It is a widespread misconception that Sigmund Freud talks of phylogenetic heritage only in his late work Der Mann Moses und die monotheistische Religion [1937], where he deals with collective Jewish identity. Striking remarks can already be found in Das Ich und das Es [1923] (which starts his second topography), but the idea already surfaces during the period of his first topography in Das Unbewußte [1915] and in Totem und Tabu [1912]. There is unambiguous evidence that Freud supplemented the mechanism of social inheritance based on individual memory about ones life history – the key paradigm of contemporary psychoanalysis – with hereditary ones. Freud’s statements on this matter are remarkable as I will demonstrate with extensive quotes, though in the end one wishes that Freud had been more elaborate with his concept.

„What biology and the vicissitudes of the human species have created in the id and left behind in it is taken over by the ego and re-experienced in relation to itself as an individual. Owing to the way in which the ego ideal is formed, it has the most abundant links with the phylogenetic acquisition of each individual – his archaic heritage. <...> It is easy to show that the ego ideal answers to everything that is expected of the higher nature of man. As a substitute for a longing for the father, it contains the germ from which all religions have evolved.”¹ Freud’s ego ideal is the agent that realizes the associated volonté générale. „With the mention of phylogenesis, however, fresh problems arise, from which one is tempted to draw cautiously back.”²

„Without the assumption of a collective mind [Massenpsyche], which makes possible to neglect the interruptions of mental acts caused by the extinction of the individual, social psychology in general cannot exist. Unless psychical processes were continued from one generation to another, if each generation were obliged to acquire its attitude to life anew, there would be no progress in this field and next to no development. This gives rise to two further questions: how much can we attribute to psychical continuity in the sequence of generations? and what are the ways and means employed by one generation in order to hand on its mental states to the next one? I shall not pretend that these problems are sufficiently explained or that direct communication and tradition – which are the first things that occur to one – are enough to account for the process.”³
“I am aware that expression has been given in many quarters to thoughts like these, which emphasize the hereditary, phylogenetically acquired factor in mental life.” Freud then is careful to distinguish individually acquired characteristics, i.e. socially and culturally acquired ones, from hereditary traits such as instincts. These hereditary traits resemble C. G. Jung’s collective unconscious yet differ in important details. Freud repeatedly associates instincts with the Id, hereditary traits thus for Freud are not simply genetic ones as modern readers might suspect.

“The experiences of the ego seem at first to be lost for inheritance; but, when they have been repeated often enough and with sufficient strength in many individuals in successive generations, they transform themselves, so to say, into experiences of the id, the impressions of which are preserved by heredity.” This sentence has a close affinity to Rupert Sheldrake’s concept of morphic fields, in particular when Freud claims that the strength of a trait depends on how often it has been repeated. And Freud continues: “Thus in the id, which is capable of being inherited, are harbored residues of the existences of countless egos; and, when the ego forms its super ego out of the id, it may perhaps only be reviving shapes of former egos and be bringing them to resurrection.” Freud’s description of the Id reminds me of the book of life in the Holy Scriptures. (e.g. “And anyone not found written in the Book of Life was cast into the lake of fire.” For a visual rendering of the book metaphor see Figure 1 where every one carries his own book – his ego-formation –, ready to be read.) The Christian notion about eternal life after death expressed in Freudian terminology calls for permanent existence of ego-formations in the Id. Freud does not exclude that such permanence may exist, at least in some cases (for those in the Book of Life), but quotes reviewed later in the body text (see footnote 31) confirm that Freud prefers an “Asian view” of rebirth. Freud, however, never presented a detailed mechanism for his Lamarckian view on inheritance.

Figure 1: Secundum opera ipsorum (… as written in the book), “The Last Judgment”, Albi Cathedral, France, mural of the 15th century.
Freud in fact has been criticized for holding Lamarckian views to start with.\(^9\) The critics, however, overlooked the fact that Freud simply refers to psychic phenomena (memory-traces), to a 2\(^{\text{nd}}\) phylogenetic system different from the first one that is based on DNA (to which a Lamarckian mechanism does not apply). To Freud, this distinction was all but clear, however. In the quote that follows he recognizes that the biological sciences dislike the Lamarckian mechanism which he insists to need – needs for what he still calls biological evolution – and then suggests to distinguish acquired characters (a term Freud now associates with the biological kind) from memory-traces (which concern him and which are supposed to be different). “But it may well be that at bottom we cannot imagine one without the other”\(^{10}\), i.e. the 2\(^{\text{nd}}\) system without the 1\(^{\text{st}}\). Incidentally Lamarck himself talks of inheritance of acquired characters only in the context of such psychic phenomena and not in matters that since have been demonstrated to be based in genetics.

“The work of analysis has, however, brought something else to light which exceeds in its importance what we have so far considered. <…> Its evidential value seems to me strong enough for me to venture on a further step and to posit the assertion that the archaic heritage of human beings comprises not only dispositions but also subject-matter – memory-traces of the experience of earlier generations. <…>

On further reflection I must admit that I have behaved for a long time as though the inheritance of memory-traces of the experience of our ancestors, independently of direct communication and of the influence of education by the setting of an example, were established beyond question. When I spoke of the survival of a tradition among a people or of the formation of a people’s character, I had mostly in mind an inherited tradition of this kind and not one transmitted by communication. or at least I made no distinction between the two and was not clearly aware of my audacity in neglecting to do so. My position, no doubt, is made more difficult by the present attitude of biological science, which refuses to hear of the inheritance of acquired characters by succeeding generations. I must, however, in all modesty confess that nevertheless I cannot do without this factor in biological evolution. The same thing is not in question, indeed, in the two cases: in the one it is a matter of acquired characters which are hard to grasp, in the other of memory-traces of external events – something tangible, as it were. But it may well be that at bottom we cannot imagine one without the other.

If we assume the survival of these memory-traces in the archaic heritage, we have bridged the gulf between individual and group psychology: we can deal with peoples as we do with an individual neurotic. Granted that at the time we have no stronger evidence for the presence of memory-traces in the archaic heritage than the residual phenomena of the work of analysis which call for a phylogenetic derivation, yet this evidence seems to us strong enough to postulate that such is the fact. If it is not so, we shall not advance a step further along the path we entered on, either in analysis or in group psychology. The audacity cannot be avoided.

And by this assumption we are effecting something else. We are diminishing the gulf which earlier periods of human arrogance had torn too wide apart between mankind and the animals. If any explanation is to be found of what are called the instincts of animals, which allow them to behave from the first in a new situation in life as though it were an old and familiar one – if any explanation at all is to be found of this instinctive life of animals, it can only be that they bring the experiences of their species with them into their own new existence – that is, that they have preserved memories of what was experienced by their ancestors.”\(^{11}\)
What is the Id (Es)? For Freud different lines of reasoning submerge behind the term, which he introduced in 1923 (when he presented his so-called second topography), though already the agency *Ubw* included a phylogenetic core (Freud always abbreviated the unconscious (das *Unbewußte*) and italicized it when he referred to an agency of his first topography that he introduced in the 7th chapter of his *Traumdeutung* in 1900). Freud took the expression Id from Georg Groddeck: „In my opinion man is lived by the unknown. Within himself there is an Id, something miraculous, that regulates all that he does and that happens with him. The statement ‘I live’ is only true in part, it expresses a small partial phenomenon of the fundamental truth: ‘man is lived by the id’.”

Freud considers the Id to be like an ocean into which the individuated egos (“I”s) are submerged. „The ego is that part of the id which has been modified by the direct influence of the external world through the medium of the *W-Bw*.” It is a very remarkable thing that the *Ubw* of one human being can react upon that of another, without passing through the *Bw.*

Freud furthermore states that „... psychical phenomena are to a high degree dependent upon somatic influences and on their side have the most powerful effects upon somatic processes.” He never exactly said how.

Nor did he address the relationship between his Id (Es) and the chromosomal genes that the geneticists talked about, but we have indirect clues: psychical formations are not located in the organic elements of the nervous system but in their structures (resistances and facilitations [Bahnungen]) By implication, genes code for the organic elements – and a genetic disfunction may impair psychic function –, but they do not code for the nervous structure that stores our non-genomic memories. The perceptions and impressions themselves are isomorphous to structures and structural elements (C.f. platonic ideas) that somehow are mapped into neuronal code such that retrieval from the storage device permits to revive the original image. Freud in 1900 anticipated present understanding but he could not possible be as sure about the molecular relationships as we are today. He actually warns a few pages earlier: „I shall entirely disregard the fact that the mental apparatus with which we are here concerned is also known to us in the form of an anatomical preparation, and I shall carefully avoid the temptation to determine psychical locality in any anatomical fashion.” This was written in 1900.

The problem may be more protracted than the equivalence theory of Moritz Schlick, suggests. Schlick: “One and the same reality” can be “designated by two different conceptual systems, the psychological and the physical”. “physical” signifies not a special kind of reality but a special way of designating the real. Two different sign systems (conceptual systems): Physics and mind. If the brain is the hardware and the psyche the software, then the state of the brain (the dynamic and physiological state, not the anatomical one) somehow mirrors its contents. So it goes.

But is the mind indeed located in the brain? When Freud treats the archaic heritage of peoples like an individual neurotic (see footnote 11) he is not explicit what sort of neuronal structure such memory utilizes, still those of the composite individuals (grid computing model) or structures of their own independent of biological neurons. Freud leaves us with statements like: „I have taken as the basis of my position the existence of a collective mind (Massenpsyche), in which mental processes occur just as they do in the mind of an individual.” The issue here is: is it legitimate to set equal let alone reduce psycho-mental acts to physiological acts. Can we exclude that Freud favoured a transpersonal concept of consciousness?

Freud in later years did not care much for localisation of psychic memory at all. He was more concerned to ward off a misunderstanding that identified the unconscious with the somatic and created a dualist opposition to the (supposedly) conscious psyche. „It is generally agreed, however, that these conscious processes do not form unbroken sequences which are
complete in themselves; there would thus be no alternative left to assuming that there are
physical or somatic processes which are concomitant with the psychical ones and which we
should necessarily have to recognize as more complete than the psychical sequences, since
some of them would have conscious processes parallel to them but others would not.”
Psychoanalysis “explains the supposedly somatic concomitant phenomena as being what is
truly psychical”.

The unbroken sequences that Freud talks about do not relate to everyday memory but
only to an absolute memory behind it. This idea is based on the Platonic difference of truth
and opinion – a true memory and some limited view one has of it. Influenced by Ewald
Herings psychology, which dominated the zeitgeist, Freud believed in a memory independent
of the memory-function, a storage of absolute undistorted memory, whereas dreams and
normal human capacities to remember always are distorted. In a specific version the idea of a
memory of memory-function was shared by Bleuler in Zurich. Other contemporaries rather
felt that conceptually one could do without a memory of memory-function.

The citations that I have selected up to this point describe a memory system based on a
permanent storage device (a neuronal network structure?) whose access is modulated (by
expression – and post-translational modification – of synaptic transmitter proteins); access
by the conscious mind for example is filtered by a mechanism that Freud calls repression. It is
a repository of individual memories, in particular also of role models (ego ideals) that
individuals develop in response to socio-cultural exposure and to phylogenetic inheritance of
other role models and memories that have become deposited in what Freud calls the Id (Es).

As a depository of memory shaped by life-experience it is a depository of
constructions, not of reality. The 2nd phylogenic system, Freud’s Id, accordingly is not a
source of intuition [Erkenntnis] that describes events as they are but as they have been
perceived previously. One recovers from this collective memory not what is historically
true, but very well what has been written, said and thought about it. Intuition, hence, is not an
argument against constructivist epistemology (as critics have claimed). But as a system that
is capable to coordinate the planning of events it has, of course, the capacity to enact reality.

Does Hugo, the human genome project, sequence the Id? The answer evidently is no,
but it sometimes seems that this remains to be discovered. Freud, to be sure, never developed
a mature and comprehensive theory of inheritance. Freud’s language dates from a time of
booming genetics though predates modern molecular biology. Evolutionary biologists still
tried to define the storage medium of inheritance; structural biology had just discovered
chromosomes, which later on made genetic methodology increasingly focus on certain types
of memory. 100 years ago one could even speculate that there was only one system of
memory at all, as Richard Semon did most prominently. For my part it is evident that there
are two, or at least two, modes of memory and inheritance; i.e. two storage devices: genes
(genomic DNA based on the genetic code) and memory proper (related to neuronal structures
but possibly not identical with them).

Freud provides some further specifications about the Id which contradict in part his
other writings. On times the Id refers to a comprehensive depository of phylogenetically
accumulated memory, sometimes framed by a binary opposition of individual (the Ego) vs.
genus related (the Id). This is the line presented thusfar. At other times it is merely the
emotional side of the Id at large which in those instances dichotomizes into a super-ego (what
Lacan pointedly calls symbolic father and which is related to the ego ideal of Freud’s first
topography) and the Id of drives, chaos, myths, the presymbolic, in short: the dark sides of life
(or of Zoroastrian dualism, to mention its philosophical heritage). Both views coexist, neither
one predates the other. The most prominent passage of the Zoroastrian id is from Neue Folge
der Vorlesungen zur Einführung in die Psychoanalyse [1933], which was written right between Das Ich und das Es [1923] and Der Mann Moses und die monotheistische Religion [1937] the two sources for the phylogenic id. The Zoroastrian id runs as follows: The id “is the dark, inaccessible part of our personality <…> and can be described only as a contrast to the ego. We <…> call it a chaos. <…> We picture it as being open at its end to somatic influences, and as there taking up into itself needs of the drives [Triebbedürfnisse] which find their psychical expression in it, but we cannot say in which substratum. It is filled with energy reaching it from the drives, but it has no organization, produces no collective will, but only a striving to bring about the satisfaction of the needs of the drives subject to the observance of the pleasure principle. The logical laws of thought do not apply in the id, and this is true above all of the law of contradiction. Contrary impulses exist side by side, without canceling each other out or diminishing each other. <…> There is nothing in the id that could be compared with negation, and we perceive with surprise an exception to the philosophical theorem that space and time are necessary forms of our mental acts. There is nothing in the id that corresponds to the idea of time.”

This second line of reasoning apparently draws from dreams (dream-logic).

Freud’s antagonism between pleasure principle (realized by the id) and principle of reality (under the rule of the super-ego) points in the same direction. A missing link between both lines of argument comes from an early work, Das Unbewußte [1915]. It is the earliest explicit reference to phylogenic memory. Here the Id is presented as a garbage bin into which all those traits are returned that turn out to be non-serviceable (!), and this happens frequently during childhood. But voilà: it’s bricolage – what is junk for one may be a gem for someone else who picks it up from the Id (what Freud in 1915 still called Ubw – the unconscious). “The content of the Ubw may be compared with an aboriginal population in the mind. If inherited mental formations exist in the human being – something analogous to instinct in animals – these constitute the nucleus of the Ubw. Later there is added to them what is discarded during childhood development as unserviceable; and this need not differ in its nature from what is inherited. A sharp and final division between the content of the two systems does not, as a rule, take place till puberty.” This one sided emphasis makes easily forget that the symbolic father derives from the Id. Note that in this passage Freud describes acts at the innate level in which the social sphere participates.

I cannot spare the remark that Freud’s bricolage is a bricolage of memes. The pieces in the garbage bin and the populations in the mind are memes. Here I take the term meme rather loosely as a unit of the 2nd phylogenetic system. The science of memetics, as far as it follows Dawkins model, sticks to a very particular conception of man, quite likely the very conception of man in postmodern theory, but still not the only conceivable one. Put differently, we have to remain aware that the workings of the phylogenetic id may differ for different types of people, it may be class-specific etc. Allowing “meme” to mean more and different things than what Dawkins has specified about it, we leave the subject open to further studies.

Let me return to the citation. Interpreted in terms of Zoroastrian dualism Freud seems to confuse the latent content of dreams (that is memorized), with a particular structure of its representation (its manifest content that is subject to a certain processing which makes use of primary logic etc). It may be, of course, that the Id is layered and contains early phylogenetic memories whose latent structure is more primitive than present capacities. Still it would be a mistake to lose sight of the larger problem that Freud has touched and reduce the connotation of Id to one or another of its subsets. Or rather, being merely a matter of definition, not everything that Freud calls Id is the same Id. Neither is the Id per se unstructured, it only seems that Freud looked at a segment of it which is, or appears to be. From a systems point of view we are confronted with a space structured by the relations of the object it contains, to look at the Id as an unstructured ether – as Freud may have done –, to
experience it as a steaming pot (of sexual desires!) or ocean in which one gets lost, simply
derives from a different set of conceptual ideas and contextual needs.

This, however, is not the occasion to revise Freud’s theory, nor to do justice to the vast
body of literature on this subject in the field of psychotherapy alone. The principal questions
that Freud leaves us with is what kinds of memory there are besides the one described by
chromosomal genetics. I restrict myself to adding a few cursory remarks.

Thus psychiatric terminology distinguishes etiologically three types of disease: those
of organic origin that can be traced down to functional defects in such parts of the system that
derive from the genetic information or to genetic defects themselves; those called reactive, i.e.
resulting from well established socio-cultural interactions; and those called endogenic,
variable described as “of unknown etiology” or “currently without identified organic origins”
and effectively defined by exclusion – being neither organic nor reactive. Anthropologists
provide further distinctions: the informal memory of social groups (often called collective
memory and subject of oral history), and cultural memory transmitted by means of specialized
institutions and professions like priests, scientists, artists and intellectuals serving as editors
(those that for Gramsci are the machinists of hegemony). These experts visibly produce new
media for memory (writing, cultural artifacts), though their informal and oral impact on social
groups and mental media should not be neglected. In both cases memory is preserved (and in
fact transformed) by occasionally reenacting selected pieces like a *theatrum mundi*. 36
Thus suggests that the collective minds (plural !) have limited lifetimes themselves. Finally let me
draw attention to political theology, specifically to the concept of *corpus mysticum* and later
secularized collective bodies whose corporational aspects resemble the attributes of angels, a
_fictio imitatur naturam_. Medieval scholarship thus insinuates a distinction of a natural and a
cultural type. Collective bodies, like the *universitas* or the *collegium*, perpetuated themselves
by a succession of individual members (that held chairs); only individual carriers not the
collective body per se could be excommunicated or punished. 37

Whether natural, cultural, deep-structured or environmental, hereditary or acquired (by
way of imitation or otherwise), we are faced with a hierarchy of systemic processes, not just
social ones, with memories that are interrelated. Each cultural act also has a correlative in
deep-psychology; Freud: „Our tentative answer will be that it is impossible for the super-ego
as for the ego to disclaim its origin from things heard; for it is a part of the ego and remains
accessible to consciousness by way of these word-presentations (concepts, abstractions). But
the *cathetic energy* [Besetzungsenergie] does not reach these contents of the super-ego from
auditory perception (instruction or reading) but from sources in the id.” 38 The super-ego are
the socially (or rather socio-communicatively) acquired control mechanisms, but its stimulus
is the id.

Thus what I have called second mode of inheritance to emphasize the incompleteness
of the first, genetic, one, in fact turns out to be a plethora of memory systems or possibly one
rather complex, layered and flexible system. It entails components which maximize
phylogenetic preservation (what C.G. Jung called archetypes, C. Levi-Strauss the savage
mind) as well as those with little constancy and a high degree of adaptability (like Dawkins’
memes). It entails individual as well as collective memories. It is not my intention to disect
these various types of memory at this point except to to affirm that there is, besides the
genomic system, (at least) one other mode of phylogenetic memory. And to remind us that we
as humans experience the smoke from which we construe the fire rather variably; the Id
affects different people and people of different eras differently.

Thus the culture of the first half of the 20th century was dominated by a belief in
insurmountable residuals of early phylogenetic development and a rigid conception of man.
Now, in postmodern feminism authors like Judith Butler, Luce Irigaray or Donna Haraway claim that (what they call) bodies are socially constructed and changeable, they are made not born, they are in fact hybrids of nature and technology (memetic engineering). According to the Cyborg-metaphor the decentered subjects of our postmodern era constantly disassemble and reassemble. This all is possible because humans are constructed as agents with autonomous desire but distributed behavior.

Freud leaves us with a number of questions: Is his Id a typological description of a certain kind of memory which we humans share with other species, i.e. a field of study like genetics, or the name for an actual repository of information like the (individual) genome is? Does a collective subject exist or is it merely a generic term [Gattungsbegriff]. Can we “deal with peoples as we do with an individual neurotic?” To appreachiate this question let me remind that while the genetic code is universal to all forms of life we know of, the actual genetic information (genome) is located in each individual. As a matter of convenience these individuals are grouped into taxonomic categories (including species) but the species itself hosts no separate genome of its own. Hence the question, is the Id a distributed network of memory agents? As Rudolf Eisler states in different context and language: “The people’s mind [Volksseele] is in resonance with the individual minds, which it enfolds and whom it is immanent.” For scholars like Emile Durkheim and Talcott Parsons any whole has emergent properties, hence social systems are not derivable from acting units. This, though, does not automatically mean that the psychic structure of the individual is the same as that of a people? And are we safe to assume that human kind is divided into multiple phylogenetic lineages of the Id rather than sharing one global repository? My implicit hypothesis is certainly in line with the individualistic tradition of the Latin Church that condemned Averroes thesis about the unity of the intellect (monopsychism).

But the issue is contested. For Kinji Imanishi, a naturalist and one of the ‘Kyoto boys’ who contributed to theoretical biology from 1941 onwards using a sociological approach, it is not the individual that is the carrier of evolution but the group: “The specia”, a term coined by Imanishi and meaning species society, “is a knowable, existent entity with an autonomous nature.” It is more than a population. “The various individuals [specion] which make up the specia have membership in the specia, and are continually contributing to the maintenance and perpetuation of the specia to which they belong.” “All the individuals [specion] that make up the specia, with the arrival of the time that they must change, change simultaneously.” “It’s right for things to change when they’re supposed to change.” “The <…> specia <came> into being at the same time that the first organisms came into being.” “Darwin”, on the other hand, “thought that evolution begins with the individual, or with a small number of individuals. This certain individual <…> can be victorious in competition only when it is the fittest, and it is further supposed that that organism losing in the competition for survival will perish. God is always on the side of the elite. Perhaps because this appeals to those Christian Westerners . . . “Westerners will probably not agree with me. They know only the individual., and probably will not recognize anything above the level of the individual.”

It is difficult to see, with all that we know about genetic mechanisms, how Imanishi’s model should work at the genomic level. At the level of the Id, this is different. Indeed the kinship of the specia to the concept of 2nd phylogenic memory is evident. As for details Imanishi’s claim can be realized both by centralized repositories or by individuals with a high degree of vertical exchange. The latter model does not exclude that these are hierarchically stratified (analogous, but not identical, to distributed networks with client - server architecture). Is there a need to postulate in addition a dependence on exogenous factors (substantially other species)? Indeed the metaphorical “server” alludes more to an agency of collective volition, than to particular persons who play god. In this regard Julian Jaynes points out that, because individual persons often proved reluctant to reach difficult decisions,
evolution developed overdetermined mechanisms for decision making. Are we facing endogenous or exogenous mechanisms?

There are more questions that Freud leaves us with unanswered: If there is a dual mode of inheritance then the interrelationship between them is certainly relevant to interpret the data that HUGO has generated. At what point during evolution did these systems emerge? The answer for the first system is: during prebiotic evolution (only how this happened still remains a puzzle). But when did the second mode of inheritance evolve? Right away or later with the onset of a nervous system – or rather a nervous system of certain minimal complexity? Next: Is the second phylogenetic system needed to direct the first system during embryogenesis? Is DNA/RNA-based inheritance all we need to explain the life of prokaryotes and simple eukaryotes?

8 Holy Scriptures, Revelation, Rev 20:15 New King James Version.
11 Freud, Sigmund [1937] Der Mann Moses und die monotheistische Religion, German in: Gesammelte Werke Vol 16: 101-246, Anna Freud Ausgabe, Frankfurt: Fischer 1999, p. 206-208; English in: Standard Edition Vol. 23: 1-137, p. 99-100. Freud uses the German words Trieb and Instinkt distinctly, a difference that is essential for the present topic. I have therefore revised the uniform translation used by the Standard Edition for all of my citations such that when it says instinct Freud indeed wrote Instinkt in German, and when I render it as drive – just for the sake of distinction – he wrote Trieb.


16 Until some 50 years ago and occasionally even today the expression ‘genetic’ was used without being restricted to particular concepts of molecular biology, in the sense of the German word entwicklungsgeschichtlich (in respect to a history of development), i.e. in reference to genesis (and thus is inseparable from a dynamic and evolutionary point of view). Take for example Freud’s use of the term phylogenetic. Genetics later on defined a subject area and methodology that was presumed to elaborate the conundrum of genesis and heritability, and focused on the genome and its genes. The storage medium for this kind of memory by now is firmly identified with chromosomal DNA (and sometimes RNA, which presumable is the older variant for storing genetic information; it is common among viruses and generally partakes in the process of translation). It was originally hoped that genetics would explain all that is to be said about genesis, but it soon became evident that this is not the case. Whenever speculating about other kinds of memories and inheritance we therefore run into a terminological problem. I for my part will restrict my use of ‘gene’, ‘genome’, ‘genetic’ to the chromosomal ‘memory’-system, but to stay with Freud’s language will use ‘phylogenetic’ in a broader sense (there are instances where Freud also uses ‘genetic’ in the original sense, but I have not quoted any).


23 οὐλεθεία (άλεθεία) [truth, reality], δοξα (doxa) [opinion] moreover δοξη (doxé) [appearance], e.g. the parable of the cave (Plato, „Der Staat“, in *Platons Sämtliche Dialoge in 7 Bänden*, Otto Apelt, Hg., Band 5, Hamburg: Felix Meiner Verlag 1919, Nachdruck 1998 S. 260-276 (506St-519St).)


25 This insert refers to discussions in modern neurobiology that in technical detail were beyond Freud’s outlook of his time, though Freud writes: „Thus, we may speak of an unconscious thought seeking to convey itself into the preconscious (Vbw) so as to be able then to force its way through into consciousness. What we have in mind here is not the forming of a second thought situated in a new place, like a transcription which continues to exist alongside the original, <… rather> that some particular mental grouping has had a cathexis of energy attached to it or withdrawn from it, so that the structure in question has come under the sway of a particular agency or been withdrawn from it.” (Freud, Sigmund [1900] *Die Traumdeutung*, German in: Gesammelte Werke Band 2/3: 1-642, Anna Freud Ausgabe, Frankfurt: Fischer 1999, p. 615; English in: Standard Edition Vol. 4/5: 1-627, p. 610.). C.f. Freud’s first scheme of the psychical apparatus (which predates his first topography and his Traumdeutung), where he writes: „I am working on the assumption that our psychical mechanism has come into being by a process of superposition : the material present in the form of memory-traces being subjected from time to time to a restructuring into new relations – to a re-transcription (Umschrift). Thus what is essentially new about my theory is the thesis that memory is present not once but several times over, that it is laid down in various species of signs.” “There are at least three, probably more <transcriptions …1>) arranged according to simultaneity <… 2>) arranged according to other (perhaps causal) relations <… 3>) attached to word-presentations.” But there is also restructuring over time in accordance with fresh circumstances: “I should like to emphasize the fact that the successive registrations represent the psychical achievement of successive epochs of life.” (my English translation differs from the one quoted below: Freud, Sigmund [1896] Brief vom 6. Dezember 1896, in: *Aus den Anfängen der Psychoanalyse: Briefe an Wilhelm Fliess, Abhandlungen und Notizen aus den Jahren 1887-1902*, abridged edition, London: Imago, 1950, p. 185-192, especially p. 185-186; in: *The origins of psycho-analysis: letters to Wilhelm Fleiss, drafts and notes, 1887-1902*, 1902-02, abridged edition, edited by Marie Bonaparte, Anna Freud, Ernst Kris, authorized translation by Eric Mosbacher and James Strachey, introduction by Ernst Kris, London: Imago 1954, p. 173-182, especially p. 173-174; also abridged in: Standard Edition Vol. 1: 233-239, especially p. 233-235; in: *Briefe an Wilhelm Fließ 1887-1904*, unabridged edition, Jeffrey Moussaieff Masson, Ed.; Frankfurt/M: Fischer 1986, p. 217-226, especially p. 217-218; in: *The Complete Letters of Sigmund Freud to Wilhelm Fliess 1887-1904*, Jeffrey Moussaieff Masson, Ed. and transl., Cambridge: Harvard UP 1985 p. 207-215, especially p. 207-208.) See also: Freud, Sigmund [1895] *Entwurf einer Psychologie auf neurologischer Grundlage*, German in: Gesammelte Werke Nachtragsband: 375-486, Anna Freud Ausgabe, Frankfurt: Fischer 1999; English in: Standard Edition Vol. 1: 281-387.; also in: *Aus den Anfängen der Psychoanalyse: Briefe an Wilhelm Fliess, Abhandlungen und Notizen aus den Jahren 1887-1902*, abridged edition, London: Imago, 1950, p. 371-466. Remarkably neurobiologists today investigate models that transfer Freud’s metapsychology into biology.


30 There is indeed a continuity of thought between the first and second topography in respect to phylogenesis, but this does not imply that Freud’s *Ubw* and his Id are identical concepts.


32 A meme is the hypothetical unit of information that encodes mind-stuff in the same way as a gene encodes biological information (the protein structures). In case of genes we now know its chemical basis (DNA) and detailed mechanism of operation, something similar for the meme remains to be discovered and may not even exist. Until then it is better to associate memes with elementary traits described by phenotypic attributes.


34 From a logic and set-theoretical point of view, the essential property of primary logic is the partial symmetrization, which is equivalent to (selective) dimensional reduction of the attribute space (and thus provides for condensation and displacement). This is a rather plausible transformation in information processing that is easily modulated. It gradually merges with our standard asymmetric logic, provided dimensional reduction in data sampling (classification) does not interfere with analysis. A purely symmetric logic collapses into one undifferentiated whole and ceases to yield anything. Ignacio Matte-Blanco therefore calls primary logic a bi-logic (one in which simplifications in the data structure do interfere with analysis). It is evident that this is all about information processing and not about information content, as incomplete as it may be *(reality-testing works as long as logical contradictions that point to missing information are recognized)*. C.f. Rayner, Eric [1995] Unconscious logic. An introduction to Matte Blanco’s bi-logic and its uses, London: Routledge.

35 A memory system is not just coded information but depends on systems for retrieval and expression. Do instincts and a consciousness with free will make use of the same system, are pre-symbolic and symbolized memories stored the same way, are different evolutionary stages of development layered within on system or is it more adequate to speak of several separate but interacting systems?


37 C. F. Kantorowicz, Ernst H. [1957] The King’s two bodies: A study in medieval political theology, Princeton: Princeton UP [1966], ch. 6, in particular p. 193. (I here refer to the intellectual history of the 12th and 13th century; e.g. to the Council of Lyon in 1245 where pope Innocent IV settled the issue of excommunication)

Membership bodies cannot be angle-like either since, as Thomas de Aquino pointed out, each angel is a species of his own, substantially unique and one by numbers (Thomas de Aquino [1258-64] “Summa contra gentiles” II, 93, in: Thomeae Aquinatis opera omnia [NBM/CD-ROM]: cum hypertextibus in CD-ROM, auctore Roberto Busa, Milano: Ed. Elettronice Editel 1992.).


Benhabib, Seyla; Butler, Judith; Cornell, Drucilla; Fraser, Nancy [1990-93] Der Streit um Differenz. Feminismus und Postmoderne in der Gegenwart, developed from the symposium “Feminism and Postmodernism” in Philadelphia 1990, Frankfurt/M: Fischer 1993.


40 memetic; from meme, defined by Richard Dawkins as genes of the mind, though first introduced by Richard Semon as mmemes, units of universal memory.

41 I intentionally refer to what German language calls Wollen (desire, demand, need) rather than Wille (will, volition), the latter insinuating a capacity and power to do so. This distinguishes my description from situations which – phenomenologically at least – are adequately described by voluntarism. It was Wilhelm Wundt who claimed that volition was the only aspect in human existence that was entirely ones own (Wundt, Wilhelm [1889] System der Philosophie, 2vols, Leipzig: Wilhelm Engelmann 1890, 1:375ff.). I believe it is important to mention that a person lacking such capacity and discovering his needs has a high risk to develop an inferiority complex (Alfred Adler) with all dire historical consequences (Potschka, Martin [1997] „Psyche-Gesellschaft-Psychotherapie“, Weg und Ziel 55(3): 45-52.)


45 Albertus Magnus, Thomas de Aquino, and many theologians thereafter rejected the assumption of a supra-individual mind (Thomas de Aquino [1270] De unitate intellectus contra Averroistas. Op. omn. 43 (Rom 1986) 243-314.). Essential parts of Thomas’ argument (concerning the material principle of individuation) were initially condemned by Stefan Tempier, bishop of Paris, in 1277. This was only revoked after Thomas canonisation by Stephan de Borreto, bishop of Paris, in 1325 (Assenmacher, Johannes [1926] Die Geschichte des Individuationsprinzips in der Scholastik, Leipzig: Felix Meiner, p. 47, 52.). Though humans differ by numbers they are substantially the same, or nearly so (Thomas never explicitly specified whether mankind was one species or several. I guess the monopsychism debate required some diplomatic skills). “All humans, that are born from Adam, may be viewed as one (single) man insofar as they share the nature, that they received from their
