those students also go to the Bayerische Staatsbibliothek, and then scan in their books at the scanner, and take the scan files home and put them through the OCR, so you need to make only some

corrections where the OCR couldn't do it all by itself. And this surely saves a lot of time. On top of this is the enhanced Google search. And then one needs to get the retrieved material into some Structure. And this Structure is the catalogue of the Warburg Library. As I believe, this is one of the best catalogs in the whole of Library Science. It is not ordered according to some stupid Alphabetical or Numerical Principle, but according to its Deep Inhalt (the deep Content). And to determine what the Inhalt is, one needs to read the book, at least a little bit. There is also the ISKO organization International Society for Knowledge Organization. I have been at some conferences of that organization around 1997-1999, and I had presented some of my ideas. I had not yet been able to get the Structure of the Warburg Library at that time. And so I could not give the fitting example for my theory of Hierarchical Associative Hypertext.

The **Dewey Decimal Classification (DDC)**, colloquially the **Dewey Decimal System**, is a proprietary **library classification** system first published in the United States by **Melvil Dewey** in 1876.[1] Originally described in a four-page pamphlet, it has been expanded to multiple volumes and revised through 23 major editions, the latest printed in 2011. It is also available in an abridged version suitable for smaller libraries. **OCLC**, a non-profit cooperative that serves libraries, currently maintains the system and licenses online access to **WebDewey**, a continuously updated version for **catalogers**.

The Decimal Classification introduced the concepts of *relative location* and *relative index* which allow new books to be added to a library in their appropriate location based on subject. Libraries previously had given books permanent shelf locations that were related to the order of acquisition rather than topic. The classification's notation makes use of three-digit **Arabic numerals** for main classes, with fractional decimals allowing expansion for further detail. Using Arabic numerals for symbols, it is flexible to the degree that numbers can be expanded in linear fashion to cover special aspects of general subjects.[2] A library assigns a classification number that unambiguously locates a particular volume in a position relative to other books in the library, on the basis of its subject. The number makes it possible to find any book and to return it to its proper place on the library shelves.[notes 1] The classification system is used in 200,000 libraries in at least 135 countries.[3][4]

### 48.2.1 The Structure is just another Deeper Version of the Form

And the Structure is just another deeper version of Form. It is Form in a deeply and highly structured manner. And this is exactly what the Warburg Library is all about. Because without a deeply nested hierarchical structure it is quite impossible to think such a thing like the Warburg Library is. And of course this is all about the Project Hagia Sophia. Its structure is a deeply nested Hierarchical Hypertext. And in would be pretty impossible to do this without the right Computer Tools. I have in part developed Hypertext Structures myself in the early 1980's. That was quite some time before the idea of Hypertext was even developed.

### 48.2.2 About the good Hl. St. Augustinus

I use the German word Inhalt as a technical term, to distinguish it from the (in-) contents (or In-Contentia of "Life of Brian" fame). This is my favorite application of thinking Form and not Inhalt. When I read the writings of the Hl. St. Augustinus I am always con-vulsing with re-vulsion. Really. Augustinus is one of those characters whom I just love to hate. But I only hate WHAT he thinks, the Inhalt. And I just love the Form of his Thinking. I will just remember the verses of Nietzsche: Ihr Einsamen von heute, ihr Ausscheidenden:

Wahrlich, ich rathe euch: geht fort von mir und wehrt euch gegen  
Zarathustra! Und besser noch: schämt euch seiner! Vielleicht betrog er euch.  
Der Mensch der Erkenntniss muss nicht nur seine Feinde lieben, sondern  
auch seine Freunde hassen können.

And this is also the way I go about the good Hl. St. Augustinus. Since I am doing Complementarity Thinking, I have noticed something: Even when I hate the *Inhalt of the excessive ruminations of St. Augustinus*, I just love the *Structure of his Thought-System*. Because he had been a very good Lawyer, and Rhetor, and Orator and he was a Manichaeon on top of that. Now to be a Manichaeon is the best thing to do when you are in the Law Business. To think the Manichaeon way means to be "dyed in the wool" with Dualistic Thinking. Manichaeon'ism was probably the highest logical suprematization of Dualistic thinking that ever existed. (See also: Peter Sloterdijk "Gottes Eifer" on more information about Suprematization). Manichaeonism is derived from the ancient Persian Zoroastrism of Ahura Mazda and Ahriman as the Dualistic Spirits who are in an ever-lasting battle about who controls the world, and the mInds of the Humans. I also refer to the theory of Rudolf Steiner who had done some enlargement of this theory.

<https://anthrowiki.at/Ahriman>

<https://www.britannica.com/topic/Ahura-Mazda>

[https://en.wikipedia.org/wiki/Ahura\\_Mazda](https://en.wikipedia.org/wiki/Ahura_Mazda)

<https://en.wikipedia.org/wiki/Ahriman>

### 48.2.3 A few side thoughts about the Hl. St. Augustinus and Rousseau

I just give a little side thought about the Hl. St. Augustinus. And I had pretty much the same revulsion when I read Rousseau. The thinking style of them both was quite of the same kind of excessive rumination, like the Hl. St. Augustinus did. But I just didn't get the idea why the good Rousseau ruminated so excessively about masturbation. Rousseau was about the same obsessed with masturbation as the good Marquis de Sade was with his sexual tortures. At least the stories of the good Marquis de Sade made for some interesting reading for an Anthropologist. One can always learn something more about human sexual deviation, even if the stories the good Marquis de Sade were complete fiction since he was in the Bastille at the time when he wrote those stories. I believe that there must have been a reading Salon in the assembly room for all the prisoners in the Bastille, and when the Marquis de Sade did his readings, the room was always packed full. Since the prisoners had very little other entertainment. I could do quite a bit of psycho-analysis about this. But what struck me with so much Shock and Awe (remember the 2003 Irak war of G.W. Bush)... Was the fact that even such enlightened thinkers like Jacques Derrida had so much admiration and adoration for Rousseau, and I even think that the French Intelligenzia believes that the poor Rousseau was some sort of National Philosophical Hero. And Rousseau was really the poorest, and basest, and most erroneous thinker of the whole of the French Intelligenzia, which was more of a Demenzia at those times, just like the good Descartes a few years before Rousseau. This would be about the same achievement as if the Germans would take the Dr. Josef Goebbels as their National Philosophical Hero. To quote the good Asterix: Ils sont fous les Romains. The retort is: Ils sont fous les Francais Intelligenzia or better the Demenzia.

[https://www.google.com/search?](https://www.google.com/search?q=patrice+ayme+Intelligentsia+sartre&tbm=isch&source=hp&sa=X&ved=2ahUKEwiW2L2C84fjAhVMKI AKHVSvDhsQsAR6BAgFEAE&biw=1326&bih=767)

[q=patrice+ayme+Intelligentsia+sartre&tbm=isch&source=hp&sa=X&ved=2ahUKEwiW2L2C84fjAhVMKI AKHVSvDhsQsAR6BAgFEAE&biw=1326&bih=767](https://www.google.com/search?q=patrice+ayme+Intelligentsia+sartre&tbm=isch&source=hp&sa=X&ved=2ahUKEwiW2L2C84fjAhVMKI AKHVSvDhsQsAR6BAgFEAE&biw=1326&bih=767)

<https://patriceayme.wordpress.com/2018/01/15/sartre-and-de-beauvoir-were-nazis-is-existentialism-a-euphemism-for-nazism/>

Abstract: Once I went climbing somewhere. The equipment was heavy, the rope cumbersome, the slope steep. On the side of that upward struggle, a foot away, a boulder with a flat top, pretty crystalline colors. It invited me to put my hand on it, for a welcome rest. As I engaged the motion, some engine of systematic suspicion inside my brain addled by the effort, had an automatic, and, it turned out, life saving, second look. **A magnificent viper was coiled on the colored rock, its pretty camouflage perfectly adapted. It puffed, ready to strike when I jerked back. As we will see, human vipers, are also perfectly adapted, perfectly camouflaged, and that's what makes them so pretty.**

It's not because an ideology sounds good, and looks pretty, that it is. Baits look good, and that's why fishes bite them (experienced fishes do not bite baits, they know the difference). So beware of all too seductive ideologies... All the more as plutocratic propaganda finds alluring all and [any ideology which serves it, and has the means to finance it, beyond your wildest dreams](#). In France, in the 1950s, more than 50 major opinion makers were on the CIA roll. Surely, would the naive say, not icons such as Sartre and De Beauvoir? Well, for those, the situation was even worse.

Yes, I know, top philosophers have always been iconoclastic. Top philosophers break icons. Nothing that is viewed favorably in this celebrity worshipping, thus superficiality craving, age of the greedy critters.

...

#### **Existentialism as a cancer of the spirit:**

An example of a ruinous ideology has been so-called "Existentialism", a nebulous "philosophy" preoccupied with the self, which played a crucial role in deploying, and justifying Lenino-Stalinism, Nazism, "Maoim", the "American Century", also known as "neo-liberalism"...

Existentialism gave a justification, if not inception to the "Et Moi, Et Moi, Et Moi" (me, me, me) philosophy, which brought us, in turn, both the cult of wealth supreme ("neo-liberalism", "inequality") and "communitarianism" (my community is all I need to enjoy and know, by birthright; in particular Islamism, but it could be Buddhism in Burma... or sexism).

"Neo-liberalism" is neither: neither "liberal", nor new in any sense.

[https://en.wikipedia.org/wiki/Jacques\\_Derrida](https://en.wikipedia.org/wiki/Jacques_Derrida)

<https://de.pons.com/%C3%BCbersetzung/franz%C3%B6sisch-deutsch/ils+sont+fous+ces+romains>

<https://www.linguee.com/french-english/translation/ils+sont+fous+ces+romains.html>

<https://en.wikipedia.org/wiki/Obelix>

<https://en.wikiquote.org/wiki/Asterix>

[https://en.wiktionary.org/wiki/Appendix:Non-English\\_snowclones](https://en.wiktionary.org/wiki/Appendix:Non-English_snowclones)

<https://mobile.secouchermoinsbete.fr/1299-la-signification-des-lettres-spqr-a-rome>  
[https://www.reddit.com/r/dankmemes/comments/61lhc5/ils\\_sont\\_fous\\_ces\\_romains/](https://www.reddit.com/r/dankmemes/comments/61lhc5/ils_sont_fous_ces_romains/)  
<http://www.thefullwiki.org/Asterix>  
<https://www.google.com/search?q=ils+sonst+fous+ces+romains+english+wikipedia&tbm=isch&source=univ&sa=X&ved=2ahUKEwj6h-egzO7iAhXXwKQKHxW6BUAQsAR6BAgFEAE&biw=1380&bih=707>

### 48.3 The Display Tree for an Associative Hierarchy

As I said in the main text, the display of the lines is what counts when you want to have the overview. So there is a Tree width, which should not exceed the number of lines that you can display. Doing a lot of scrolling up and down is not a good way to keep an overview. I give an example for the base of such an Associative Tree. This is the root level of the video archive of the Noologie project. Here you can see the main categories by which I subdivide the many different subjects of the first or the root level of the tree. You may notice that this tree is not balanced at all, because the design depends on the depth of the subtrees that you have under each root level heading. There is no patent recipe how to subdivide a knowledge Data Base. I am sure that Aby Warburg had a better subdivision. But here the requirements are different since I also include a lot of Entertainment Videos, and then a lot of Music Videos. And then some Natural Science and Technology videos, which was not the purpose of the Warburg Library. So the scope in the present Database is so much wider.

```
\doku-craft-handwerk-art
\doku-geo
\doku-hist
\doku-hist-antik
\doku-nat-astro
\doku-natwiss
\doku-paleo
\doku-rel
\doku-rel-anthro-ethno
\doku-rel-esoteric
\doku-sozwiss
\doku-tech
\film-comic
\film-hist
\film-scifi
\film-video
\komiker-deutsch
\music
\music-antik
\music-asien-indien
\music-esoteric
\music-ethno
\music-klass
\music-modern
\music-other
\music-rel
\philosophy
\wagner-film
\wagner-music
\wagner-other
```

Here I show some entries of the next levels of the tree. You can see some of the volume of the material that is stored under each tree root level.

```
\doku-craft-handwerk-art\blacksmith-traditional
\doku-craft-handwerk-art\chinese arts and crafts
\doku-craft-handwerk-art\dance
```

\doku-craft-handwerk-art\der letzte seines standes  
 \doku-craft-handwerk-art\diamant-glas  
 \doku-craft-handwerk-art\diamant-saphir-smaragd  
 \doku-craft-handwerk-art\indian arts & crafts  
 \doku-craft-handwerk-art\japanese crafts  
 \doku-craft-handwerk-art\japanese woodworking  
 \doku-craft-handwerk-art\japanese-other-garden  
 \doku-craft-handwerk-art\kunsthandwerk bayern  
 \doku-craft-handwerk-art\miyoko  
 \doku-craft-handwerk-art\oel-platin  
 \doku-craft-handwerk-art\tonneau-barrel  
 \doku-craft-handwerk-art>wax casting technique  
 \doku-craft-handwerk-art>wolle  
 \doku-craft-handwerk-art\diamant-glas\audio\_ts  
 \doku-craft-handwerk-art\diamant-glas\video\_ts  
 \doku-craft-handwerk-art\diamant-saphir-smaragd\audio\_ts  
 \doku-craft-handwerk-art\diamant-saphir-smaragd\video\_ts  
 \doku-craft-handwerk-art\oel-platin\audio\_ts  
 \doku-craft-handwerk-art\oel-platin\video\_ts  
 \doku-craft-handwerk-art>wolle\audio\_ts  
 \doku-craft-handwerk-art>wolle\video\_ts  
 \doku-geo\afrika  
 \doku-geo\amerikas  
 \doku-geo\asien  
 \doku-geo\austral-oceanien  
 \doku-geo\china  
 \doku-geo\earth-story  
 \doku-geo\ethiopia  
 \doku-geo\eurasien  
 \doku-geo\europ  
 \doku-geo\geo afrika arab  
 \doku-geo\near-east  
 \doku-geo\tibet  
 \doku-geo\zdoku-others  
 \doku-geo\asien\burma  
 \doku-geo\asien\burma\burma-reise  
 \doku-geo\asien\burma\burma-taron  
 \doku-geo\asien\burma\burma-reise\audio\_ts  
 \doku-geo\asien\burma\burma-reise\video\_ts  
 \doku-geo\asien\burma\burma-taron\audio\_ts  
 \doku-geo\asien\burma\burma-taron\video\_ts  
 \doku-hist\hist modern  
 \doku-hist\hist paleo  
 \doku-hist\hist personen  
 \doku-hist\hist-asien  
 \doku-hist\hist-mediev-renaiss  
 ...

## 48.4 The Dewey Decimal Classification

[https://en.wikipedia.org/wiki/Dewey\\_Decimal\\_Classification](https://en.wikipedia.org/wiki/Dewey_Decimal_Classification)

The OCLC has maintained the classification since 1988, and also publishes new editions of the system. The editorial staff responsible for updates is based partly at the [Library of Congress](#) and partly at OCLC. Their work is reviewed by the Decimal Classification Editorial Policy Committee, a ten-member international board which meets twice each year. The four-volume unabridged edition was published approximately every six years, with the last edition (DDC 23) published in mid-2011. [36] In 2017 the editorial staff announced that the English edition of DDC will no longer be printed, in favor of using the frequently updated WebDewey. [37] An experimental version of Dewey in [RDF](#) was previously available at dewey.info beginning in 2009, [38] but has not been available since 2015. [39]

## Design

The Dewey Decimal Classification organizes library materials by discipline or field of study. Main divisions include philosophy, social sciences, science, technology, and history. The scheme comprises [ten classes](#), each divided into ten divisions, each having ten sections. The system's notation uses Arabic numbers, with three whole numbers making up the main classes and sub-classes and decimals designating further divisions. The classification structure is [hierarchical](#) and the notation follows the same hierarchy. Libraries not needing the full level of detail of the classification can trim right-most decimal digits from the class number to obtain more general classifications.[\[41\]](#) For example:

500 Natural sciences and mathematics

510 Mathematics

516 Geometry

516.3 Analytic geometries

516.37 Metric differential geometries

516.375 Finsler geometry

The classification was originally enumerative, meaning that it listed all of the classes explicitly in the schedules. Over time it added some aspects of a [faceted classification](#) scheme, allowing classifiers to construct a number by combining a class number for a topic with an entry from a separate table. Tables cover commonly-used elements such as geographical and temporal aspects, language, and bibliographic forms. For example, a class number could be constructed using 330 for economics + .9 for geographic treatment + .04 for Europe to create the class 330.94 European economy. Or one could combine the class 973 (for the United States) + .05 (for [periodical](#) publications on the topic) to arrive at the number 973.05 for periodicals concerning the United States generally. The classification also makes use of mnemonics in some areas, such that the number 5 represents the country Italy in classification numbers like 945 (history of Italy), 450 (Italian language), 195 (Italian philosophy). The combination of faceting and mnemonics makes the classification *synthetic* in nature, with meaning built into parts of the classification number.[\[42\]](#)

The Dewey Decimal Classification has a number for all subjects, including fiction, although many libraries maintain a separate fiction section shelved by alphabetical order of the author's surname. Each assigned number consists of two parts: a class number (from the Dewey system) and a book number, which "prevents confusion of different books on the same subject".[\[7\]](#) A common form of the book number is called a [Cutter number](#), which represents the author and distinguishes the book from other books on the same topic.[\[43\]](#)

## Classes

Main article: [List of Dewey Decimal classes](#)

(From DDC 23[\[44\]](#))

000 – Computer science, information & general works

100 – Philosophy & psychology

200 – Religion

300 – Social sciences

400 – Language

500 – Pure Science

600 – Technology

700 – Arts & recreation

800 – Literature

900 – History & geography

## Tables

(From DDC 23[\[44\]](#))

T1 Standard Subdivisions

T2 Geographic Areas, Historical Periods, Biography

T3 Subdivisions for the Arts, for Individual Literatures, for Specific Literary Forms

T3A Subdivisions for Works by or about Individual Authors

T3B Subdivisions for Works by or about More than One Author

T3C Notation to Be Added Where Instructed in Table 3B, 700.4, 791.4, 808–809

T4 Subdivisions of Individual Languages and Language Families

T5 Ethnic and National Groups

T6 Languages

## Relative Index

The Relative Index (or, as Dewey spelled it, "Relativ Index") is an alphabetical index to the classification, for use both by classifiers but also by library users when seeking books by topic. The index was "relative" because the index entries pointed to the class numbers, not to the page numbers of the printed classification schedule. In this way, the Dewey Decimal Classification itself had the same relative positioning as the library

shelf and could be used either as an entry point to the classification, by catalogers, or as an index to the Dewey-classed library itself.[45]

## 49 Odds and Ends

Here are some contributions that have no proper context place as yet:

### 49.1.1 The Fallacy of the Fossils

The fallacy of the fossils is ecological. The place where fossils are abundant, is mainly because they don't rot so easily. In the middle of a jungle everything organic gets recycled very quickly and thoroughly. So the chance of fossilization is small. Almost the only examples to the contrary are the tar pits like *LaBrea* in Los Angeles and the *Messel Pit*. And then there are the Glaciers and the *Permafrost of Siberia*. Because these are melting, they also will become veritable treasure troves of hitherto unknown and unknowable ancient proto-civilizations.

[https://en.wikipedia.org/wiki/Messel\\_pit](https://en.wikipedia.org/wiki/Messel_pit)

[https://en.wikipedia.org/wiki/La\\_Brea\\_Tar\\_Pits](https://en.wikipedia.org/wiki/La_Brea_Tar_Pits)

The best preserved fossils are exactly in those places where life has a hard time to survive. Like the Badland belt of the USA from Arizona, New Mexico going to the north, and in Asia it is the *Gobi Desert*. The same it is with the rift valley of East Africa, where some quite arid areas are very suitable for fossil preservation, so Louis Leakey and friends made most of their discoveries there. The fallacy of the fossils is similar to the joke where a man is searching for his lost keys, under the lantern, because he can see better there, even though he had lost the keys somewhere else where it is dark.

[https://en.wikipedia.org/wiki/Louis\\_Leakey](https://en.wikipedia.org/wiki/Louis_Leakey)

### 49.1.2 Monty Python and The Holy Grail

And there arose those famous knights (of the Arthurian Legends of course). When they produced the movie "Monty Python and The Holy Grail", the poor Monty Pythons didn't have enough money for horses. So it came to pass that the German title was: "Die Ritter der Kokosnuss" (Cocoanut). How could a German translator / synchronizer come up with that funny German title ??? Now if you know the movie business, you know that in all the German synchronizations of US or english movies, the horses were imitated with empty Kokosnuss shells. But if you didn't know this trick, you were out of luck, when you went to the cinema, and there was none whatsoever Kokosnuss to be seen. It was just to be heard. But the poor German movie-goers had no idea of that. I myself did a whole lot of wondering when I first viewed "Die Ritter der Kokosnuss" in the movie theater. And it took me about 20 years of heavy thinking to figure out what this joke was all about. Monty Python And The Holy Grail 1975 HD

[https://www.youtube.com/results?search\\_query=monty+python+holy+grail](https://www.youtube.com/results?search_query=monty+python+holy+grail)

<https://www.youtube.com/watch?v=4qvXvDfGnh8>

## 49.2 Forensic Pictures of the Result of Gunshot Suicides

**Spoiler Alert! I don't want to spoil anyone's fun,  
but this text here contains some material which some people may find Offensive, Disgusting,  
Grossed out, and even Politically Incorrect.  
But this is Anthropological Material. And as an Anthropologist,  
who cannot take such kind of Material, one should better look  
for another kind of job, like an Accountant.  
You have been warned!  
Any further Reading here is wholly on your Own Responsibility!!!**

I just have some second thoughts about the *Stalinist Purges*, and the *gunshot executions*. In the USA, suicide by gun is a preferred method, especially for men who are gun lovers. Perhaps one has (n)ever seen some forensic pictures of the results of *botched gunshot suicides* in the USA, and there are quite a lot of them, and I have seen my share of them. Because you just take a shotgun, put it to your mouth, and then Kaboom. But there were even some morons who missed the shot and I have no idea how they could miss at about 5 centimeters distance. The head shot was the preferred method of suicide that Ernest Hemingway (... almost always) used. He used a shotgun just to make sure. The one thing I was always puzzled about is: A shotgun is quite long, so one will have a hard time when one wants to pull (or better push) the trigger because the arm doesn't reach that far. But maybe he used a broomstick to improvise. The good Ernest Hemingway always had a keen sense for drama, even when he committed suicide. I would not have liked to be his cleaning maid, to clear up the mess that he had produced. He must have shot most of his head away. A shotgun is no toy for children to play with.

<https://www.artofmanliness.com/articles/why-ernest-hemingway-committed-suicide/>

Suicide always leaves the question of "Why?" in its wake, and this is especially true when the person who commits the act seemingly has so much to live for.

Such is the case of Ernest Hemingway. As his friend, A. E. Hotchner wondered, why would someone "whom many critics call the greatest writer of his century, a man who had a zest for life and adventure as big as his genius, a winner of the Nobel Prize and the Pulitzer Prize, a soldier of fortune with a home in Idaho's Sawtooth Mountains, where he hunted in the winter, an apartment in New York, a specially rigged yacht to fish the Gulf Stream, an available apartment at the Ritz in Paris and the Gritti in Venice, a solid marriage . . . good friends everywhere . . . put a shotgun to his head and [kill] himself"?

While an answer to this kind of question can never be offered with any certainty, given the complexity of mental health, and the time that has passed, there are several plausible possible explanations.

What we do know is that at the end of his life, Ernest Hemingway was suffering in mind, and likely in body as well. Over the course of his life he had weathered malaria, dysentery, skin cancer, high blood pressure, and high cholesterol, and these maladies had taken their toll. Additionally, he had suffered six serious, essentially untreated concussions (two within back-to-back years), which left him with headaches, mental fogginess, ringing in his ears, and very likely a traumatic brain injury.

Several years before his suicide, he was almost killed in two separate plane crashes, in two days, which ruptured his liver, spleen, and kidneys, sprained several limbs, dislocated his shoulder, crushed vertebra, left first degree burns over much of his body, and cracked his skull, giving him one of the aforementioned concussions (this one so severe that cerebral fluid seeped out of his ear). He was in constant pain for a long time afterwards, which he dealt with by drinking even more heavily than he usually did.

### 49.2.1 My Favorite Works of Art by Hermann Nitsch

The results of the suicide by shotgun look pretty much like my favorite works of art by Hermann Nitsch. Since one usually leans against a wall, so that performing the suicide will be a little more stable. When you miss, you will be out of luck entirely.

<http://www.nitsch.org/>

<http://www.nitsch.org/malaktionen/>

<http://www.nitsch.org/biografie/>

[http://www.nitsch.org/wp-content/uploads/2018/11/aktionen\\_02-612x407.jpg](http://www.nitsch.org/wp-content/uploads/2018/11/aktionen_02-612x407.jpg)

<http://www.nitsch.org/aboutactions/>

<https://www.br.de/mediathek/video/werkschau-hermann-nitsch-rituelle-kunst-in-ingolstadt-av:5c90d04d62289a001342c3cd>

<https://www.youtube.com/watch?v=i07MePe6yMA>

<https://www.youtube.com/watch?v=LrALo-R3eAg>

## 49.2.2 Face Transplantations

Face transplant: These are some quite nice photos of Face transplantations. Even with pre-op and post-op photos. The doctors are quite proud of their successes. So they put the photos on the www, to make some advertisement of their skills. This is not for the faint-hearted! You have been warned. You do this entirely on your own responsibility! If you have nightmares, please don't complain to me. I haven't forced you to look at those photos. Too bad. As I say it again and again. When one wants to be a true Anthropologist, one must have a professional attitude about these photos. Or otherwise one will be a quite incompetent Anthropologist. And the medical schools do everything they can to harden their students to such views. A doctor must keep his/her cool even with such sights. And when one looks at them in the flesh... a doctor should not faint when looking at the scene in Real Life. In other countries the doctors are not so shy. When one goes to some Korean www-sites, one will see some even more grisly photos. But I will spare the poor reader even more harrowing photos.

[https://www.google.com/search?q=Face+transplant&tbm=isch&source=iu&ictx=1&fir=-S1BBcQk6yeWKM%253A%252CGbrtfcM2Ix8V7M%252C\\_&vet=1&usg=AI4\\_-kQWFXnyEatmwPijV5uK990JKvLvJw&sa=X&ved=2ahUKewjf5MuAgufiAhXDxqQKHxN5CUUQ9QEwAHoECAAQBA&biw=1380&bih=762#imgrc=-S1BBcQk6yeWKM:](https://www.google.com/search?q=Face+transplant&tbm=isch&source=iu&ictx=1&fir=-S1BBcQk6yeWKM%253A%252CGbrtfcM2Ix8V7M%252C_&vet=1&usg=AI4_-kQWFXnyEatmwPijV5uK990JKvLvJw&sa=X&ved=2ahUKewjf5MuAgufiAhXDxqQKHxN5CUUQ9QEwAHoECAAQBA&biw=1380&bih=762#imgrc=-S1BBcQk6yeWKM:)

[https://a57.foxnews.com/static.foxnews.com/foxnews.com/content/uploads/2018/09/918/516/patrick\\_progression\\_9.jpg?ve=1&tl=1](https://a57.foxnews.com/static.foxnews.com/foxnews.com/content/uploads/2018/09/918/516/patrick_progression_9.jpg?ve=1&tl=1)

The following nice youtube video is of someone who had tried to commit suicide by gun. So this is it when one does a near miss. I have no idea how that poor guy could miss, when one just has to hold the gun (I mean a pistol, not a rifle) to the mouth and pull the trigger. As I said above to kill yourself the Hitler way, one needs to take the gun in the mouth and direct it at about an angle of 45 degrees upwards to the back of the mouth. Then one pulls the trigger. Kaboom!

<https://www.youtube.com/watch?v=9dYQjT4u3z8>

<https://www.google.com/url?>

[sa=i&source=images&cd=&ved=2ahUKewiTlqn7hOfiAhWCyqQKHQ\\_uBr4QjRx6BAGBEAU&url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3D9dYQjT4u3z8&psig=AOvVawlySIKewry-36Vyo69jn2AZ&ust=1560534462241255](https://www.google.com/url?sa=i&source=images&cd=&ved=2ahUKewiTlqn7hOfiAhWCyqQKHQ_uBr4QjRx6BAGBEAU&url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3D9dYQjT4u3z8&psig=AOvVawlySIKewry-36Vyo69jn2AZ&ust=1560534462241255)

The following photo is about a french woman who was so drugged out of her mind for a few days, and she had a little pet dog, and it was just quite a little dog, and after a day or two the dog was hungry. And the poor woman lay on the floor, drugged out. So the poor hungry dog just started to chew its way where it was softest, of the woman's flesh. And that was her mouth. So when the woman finally woke up from her koma, she wanted to smoke a cigarette. Then she realized that she had no mouth any more. The dog had eaten it. Fortunately for our good night's sleep the good French doctors omitted the photo what she looked like before the transplantation surgery.

[https://ichef.bbci.co.uk/news/660/media/images/64388000/jpg/\\_64388483\\_624\\_dinoire\\_comp2.jpg](https://ichef.bbci.co.uk/news/660/media/images/64388000/jpg/_64388483_624_dinoire_comp2.jpg)

## 50 Literature Sources

### 50.1 AG-Literature

The very extensive Literature is now under:

<http://www.nologie.de/denk-bib.htm>

<http://www.nologie.de/bib.htm>

[http://www.nologie.de/bib\\_c.htm](http://www.nologie.de/bib_c.htm)

This is the Nology Archive of Video Collections. These are about 4 Terabytes.

<http://www.nologie.de/video.txt>

AG-Dissertation

Design und Zeit: Kultur im Spannungsfeld von Entropie, Transmission, und Gestaltung

<http://elpub.bib.uni-wuppertal.de/edocs/dokumente/fb05/diss1999/goppold/>

<http://www.nologie.de/desn.htm>

On Extra-Verbal Cultural Traditions

<http://www.nologie.de/desn23.htm>

A more or less complete collection of all the nologie files that are quoted in the present text:

<http://www.nologie.de/>

<http://www.nologie.de/sophia.htm>

<http://www.nologie.de/sophia.pdf>

<http://www.nologie.de/quer.htm>

<http://www.nologie.de/quantum.htm>

<http://www.nologie.de/wagner1.htm>

<http://www.nologie.de/wagner1.pdf>

<http://www.nologie.de/spf-noo.pdf>

<http://www.nologie.de/noo.htm>

<http://www.nologie.de/noo2.htm>

<http://www.nologie.de/noo2.pdf>

<http://www.nologie.de/aby.htm>

<http://www.nologie.de/aby.pdf>

<http://www.nologie.de/desn.htm>

<http://www.nologie.de/desn24.htm>

<http://www.nologie.de/desn-diss.htm>

<http://www.nologie.de/diadenk.htm>

<http://www.nologie.de/morph.pdf>

<http://www.nologie.de/morph.htm>

<http://www.nologie.de/diamant.htm>

<http://www.nologie.de/zeno.htm>

<http://www.nologie.de/gbruno.htm>

<http://www.nologie.de/cunni.htm>

<http://www.nologie.de/plato.htm>

<http://www.nologie.de/Hesiodos.htm>

<http://www.nologie.de/erga-kai.htm>

<http://www.nologie.de/akasha.htm>

<http://www.nologie.de/symbol.htm>

<http://www.nologie.de/infra.htm>

<http://www.nologie.de/Hesiodos.htm>

<http://www.nologie.de/erga-kai.htm>

<http://www.nologie.de/akasha.htm>

<http://www.nologie.de/soter.htm>

<http://www.nologie.de/soter.pdf>

<http://www.nologie.de/desn24.htm>

<http://www.noologie.de/video.txt>  
[www.noologie.de/gumilev/ebe0.htm](http://www.noologie.de/gumilev/ebe0.htm)  
<http://www.noologie.de/witze.htm>  
<http://www.noologie.de/sophia.htm>  
<http://www.noologie.de/morph.pdf>  
<http://www.noologie.de/shinto.htm>  
<http://www.noologie.de/quantum.htm>  
<http://www.noologie.de/wagner1.htm>  
<http://www.noologie.de/video.txt>

#### Hamlet's Mill

[https://www.bibliotecapleyades.net/hamlets\\_mill/hamletmill.htm](https://www.bibliotecapleyades.net/hamlets_mill/hamletmill.htm)

These are more Materials of the Mentioned Themes.

[http://www.noologie.de/diamant.htm#\\_Toc349324159](http://www.noologie.de/diamant.htm#_Toc349324159)

[http://www.noologie.de/diamant.htm#\\_Toc349324172](http://www.noologie.de/diamant.htm#_Toc349324172)

<http://www.noologie.de/plato.htm>

<http://www.noologie.de/neuro04.htm>

<http://www.noologie.de/neuro07.htm>

<http://www.noologie.de/morph.htm>

#### Lev Gumilev

This is the Russian www where all the materials on and by Gumilev can be found.

Gumilev, Lev: "Ethnogenesis and the Biosphere", Progress, Moscow (1990).

<http://gumilevica.kulichki.net/English/ebe.htm>

Searches for an Imaginary Kingdom: The Legend of the Kingdom of Prester John

<http://gumilevica.kulichki.net/English/sik.htm>

<http://gumilevica.kulichki.net/English/>

<http://gumilevica.kulichki.net/English/biography.htm>

<http://gumilevica.kulichki.net/English/bibliography.htm>

<https://www.cambridge.org/fr/academic/subjects/history/european-history-1000-1450/searches-imaginary-kingdom-legend-kingdom-prester-john?format=PB&isbn=9780521108799>

<http://gumilevica.kulichki.net/English/maps.htm#HPH>

<http://gumilevica.kulichki.net/English/Article01.htm>

[https://en.wikipedia.org/wiki/Lev\\_Gumilyov](https://en.wikipedia.org/wiki/Lev_Gumilyov)

Lev Gumilev (1912-1992). Scientific heritage of Dr. Lev N. Gumilev.

I have in the Noology Archive all the videos of the Dance Traditions that I reference here. The Dance Traditions are extra-verbal, and **No Verbal Description can tell us about: That, Which is Un-Describable in words and Only in Dance.** There is a lot of Verbal Material in the Derra-De-Moroda Dance Library at the University of Salzburg. I have read extensively in this Library, but reading so many books, doesn't help understand the dances. In this case, **One Video can convey a Message**, that 10.000 words can never convey. This is the power of Modern Multi Media Technology. All the videos referenced here, are also in the Noology Video Archive.

Wolfgang Nastali: Ursein - Urlicht - Urwort

Die Überlieferung der religiösen "Urquelle" nach Joseph Anton Schneiderfranken Bö Yin Ra.

## 50.2 More Literature

Most of the Literature used is in these .htm files:

<http://www.noologie.de/denk-bib.htm>

<http://www.noologie.de/bib.htm>

[http://www.noologie.de/bib\\_c.htm](http://www.noologie.de/bib_c.htm)

Some new additions to the above are given here:

Irvin D. Yalom: "When Nietzsche wept", "Love's Executioner", and "The Gift of Therapy".

These are probably the best books about the business of Psycho-Therapy there ever were.

It saves you the time and the cost of going to Psychology / Psycho-Therapy school for so many semesters.

Amd so much time and money that you can save by this. Then you take that money and you go out and have some fun. I know some kinds of fun, for which one needs some money, or otherwise this will be no fun whatsoever.

Haarmann, H.: Language in Its Cultural Embedding, de Gruyter, Berlin (1990)  
Haarmann, H.: Universalgeschichte der Schrift, Campus, Frankfurt (1992a)  
Haarmann, H.: Die Gegenwart der Magie, Campus, Frankfurt (1992b)  
Haarmann, H.: Geschichtsschreibung der Semiotik, in: Posner, p. 668-709 (1997)

Catherine Nixey: „Heiliger Zorn – Wie die frühen Christen die Antike zerstörten“.  
A. d. Engl. v. Cornelius Hartz). Deutsche Verlags-Anstalt, München. 397 S.  
<https://www.welt.de/geschichte/article194948111/Circumcellionen-Es-ist-ihr-taeglicher-Sport-sich-zu-toeten.html>

Nastali, Wolfgang: Ursein - Urlicht - Urwort  
Die Überlieferung der religiösen "Urquelle" nach Joseph Anton Schneiderfranken Bö Yin Ra.

### 50.3 Bibliography Abbreviations

Brock, Bazon: (1986) Abk.: **AGEU**

Giordano Bruno: Ed. Samsonow, Reihe Philosophie Jetzt, Diederichs (1995) Abk.: **Bruno**

Goppold, A.: "Design und Zeit: Kultur im Spannungsfeld von Entropie, Transmission, und Gestaltung".  
Dissertation, Univ. Wuppertal, bei Bazon Brock, 300 S., (1999d).<sup>[4]</sup>  
Abk. **D&Z**,<sup>[5]</sup> **Design und Zeit**

Eco, Umberto: "Kant und das Schnabeltier", Eco 2000.<sup>[6]</sup> Abk. **Eco**  
Günther, Gotthard: "Grundzüge einer neuen Theorie des Denkens in Hegels Logik", Meiner, Hamburg,  
(1978b). abk. **GRDZ**

Heidegger:  
"Was heisst Denken?" abk. **WHD**.  
"Sein und Zeit" (1977) abk. **S&Z**.

Spengler, Oswald: Der Untergang des Abendlandes. C.H.Beck München (1980), abk. **Spengler**.

Sloterdijk, Peter:  
Eurotaoismus, Ed. Suhrkamp (2018), orig. 1989, abk. "**Eurotao**"  
Sphären Band I, Blasen, Suhrkamp, Frankfurt (1998), abk. "**Blasen**".  
Sphären Band II, Globen, Suhrkamp, Frankfurt (1999), abk. "**Globen**".  
Sphären Band III, Suhrkamp, Frankfurt (2004), abk. "**Schäume**".  
"Im Welt-Innenraum des Kapitals" (2005), abk. **WIKA**  
"Zorn und Zeit" (2006), abk. **Z&Z**.  
"Gottes Eifer", Verlag der Weltreligionen (2007), abk. "**Eifer**".  
"Du musst Dein Leben ändern" (2009), abk. **DMDL**  
Kritik der zynischen Vernunft abk. "**ZynV**"  
Was geschah im 20. Jahrhundert, Suhrkamp (2016), abk. "**20JH**".

<https://petersloterdijk.net/werk/du-musst-dein-leben-aendern-ueber-anthropotechnik/>  
<https://www.perlentaucher.de/buch/peter-sloterdijk/du-musst-dein-leben-aendern.html>  
<https://www.faz.net/aktuell/feuilleton/buecher/rezensionen/sachbuch/peter-sloterdijk-du-musst-dein-leben-aendern-der-dreizehnekampfrekordhalter-1926899.html>  
<https://www.youtube.com/watch?v=HACuGjLWEIw>  
<https://www.youtube.com/watch?v=GH7eGOxPggo>  
[https://www.youtube.com/watch?v=R29\\_3zPY9cc](https://www.youtube.com/watch?v=R29_3zPY9cc)

## 51 The End of the End is the Beginning of Another End

Technische Fussnote <sup>1</sup>



1 Technische Fussnote  
The End of the End is the Beginning of another End

Please Give me Another End!

This is The End of the Never Ending End.