CAN JULIEN D'HUY'S COSMOGONIES SAVE US FROM YUVAL NOAH HARARI?

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ABSTRACT

Over the last two decades, we seem to have been confronted with a tremendous number of books, films, TV shows, or series that deal with the past and the present, not to mention the future, as if it were all out of time, timeless, even when it is history. We have to consider our present world as the continuation and the result of the long evolution our species has gone through since we emerged from our ancestors 300,000 years ago. Julien d'Huy is a mythologist who tries to capture the phylogeny of myths, and popular or folkloric stories that have deep roots in our past and have been produced, changed and refined over many millennia. Can he answer the question about how we have become what we are by studying the products of our past and present imagination? But confronted to the prediction of Y.N. Harari that our species will simply disappear as soon as the intelligent machines we are inventing and producing take over our bodies, brains, and minds in just a few decades, Julien d'Huy sure sounds like the antidote because at every turn in our long history we have been able, collectively, to seize the day, and evolve into a new stage in our life, both biological and mental, not to mention spirituality. Let's enter Julien d'Huy's book and find out the power and the energy that will enable us to short-circuit and avoid Yuval's nightmare.

INTRODUCTION

Julien d'Huy's book is in French and it is a choice that will reduce the outreach of its ideas and concepts, particularly this phylogenetic method Julien d'Huy[1] advocates and practices. This book needs an English version (I do not say translation because translating is always a betrayal of the original) to reach the international public that uses English as their research language. I will write this review in English and I will monitor all the translated quotations necessary.

The book is enormous and polymorphous. It is difficult to really discuss the whole book with a reduced number of topics because the book is not a treatise, well ordered and planned. It is in a way like the underbrush in a forest: it hides the big trees that are well lined and grown for later production of good wood. We are at times lost in the underbrush that also contains some brambles. We have to choose a few questions and try to get a synthetic version of these questions in the book or rather out of the book. The first work we have to do is "extraction" meaning to extract some rather well-constructed visions of some central

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[1] Julien d'Huy, Cosmogonies, La Préhistoire des mythes, La Découverte, Paris, 2020

questions. But you will not find this structured and synthetic approach to these particular questions in the book. You have to read the book the way it goes and then to collect what you think is important on the questions you are trying to sort out. That explains why in the book at times there are contradictions or contrasted opinions that seem to be contradictory, but they are most of the time inspired from this or that ethnographer, archaeologist, mythologist, or anthropologist and they do not always reflect what the author may think, and yet they are part of his presentations without being denied, falsified, or rejected.

I will follow my own way of approaching the questions, the book, the field of research Julien d'Huy positions himself in, and try to argue the points as fairly as possible but always from my point of view, that of a phylogenetic linguist, and what's more, a psychomechanic or psychosystematic linguist for whom the mind that contains the "langue" of the subject is a virtual construct in the central nervous and brain system of Homo Sapiens, knowing that this mental level is all a construct built from experiential existentialism on the basic tools that the senses, the nerves, and the brain are. If we want to understand that mental phylogenetic dimension, we have to consider the brain itself in its own functioning, knowing that the brain contains some potential competencies that are only the possibility to virtually develop from daily experience in each subject virtual constructs that will govern and guide mental, physical, and social activities in the various subjects engaged in some communication and commerce with other individuals. That goes a long way beyond this book, and I will not enter this exploration. But today the brain is no longer a complete mystery and we have the means to understand – probably never completely – how it works. But we also know that it changes every day in every individual and it develops new means, new virtual constructs all the time to cope with the new elements we are confronted with in life.

1. THE FIRST MIGRATION OUT OF AFRICA.

This principle or idea is constant in the book even if it is not always referring to the same dates or a clear definition of what the migration is all about: Who are the Homo Sapiens migrating here, where from and where to, along what route? The second question is: What language do they speak? Not so much the particular language but what level of linguistic phylogenesis have they reached when they leave the nest of Africa and enter a future in which they will go on developing their languages but without stepping out of the particular level of phylogenetic development reached when they left.

Yet before answering such questions we have to define the "Africa" Julien d'Huy is speaking of. It is in fact specified only once in the book as "sub-Saharan Africa" (p. 120) and clearly exemplified in one map (Map 3.2 World distribution of "emergence" myths (Le Quellec, 2014, "Une chronostratigraphie des mythes de création."[2] In this particular map, there is one dot on the northern African Mediterranean coast and thirty-seven dots in sub-Saharan Africa. The other mentions of migrating out of Africa is just that and is never specified. The phrase North-East Africa is used once but is not clear if it is the Horn of Africa that is part of Black Africa, or if it includes Egypt, which is not part of Black Africa. Then he often speaks of the first migration out of Africa and by the dates that are attached to this event we are probably dealing with what is for me the third and last migration out of Black Africa. Let me be clear on this timeline.

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[2] "A chronostratigraphy of creation myths", *Eurasie* n° 23, p. 51-72)

1- **First migration out of Black Africa** (the nest of Homo Sapiens being the section of the African continent going from the Horn of Africa to South Africa along the Indian Ocean and covering originally a strip of land that is about one third of the width of the southern part of this nest (Black Africa as a whole). This migration occurred early in the history of Homo Sapiens probably starting as soon as 250,000 BCE. It covers Egypt, Libya, North Africa, and the Sahara. These migrants will attempt a migration to the Middle East via the Sinai around 80,000 BCE but they will come back fast, (Harari[3] will ironize in his recent books about their being quite behind the Neanderthals they found there) and they will try again only around 35,000 BCE. These people all speak one family of languages generally called Semitic and identified as Afro-Asiatic by Joseph Greenberg. These languages are all root-languages built on the first articulation of language in the phylogenetic evolution of language. Note this phylogenetic evolution is not man-made but is dictated by the inner architectural and structural characteristics of articulated language that started long before Homo Sapiens, with the big apes and monkeys, then of course with Homo Erectus and his descendants. Homo Sapiens was probably the first Hominin to fully control the first articulation of the rotation of vowels and consonants, which enabled him to easily produce at first a couple of thousand lexical items that became lexical items due to their number and the possibility to attach them to referents (objects, persons, actions, etc.). Before, the ancestors of Homo Sapiens or his cousins Neanderthals and Denisovans must have mastered a couple of hundred items, which did not make it possible to really reach the next stage of phylogenetic development. This was the result of a limited number of vowels and consonants to be compared with only 8 or 9 calls among monkeys with 3 vowels and 5 consonants which should enable them to produce 5 power 3 items, hence 125 items. Monkeys do not control the rotation of vowels and consonants, so this potential is out for them. I estimate that Homo Erectus and even Neanderthals had reached 3 vowels and 7 consonants. The potential is at most 7 power 3 items hence 343 items when fully exploited. One extra vowel or consonant would push the potential into the thousands. Originally Homo Sapiens must have been able to utter 4 vowels and maybe 10 consonants getting the potential to 10 power 4, hence 10,000 items. Present-time human languages are working on 25 or more consonants and up to about 10 vowels. Imagine the potential of 10 power 25. We never use, in any language the full potential the vocalic and consonantal means available could produce. And we are only speaking of three-sound monosyllables (A-B-C, like cat mat pat, etc.)

2- The next demographic movement that will go on all along is the progressive migration of Black Africans west as far as the Atlantic Ocean. But it is the expansion of the nest more than a migration out of Black Africa.

3- **The second migrations out of Black Africa** will go from the Horn of Africa along the Southern Arabic Corridor to the Straight of Hormuz and then to the whole of Asia where they will meet the Denisovans. This migration must have taken place around 120,000 BCE. It is the second-articulation isolating language migration: the languages there have invariable categorized items also known as characters that are "stems" derived from the roots of the first articulation. The categorization concerns spatial or temporal dimensions producing basically two types of items, spatial items (nominal in general linguistic understanding) and temporal items (verbal in general linguistic understanding). Note many of these languages have

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[3] Harari, Yuval Noah, *Sapiens, A Brief History of Humankind*, London, Vintage, 2011. Harari, Yuval Noah, *Homo Deus, A Brief History of Tomorrow*, London, Vintage, 2015

retained intonation, tone if you want, as a discriminating element added to the various characters or lexical items, and these tones are semantically pertinent. Apparently, in South East Asia the contacts with Denisovans might have gone further than occasional contacts because of the higher proportion of Denisovan genes among the people there, higher as compared to the descendants of this migration in the rest of Asia who have about the same proportion of Denisovan genes as we Europeans have inherited from sexual contact with Neanderthals, and further integration of the hybrid children and their mothers in the Homo Sapiens communities. It is important to insist on this fact because Julien d'Huy, without ever speaking of pre-Sapiens Hominins, does specify that South East Asia and Melanesia is a fundamental source of mythologies to be found in South America, though he does not seem to have integrated into his corpora the mythologies of Olmecs, Mayas, Toltecs, and hardly integrated some Aztec mythology. We have to keep in mind that 75% of the native American population will be genocided by diseases and war after the arrival of Columbus and that lost population will be progressively replaced by Europeans and notably by African slaves. No one can tell the impact such a massive population processing may have had on the mythologies of these vast areas.

4- **The third and last migration out of Black Africa** from the Horn of Africa along the Southern Arabic corridor to the Strait of Hormoz and then to the Middle East was only going to start around 70,000 BCE. The first wave was the agglutinative third-articulation language speaking people that spread to the whole of Europe and around the Caspian Sea to Central Asia, Siberia, Mongolia, Manchuria, as for the east, and to the Urals, northern Russia, Finland, and the Samis as for the west. Hungary is a recent migration from northern Russia and Finland. The second wave of this last migration out of Black Africa will stay on the Iranian plateau up to the Magdalenian and they will migrate west to Europe (the Indo-European branch) and east to the south Asian subcontinent where they will meet with people from previous migrations and push them "out of the way" mostly, taking over Pakistan, India, Bangladesh, Sri Lanka and slightly more in the Himalayas. We must understand that this last wave of out-of-Africa last migration met with Neanderthals in Iran and Asia Minor, but did not meet with Denisovans. A genetic study has to be done to see if the Indo-Aryan populations have any Neanderthals and Denisovan genetic heritage, and in what proportions.

2. THE QUESTION OF LANGUAGE IN MYTHOLOGY

Julien d'Huy sticks to the traditional approach in mythology studies, an approach that was developed theoretically based on a long practice (several centuries of colonialism starting with Columbus, and some older practices in Europe).

But the linguistic problem is a major problem with mythologists, and it is not a recent problem. Lévi-Strauss, who was not a linguist, pushes aside the problem of the language of the tales or myths.

"'The substance of a myth is not found in the style, nor the mode of narration, nor in the syntax, but the story told there. A myth is language: but a language that works at a very high level and where the meaning manages, so to speak, to detach itself from the linguistic foundation on which it began to roll.' (Lévi-Strauss, 1958: 232)"

"According to Lévi-Strauss, the myth is therefore not *in* but *under* the words. It is because, in a myth, meaning takes precedence over sound, and it is possible to define it 'as

that mode of discourse where the value of the formula *traduttore, traditore* tends to practically zero.' (Ibid .: 232)"[4]

I am afraid the reduction of what Lévi-Strauss calls "style… mode of narration… syntax" to "words" by Julien d'Huy is typical of not understanding what a language is. It is in no way a set of words but a meaningful architecture that derives its meaning from many elements inside the language and outside the language used in any utterance. But I would also disagree with what Lévi-Strauss[5] actually said. The reference of Julien d'Huy to Roman Jakobson's[6] "intersemiotic translation," is indeed a case of "traduttore, traditore," not in words really but in cultural references.

Jakobson (JAKOBSON, Roman (1959), ("On Linguistic Aspects of Translation", *in* BROWER, (ed.), *On Translation,* Cambridge*,* MA: Harvard University Press, p. 233) distinguishes three ways of interpreting verbal signs: intralingual translation (translation into other signs of the same language); interlingual translation (translation into another language); and intersemiotic translation (translation from language into another nonverbal system of symbols).[7]

The shift from "translation from language into another, nonverbal system of symbols" to what mythologists do, translating from one language into English, or whatever other languages, is, of course, a mirage. It is clear that a story in an ergative language that considers the whole story from the point of view of the direct object that is submitted to all the actions, and not from the point of view of the subject, hence the agent of the actions, has an impact on the story itself. It is not even equivalent to the story in the passive voice that often genericizes the agent or rejects it/him/her/them as unimportant. Ergativeness makes the story become a sort of fate or curse or an inescapable situation or set of actions that roll over the agent and other actors in the story. It gives this direct object that is normally the submissive target of the action a dimension that becomes supernatural by being un-natural and being received by the speakers of such a language as natural. It becomes natural to see the world as rolling over you. Read Sumerian stories in that light and you find out their Gods

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[4] « 'La substance du mythe ne se trouve ni dans le style, ni dans le mode de narration, ni dans la syntaxe, mais dans l'histoire qui y est racontée. Le mythe est langage : mais un langage qui travaille à un niveau très élevé et où le sens parvient, si l'on peut dire, à décoller du fondement linguistique sur lequel il a commencé par rouler.' (Lévi-Strauss, 1958 : 232)

« Selon Lévi-Strauss, le mythe n'est donc pas *dans* mais *sous* les mots. C'est parce que, dans le mythe, le sens prime sur le son qu'il est possible de le définir 'comme ce mode du discours où la valeur de la formule *traduttore, traditore* tend pratiquement à zéro.' (*Ibid*. : 232) »

[5] Claude Lévi-Strauss, (born Nov. 28, 1908, Brussels, Belg.—died Oct. 30, 2009, Paris, France), French social anthropologist and leading exponent of structuralism, a name applied to the analysis of cultural systems (e.g., kinship and mythical systems) in terms of the structural relations among their elements. Structuralism has influenced not only 20th-century social science but also the study of philosophy, comparative religion, literature, and film.

[6] Roman Osipovich Jakobson, (Oct. 11 [Sept. 29, Old Style], 1896, Moscow, Russia—July 18, 1982, Boston, Mass., U.S.A), Russian born American linguist and Slavic-language scholar, a principal founder of the European movement in structural linguistics known as the Prague school. Jakobson extended the theoretical and practical concerns of the school into new areas of study.

[7] **Kay L.** O'Halloran**, Sabine** Tan **and Peter** Wignell, "Intersemiotic Translation as Resemiotisation: A Multimodal Perspective", *Signata*, 7 | 2016, 199-229.

are not much since some cosmic order that they should dominate is freely rolling over them without them being able to do anything, at least anything efficient. I just wonder if in phylogenic depth ergativeness was not the basic syntax of human language. The escape of the human hero in the Polyphemus myth from his destruction by the cyclops, monster, master of animals, etc., to which he, the hero, should have submitted because the cyclops, monster, master of animals is the big meta-ergative fate or curse that is supposed to roll over the human agent, the actor or acting individual. It would thus be interesting to compare the original languages of the various versions and find out how this escape from fate is translated in the different languages of the different versions. And here "translated" means "rendered" and "experienced."

For having been confronted with teaching the English of Buddhism to Sri Lanka Buddhist students and monks, I know from experience how drastically treacherous translation can be. I had a difficult time with some Buddhist concepts with my students. The case of "dukkha," one of the three basic concepts of Buddhism (along with "anicca" and "anatta") is typical. To translate it as "suffering" refers in our western, mostly Christian, and even more and more Muslim traditions, to something that has nothing to do with the understanding of this concept within Buddhist philosophy and in Pāli. First, it cannot be understood outside the other two, and second, it does not mean suffering, it means the fact that nothing is stable since everything changes (anicca) and that produces a total absence of essence, stable being, the concept of a permanent soul or self (anatta). It is a positive feeling of deprivation that encourages the Buddhist to meditate and constantly examine the inner mind of his or her as something that changes constantly; then to always wonder what you provide other people with, what you give them, what you share with them. This attitude can only be seen as suffering by people who refuse plain ordinary simple existential facts and want the whole world to be what they consider it has to be to satisfy their desires. This western attitude is typical of another central concept of Buddhism that is so difficult to translate too, the concept of "tanha", though it is simpler because if you add an adjective to the noun "attachment" then you have something close to what "tanha" means: "excessive attachment," or "obsessional attachment" and that excess can go as far as "addiction", hence "addictive attachment" with a possible discussion whether it is "addicted attachment" or "addicting attachment." Note you have here the opposition between ergative and agentive linguistic architecture in full revelation for both elements concerned: the subject who experiences that attachment and the particular element to which the subject is attached, that takes control of the addicted subject.

I do not think Levi-Strauss was right. It was an easy way to do things for the outside public, but he must have known from experience that the mythologist or anthropologist he was could only get to the meaning of these tales when they were in their original language and what's even more important in their original rendering: they are stories and storytelling is fundamental to understand the story and to have the proper reaction – the one you expect – from your audience. In other words, this linguistic approach limits the human dimension of the myths, and they are the products of human experience over millennia, which can never be actually reconstructed, and Julien d'Huy is clear about one thing: you cannot actually and factually go beyond let's say 20,000 years ago, in fact, less. You can only induce from what you more or less know about 15,000 BCE what it could have been before the Ice Age Peak (19,000 BCE).

"Let's dismiss an unworkable idea right away: phylogenetic methods cannot be sure of discovering the primitive form of a story in the sense of a *Urform* – an original version from which all variations of the myth would come. They can only offer statistical reconstructions where the identified features are not necessarily the most frequently encountered in the different versions. This reconstruction of a mythical prototype is to be understood in terms of higher or lower probabilities, any certainty remaining illusory in this area. " [8]

But let me take an example from Julien d'Huy own prose. It has to be considered in French to make sense:

"Dans ces récits, une fille visitée nuitamment par un inconnu le colora pour l'identifier le jour levé; elle découvrit alors qu'il s'agissait de son frère et le dénonça: l'un devint la lune, l'autre le soleil."

First translation: Google Translate, not corrected:

"In these accounts, a girl visited at night by a stranger colored **it** to identify **it** when the day **broke**; she then discovered **it** was her brother and denounced him: **one** became the moon, **the other** the sun. "

Corrected translation:

"In these accounts, a girl visited at night by a stranger, colored **him** to identify **him** when the day **would break**; she then discovered that **he** was her brother and denounced him: **the latter became the moon, the former the sun."**

If we read the French version normally "l'un" is the first mentioned and 'l'autre" is the last mentioned, hence "l'un" would be the girl (elle découvrit) and "l'autre" would be the brother (son frère). Hence a contradiction since the girl is feminine but "l'un" is masculine. So, we correct the understanding and "l'un" becomes the brother against the normal syntax of French. The text should have been "l'une devint le soleil, l'autre la lune." But the mental correction of plain syntax is fine since the masculine "l'un" can only be the brother.

But in English, it is even more confusing since "one" can only refer to the girl, and "the other" can only refer to the brother with no gender difference between the two "one" and "other." You have to correct the translation then as I did but it is not that elegant, and I would prefer the following version:

"In these accounts, a girl visited at night by a stranger, colored **him** to identify **him** when the day **would break**; she then discovered that **he** was her brother and denounced him: **the brother became the moon, the sister the sun."**

But even so, there is a cultural contradiction between the gender of the brother and the moon on one hand, and between the sister and the sun on the other hand in our own mind (Note in German the sun is feminine, "die Sonne," and the moon is masculine, "der Mond," though they would commonly be impersonated in the reverse sexual reference, the sun male and the moon female), though in Native American culture, Maya for example, the moon is ambiguous and can be either masculine or feminine and the sun is also complex, especially,

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[8] "Écartons tout de suite une idée irréalisable : les méthodes phylogénétiques ne permettent pas de découvrir avec certitude la forme primitive d'une histoire dans le sens d'une *Urform* – une version originale d'où proviendraient toutes les variantes du mythe. Elles ne peuvent que proposer des reconstructions statistiques où les traits identifiés ne sont pas nécessairement les plus fréquemment rencontrés dans les différentes versions. Cette reconstruction d'un prototype mythique est à comprendre en termes de probabilités plus ou moins élevées, toute certitude demeurant illusoire en ce domaine." (page92)

like in Maya, when gender distinction does not exist in the syntax of the language, though the representation of the sun and moon in the codices, for example, would be female for the Moon and male for the Sun. In Maya, the third person singular is "he/she/it." But to be specific, Maya has eleven glyphs for this word which is also the simple vowel /u/.[9] Note in the first eight glyphs there is a rather common structure based on a triad of elements, often the first and third identical, the second and middle one different. The three heads are different and more complex. Some may think they might be older.

u/U (u) (T13)   u/U (u) (T191)   u/U (u) (T1)   u/U (u) (T1)

u/U (u) (T204)   u/U (u) (T232)   u/U (u) (T3)   u/U (u) (T513)
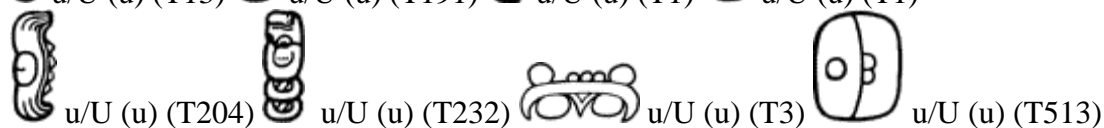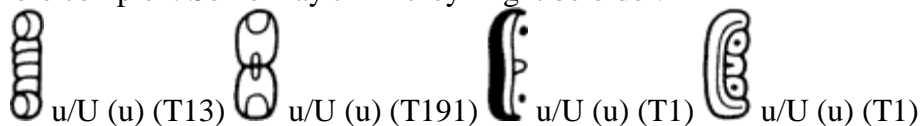
1> vowel u 2> 3rd person pronoun "he, she, it" 3> 3rd person possessive pronoun "his, hers, its."

u/U (u) (T1008v) 1> vowel u 2> 3rd person pronoun "he, she, it" 3> 3rd person possessive pronoun "his, hers, its." <> (John Montgomery) Represents a human head with closed eye.

u/U (u) (T738v) 1> vowel u 2> 3rd person pronoun "he, she, it" 3> 3rd person possessive pronoun "his, hers, its." <> (John Montgomery) Represents the head of a fish.

u/U (u) (T231) 1> vowel u 2> 3rd person pronoun "he, she, it" 3> 3rd person possessive pronoun "his, hers, its." <> (John Montgomery) Represents a human head with prominent lips.

The sun is "k'in", but the Lord Sun is "k'in ajaw" or "k'inich ajaw." It is "ajaw" that brings the idea of a male, the use of "k'inich" is interesting since it means "sun-eyed" and is commonly used with this meaning. We would interpret the brother turned into the moon as some kind of punishment or castration, provided we see the moon as feminine, and it is at least in the Dresden Codex.[10] Michael D. Coe and Mark Van Stone[11] suggest with great care that the goddess represented in this Codex as a young woman would be "Ixik" meaning "woman." Here is what John Montgomery gives us:

[9] John Montgomery, *Dictionary of MAYA hieroglyphs*, Hippocrene Books, Inc., New York, 2002, available in free access at http://www.famsi.org/mayawriting/dictionary/montgomery/index.html#:~:text=John%20Montgomery's%20Dictionary%20of%20Maya,part%20of%20speech%2C%20and%20meaning.
[10] *The Dresden Codex: Full Color Photographic Reproduction*, CreateSpace Independent Publishing Platform (January 23, 2015), ISBN-13: 978-1507685877
[11] Michael D. Coe & Mark Van Stone, *Reading the Maya Glyphs*, Thames and Hudson, New York, 2001

IX/IXIK (*ix/ixik*) (T1000b) > feminine agentive prefix; "woman."

The term "agentive" would lead us very far. But what about the sister turned into the sun? Is she really the god some might see in our western culture? I am not sure because the sun has the strange fate of dying in the west every night and being sent to the underworld to travel back to the east the next morning. I am not sure at all that spending the night in Xibalba is a sinecure for the sun, and being a woman is not exactly seen as a heroic position. Only the Hero Twins who are males managed to bring down the Death Lord.

That's what I mean when I say translating is not at all a good method to really approach a culture, a mythology, a myth. In my native Occitan dialect "la drôlesse" simply means "la fille," "the girl," as opposed to "le drôle" who plainly is "the boy." In the Paris Oil dialect, it has a very strong derogatory meaning. It definitely doesn't plainly mean "la fille." She is either "a pain in the backside" or "a dissolute girl," "a wanton girl," a Jane Calamity impersonated.

3. AGENTIVE VERSUS NON-AGENTIVE

I am going to enter here a very important question. Nothing has any value by itself. A lexical item has a meaning in the dictionary but the meaning of the same lexical item in discourse is nothing but the result of all the interactions within the discourse. De Saussure was insisting on two dimensions to determine the meaning of any "word": the paradigmatic elements to which the common practice of the concerned language in the community that uses it attach the said lexical item, plus the paradigmatic elements the speaking subject, or the listening subject attaches to this lexical item in the concrete discursive situation in which the word is uttered. And that's only one dimension and it has to be taken positively and negatively, what the lexical item is attached to positively and what the lexical item is attached to negatively, hence rejects. All that is purely cultural and immensely subjective.

But de Saussure also insisted on the syntagmatic connections, the direct connections of this particular lexical item to the other lexical items used in the concerned utterance. If I consider the Polyphemus myth, it all revolves around the agentiveness of the various characters: who has the initiative at every moment and who is controlled by fate which might actually be someone else's agentiveness.
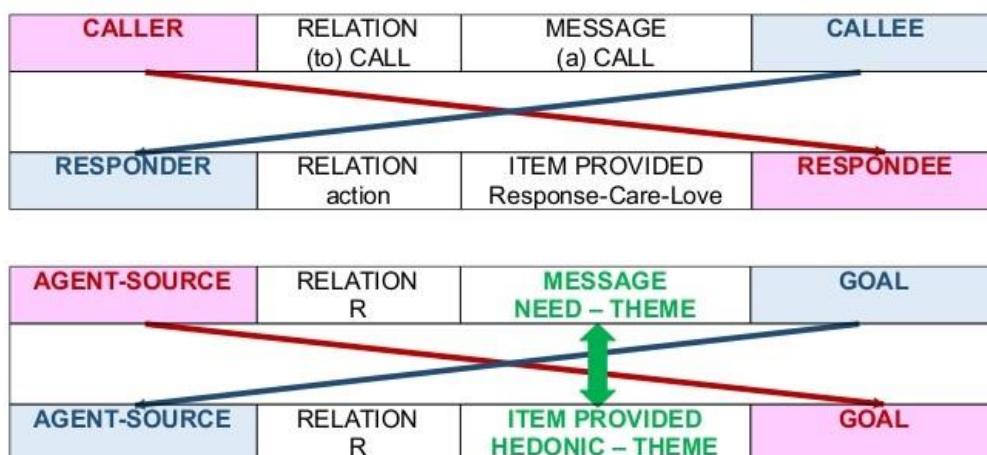
The too common practice of associating one element to one meaning in total self-containment is making interpretation binary, one for one makes two, one item for one meaning makes two, whereas meaning in any discursive communication is always at the very least ternary or a multiple array of ternary elements, **one** item **in relation** with **one** item makes three from which I may be able to derive the meaning of the first and third items. The relation between the two items is central and it is the element that actually gives the proper meaning to both items. This is banal psychoanalysis from Sigmund Freud that condemns the Jungian approach, that Lucien d'Huy rightly rejects as the predigested corset or the prefabricated straitjacket it is, but he throws the baby along with the water of the bath, maybe be even the bathtub. Sigmund Freud always insisted that in dreams or any discourse, any element, symbolic by nature, by essence, can only draw its meaning from the relations it entertains with the other elements of the dream or the discourse. "The shielded tank of the state is stern-sculling over the maelstrom of the pandemic's volcano," has meaning despite its

absurd and extremely pompous metaphors that are all contradictory and antagonistic to one another.

The Polyphemus myth Julien d'Huy analyzes in detail is typical of the shift from a non-herding hence non-agricultural society to a herding, hence agricultural society. This shift occurred sometime in the middle of the Magdalenian around 15,000 BCE. Marshack proved in his archaeological study of women's representations that it is the time when these representations changed from women being the fertile perpetuators of the surviving and expanding species to a secondary and more servile position under the domination of men seen as the masters of the earth, the agricultural earth. If you see that then the cyclops is a phantasmagoric invention representing the reconstructed masculinized past dominated by a male figure that probably has to do with the fantasized mammoth of European or Eurasian prehistoric societies. In that period of change, the Ice Age was still present as the dominant force that imposed a strict reorganization of social life. It was from this duress when survival became a real emergency requiring a lot of adaptation and creativity, that agriculture was going to start emerging in something like 5,000 years all over the world. The myth confronts a totally isolated male cyclops that has no future since he has no female cyclops, in fact, no second cyclops of any sort, to a human who is not alone and has the task to both escape the cyclops and conquer the animals. These animals are not really herded by the cyclops but only kept in custody. The human (or humans) has (have) to conquer them and take advantage of the action of the cyclops caused by his (their) presence, i.e. the releasing of the animals by the cyclops in order to capture the humans since the cyclops believed the human(s) was (were) going to be dumb enough to stay behind, or that he, the cyclops, would be intelligent enough to manage to catch him, the human (them, the humans) trying to flee along with the animals. Herding would be the consequence of this release and escape, but to escape the human(s) had to establish a connection with the animals that broke or lured the connection he (they) found himself (themselves) in with the cyclops. He (they) was (were) enslaved as prisoners soon to become fodder for the cyclops. By first blinding the cyclops he (they) asserted their superiority, and he (they) caused the only action the cyclops can take: to release the animals so that the human(s) would be trapped. The human(s) was (were) thus obliged to use their mental agentive initiative to reduce themselves to appendices to the animals that were released to be able to escape, and subsequently taking the animals along, liberating the animals for herding. They are thus both totally un-agentive under the animals that are fully agentive but within the control from the cyclops, hence not agentive at all, and yet agentive enough for the totally un-agentive human(s) to be able to escape, and yet the human(s) was (were) really agentive in the planning of this escape. We are here in the basic communicational situation humans have been confronted with since Homo Sapiens emerged 300,000 years ago from their ancestors in Black Africa. But this communicational situation is realized in concrete action and the fundamental element which is the fact that any speaker is a speaker first but is a listener second before being a speaker again, and then a listener a second time, etc. This is another rotation similar to the rotation of vowels and consonants, in this case, the rotation of speaker and speakee, or listener and listenee. Trapped by the cyclops the human(s) reversed the situation and blinded the cyclops who did the only thing he could do to isolate the human(s) and capture him (them). He (they) is (are) trapped again but he (they) transformed this trap into an escape way by making himself (themselves) un-agentive appendices to the not really fully agentive animals, and yet he (they) became the direct agent(s) of the situation since he (they) took advantage of the wrongly devised decision of the

cyclops to liberate the animals and him (them) and thus to bring herding to humanity, an unwise action of the cyclops and a collateral consequence of the action of the human(s). In this situation the world has been completely masculinized, women, being far away, and actually the prize of the long epic and picaresque voyage if they could manage to go back home.

Note this myth is in the very same pattern as the myth of the Hero Twins in the Popol Vuh of the Mayas. Males versus males to liberate the Maize God who was killed and buried by the Death Lords, which means the liberation of agriculture. They use animals, particularly insects but not only to fulfill the various challenges they are confronted with. It is in a way also comparable to the vast Chinese and Buddhist epic known as "Journey to the West" though in this case what is targeted is a set of spiritual Buddhist documents to establish Buddhism in China. This vast metaphor is the fundamental realization in an action of the basic communicational situation of humanity that came to its full both virtual and real materialization with the linguistic emergence of Homo Sapiens 300,000 years ago. My point here is that man has to realize he/she has to be alternatively the agent of the action and the theme of the response to this action.

CALLER	RELATION (to) CALL	MESSAGE (a) CALL	CALLEE
RESPONDER	RELATION action	ITEM PROVIDED Response-Care-Love	RESPONDEE

AGENT-SOURCE	RELATION R	MESSAGE NEED – THEME	GOAL
AGENT-SOURCE	RELATION R	ITEM PROVIDED HEDONIC – THEME	GOAL

In fact, Julien d'Huy has it all right and yet he misses the point because he does not consider the linguistic communicational situation, or simply the communicational situation that has to be linguistic if human. Then the myth becomes the representation of the main change in modern archaeological or prehistorical humanity: the shift from hunting-gathering to agriculture-herding that goes along with the shift from a society in which the division of labor provided women with a central position, though in no way dominant, responsible for the survival and the expansion of the community via procreation and child-rearing, and thus also responsible for keeping the fire going and the spiritual rituals of impregnation-pregnancy-birth in the caves decorated by women, which implied a spiritual role. In fact, it is nothing but the continuation of Charles Darwin's principle that the selection of haphazard mutations is performed by women because of their choices of partners within sexualized reproduction, actually ritualized probably by women themselves seen as "midwives" before the Magdalenian shift, a role they will keep after the shift. The difference between humans and plain animals is the fact humans have developed a language that enables the communicational situation to develop linguistically.

If you consider these myths like this, in fact, if you consider that mythologists cannot go beyond this Magdalenian shift after the Peak of the Ice Age when the climate changed and the rising waters were finally coming, then you can look at all the areas in the world where that agricultural shift occurred, and you should find myths of the very same type that expresses the double shift that agriculture brought. First, the shift in social activities and resources: agriculture and herding implying sedentary living, hence the first "urbanization." Second, the shift from a certain balance between the social, spiritual, and economic roles of men and women (a balance that could be warped into the fantasized vision of a women-dominated society that did not exist) to a completely different situation with the domination of society by men, which brought up the development of what could be called animistic or polytheistic religions and later monotheistic religions with the same shift from a balanced male-female definition of the divine (including gods and goddesses) to a male-dominated definition of God. My approach then is not to take the myths that have been collected often with limited systematicity, meaning systematic collecting but in some zones only with big empty areas like the Afro-Asiatic areas in Northern Africa and the Middle East. Apparently traditional myths and tales from Semitic civilizations (both Arabic and Hebrew) are not concerned here and identified as such, all the more because the original languages are rejected as non-significant. In the same way, Maya mythology and other mythologies before the Aztecs in Mesoamerica and South America are absent. And what about old Andean mythologies that are kept as long strings of knots that we do not even know how to "read." In that field, the most surprising absence is Maya mythology since the first academic researcher who actually started, after the Second World War in the 1950s and 1960s, the real deciphering of Maya writing system is from Saint Petersburg University, Leningrad University in his days. Julien d'Huy refers to several researchers from this Saint Petersburg University and yet Yuri Knorozov is not quoted, and Maya mythology is not integrated into Julien d'Huy's work, though Knorozov is today considered as the real trail-blazing researcher in Maya language, writing system, and civilization, hence Maya mythology that is only reachable because of his tremendous work.

As for agentiveness, Maya mythology would be a tremendous inspiration since it is by submitting to ordeals, challenges, sacrifice-including deals, and even volunteering for dying, that human objectives are reached because submission means resurrection and regeneration, stepping over a limit and entering a new phase of development. This vision has been vastly disturbed and distorted by the Aztecs who came from the North and assimilated a culture they found in Mexico, but they did not understand it at all. They pushed the bloodletting and blood-sacrifice practices to such extremes that it became a stigma on Native American culture in Mesoamerica and South America. To get convinced of that stigma developed by the colonial powers after Columbus, just read two or three chapters of D.H. Lawrence's *The Plumed Serpent* or *Quetzalcoatl*.[12]

If we implement this approach in the old hunting-gathering Hominin society and consider the ritualized procedure before hunting, a ritualized procedure that would normally have been performed by a human go-between, hence what many people call a shaman, and this time a male shaman, which rebalanced the fact that the procreational rituals were

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[12] D.H. Lawrence, *The Plumed Serpent* , Vintage; Reissue edition, 1992. It is a 1926 political novel by D. H. Lawrence. Lawrence conceived the idea for the novel while visiting Mexico in 1923, and its themes reflect his experiences there.

probably controlled by women who are the natural "midwives" of this human activity, the rationalization of hunting would have been as follows.

First, man becomes a hunter, or the hunter becomes human. If there is some initiation or ritualization it would be targeting the hunt itself. But the hunt does not work all the time. So, they would react in two human ways (like in Polyphemus). They would consider they had to target the animals themselves and ritualize the animals. But it still does not work all the time, though at the same time they observe the animals better and they differentiate the hunting techniques and probably the hunting weapons to be more effective. But this ritualization does not succeed all the time. Then Humans being, in many ways, paranoid thinkers, will start thinking there is a master of animals behind the animals. They will go on observing, finding patterns in the normal animal behaviors, they will improve the hunting techniques and the hunting weapons, and ritualize the master of these animals. That is what I would call the phylogenetic ritualization of the hunting activity in three stages, first the hunt itself, second the animals themselves (with differentiation), and then the master of animals (with maybe some differentiation).
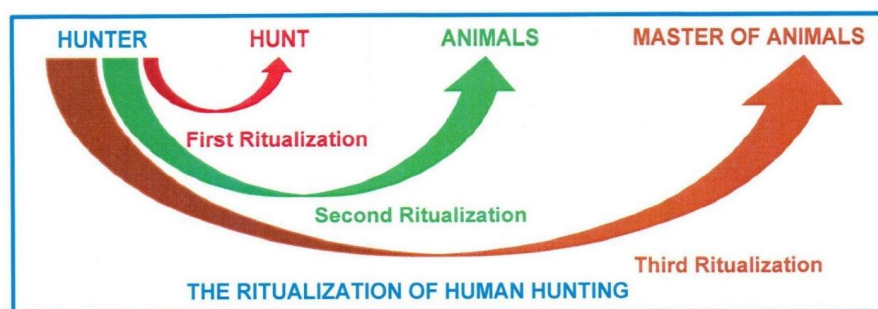
This representation shows that the concept of Master of Animals can only come last; I follow here the research of Lev Vygotsky, "Thought and Language,"[13] on conceptualization. There is no reason why Hominins or Homo Sapiens in their long emergence from plain animality to humanity would be able to jump directly to the concept of "master of animals." Human conceptualization in development in children and teenagers is always progressive. What is important here is not so much the ritualization but the other side of this activity, which is the observation of animals and the improvement of hunting techniques and hunting weapons. That makes it a real human activity, and that started a long time before the supposed symbolic revolution, no matter what name you give it, around 70,000 BCE.

This is founded on the modern understanding of the human mind in its progressive emergence after birth (and a little before birth). What I am going to say cannot exist without language, meaning that language is the main tool of this human development to discuss, explain, devise, implement the hunting techniques, tools, and weapons and improvements necessary in these and the possible ritualization required to make hunting effective.

You can of course imagine the very same process for the emergence of agriculture and herding. The Polyphemus myth is just the process I am describing here for herding, the very last attempt which liberates the animals hence domesticates them and brings them out of the wild Cyclops' cave for humans to take care of them. The successive actions of the humans,

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[13] Vygotsky Lev, *Pensée Et* Langage, Messidor, 1985, SNEDIT LA DISPUTE, 1997, ISBN-13 : 978-2843030048

blinding and then attaching themselves under the animals, and finally managing to liberate the animals and escape, humans always keeping one step ahead of the Cyclops and thus always keeping the agentive initiative, even when they are obliged to make themselves totally submissive. This is based on human psychology, the way it can be observed today, and these myths show that at least after the Magdalenian shift this human psychology just works the same way as today. We assume the Magdalenian shift did not change this psychology and was in fact the result of this psychology confronted to the new conditions and thus able to adapt to these conditions and to ritualize their actions in these myths, through these myths, and finally, these myths represent the ritual thinking of the humans who devised them.

That's all we can say about this Magdalenian shift and what existed before, not reconstructed from the myths but analyzed from what we know about the communities before the Ice Age Peak, and I insist, not only in Europe but all over the world. Unluckily in that "all over the world" there are big empty zones because either we do not care to find out what is collected in these zones, or because no collecting has taken place for many reasons, among others the fact that the West does not really care about them.
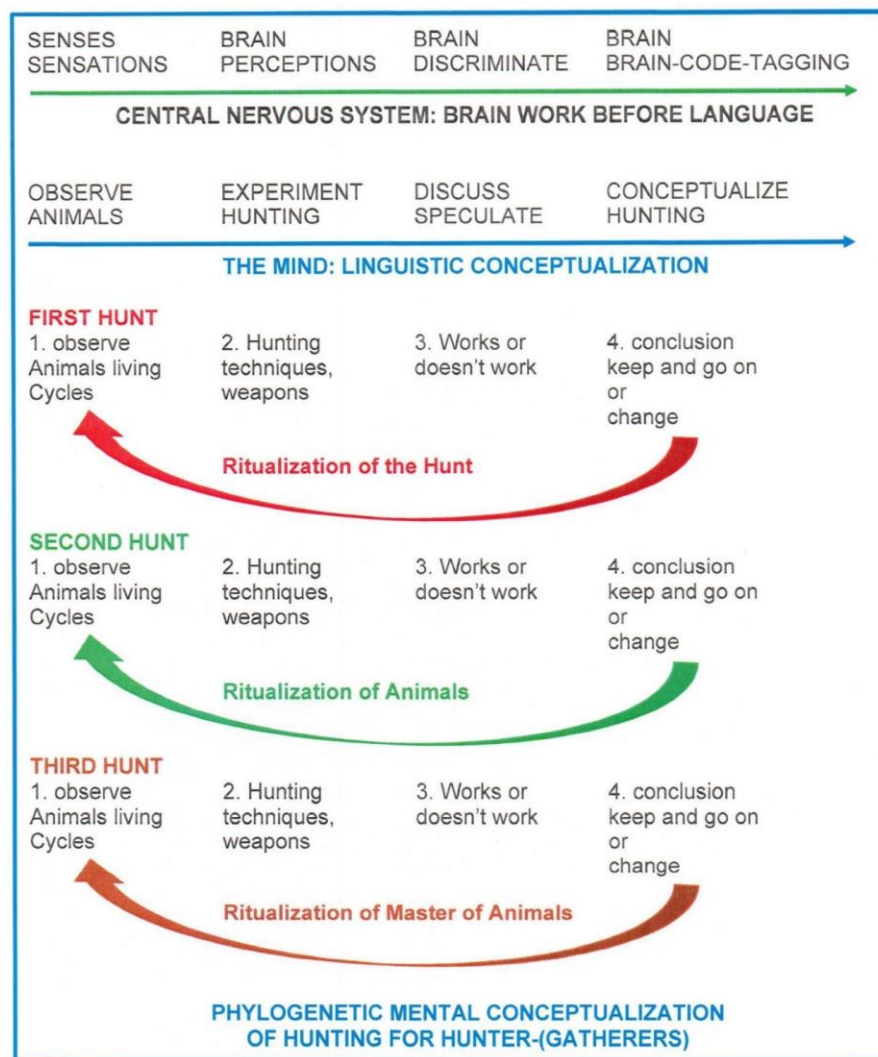
4. PROTO-MYTHS OR UR-MYTHS

I consider the retrospective reconstruction of what we cannot reach beyond a certain limit in the past is totally out of the question. It leads to the concepts of Proto-myths and Ur-myths, and I do not see the difference between the two. Phylogeny tells us one form of anything can only be captured in descent, hence the question to know what it comes from really, and not from a retrospective reconstructing procedure. Just the same way as it leads to the concept of Proto-Indo-European in Indo-European linguistics, a concept which is extremely debatable since no specification on the people speaking this language, where they came from, and what language or languages they spoke before can be provided or answered. In fact, the questions are not even asked. The battle on this point is the same for languages and myths, for linguists and mythologists. We have to try – if we can – to analyze what was before the stumbling block and try to understand what kind of psychogenetic procedures and situations Homo Sapiens was living in before that stumbling block.

Then we can compare this knowledge we collect to what we know about the same psychogenetic situations after the stumbling block. This stumbling block is a stumbling block for people who want to go backward to the period before. This is impossible. The stumbling block is a divide in labor division. It will not happen all over the world on one precise date. 15,000 BCE seems to be reasonable for the beginning of it in the most advanced areas. Between the Ice Age Peak and this Magdalenian divide, Homo Sapiens must have learned how to get as much as possible from nature, hence, to take care of nature and it is from this taking care of nature that agriculture and herding will come. It did not happen everywhere the same way and at exactly the same time, and yet by at the latest 5,000 BCE all over the world it will be essentially finished, completed. There is a divide, but not the one that those who defend the idea of a cognitive revolution of some type. It is a change that will take several thousand years to come, and I repeat that the main change is a change in the division of labor, from a balanced division between the sexes to a division of labor based this time on the type of work, and the type of control of the soil, and the work taking care of this soil. It does not always imply private property of the soil.

The Incas for instance did not have the concept of property or ownership for the soil which was controlled collectively. But in some other areas, particularly Europe and the Mediterranean area a new form of work was invented, slavery, though the real inventors of slavery as for the western world were the Egyptians and the various empires in the Middle East, and Greece. We must be careful about this concept of slavery. It covered many different statuses, from the worst possible based on violence like the gladiators in Rome, since they had to fight, and they will always be confronted with the choice "kill or be killed," and there was practically no escape from being killed sooner or later. That was a pure human sacrifice with the first potential sacrificee fighting for his life against another potential sacrificee that was doing just the same. At the other end of this social continuum of slavery, some slaves had tremendous power and influence. Julius Caesar's secretary was his slave, which was not comparable with a gladiator in the Coliseum. In-between, you had all sorts of workers from mine-slaves to house-slaves.

One thing is sure about all slaves: the master, or the mistress, could kill any slave of their own if so, they decided. And you did not need to be drunk to fall into some obnoxious treatment of your slaves just like the famous emperors Nero and Caligula, though Tiberius was also a case along that line. And we are speaking here of the exploitation of slaves as workers of some sort producing some goods or value-adding services. We should also take

into account another type of slaves: pleasure slaves that were supposed to satisfy all the impulses, drives, and hormonal needs of their masters, or their "customers." We have to keep in mind also that the importation of black slaves from Africa started very early in the Mediterranean area and around the Indian Ocean. Black slaves were common in Egypt, the Middle East, and the Roman Empire.

If we want to understand the phylogeny of language or any human production, we have to keep in mind the following timeline. What is most important is that an essential divide occurred around 15,000 BCE, but it took several thousand years before being effective, and in many areas in the world the transformation may have started later and may have taken longer to become effective.

The word revolution would not really describe what happened. It is a shift, but it was prepared by, or it was the result of a long evolution from several thousand years before the Peak of the Ice Age when the various population in some areas where it turned out to be too cold for survival, and at the same time where natural resources for hunters and gatherers became too scarce, had to regroup south or north according to the hemisphere they were living in. When you keep in mind the fact that the major migrations out of Black Africa are finished by then, Homo Sapiens has reached the whole planet, migration after migration, with the necessary cohabitation of people who arrived in one area in successive demographic waves, differentiated by the languages they spoke, the phylogenic levels of these languages, hence the different cultures they carried.

This cohabitation implied exchanges, borrowings, but also keeping apart, and a lack of comprehension and understanding, difficulties to communicate, etc. And these populations had had contacts with Neanderthals and Denisovans that were different with different levels of integration of the distant Europeans and Asian cousins, and all it meant: mixing genes, integrating the hybrid children and their mothers in the Homo Sapiens communities, maybe the integration of some males from these cousins of ours to keep the concerned hybrid children and the Homo Sapiens mothers. What was the impact on the languages of the various communities? What about the culture and the myths? One thing can be considered as sure: the communicational situation as such was similar, and that of the integrating community, hence Homo Sapiens, became dominant for these Homo Sapiens communities and there integrated Neanderthals and Denisovans.

PALEOLITHIC PREHISTORY – 300,000 to 15,000 BCE — MEMORIZED & RITUALIZED COMMUNICATION			LABOR-DIVISION TURNING POINT	MEMORIZED COMMUNICATION	WRITING SYSTEM	MECHANIZED COMMUNICATION
BEFORE	ICE AGE PEAK	AFTER	MAGDALENIAN AGRICULTURE-HERDING DIVIDE	AFTER		AFTER
UP TO 19,000 BCE	19,000 BCE	UP TO 15,000 BCE	CIRCA 15,000 BCE (minimum, varying with the areas in the world)	ABOUT 12,000 YEARS (ritualized control of people, military violence and religious power)	CIRCA 3,000 BCE	PRINTING PRESS 1450 CE TELEPHONE RADIO CINEMA TV INTERNET – LAST 120 YEARS
Paleolithic labor division. Hunting: men and rituals. Survival and expansion: women, procreation and rituals	Survival By all Means, Regrouping, Collective organization	Start taking care of nature. Climate change. Water rises: coasts, rivers, etc. Challenge of change, including migrations	Shift FROM Territory for hunting, gathering, fishing TO Control of soil and work of it, slavery, women's ancillary position	Memory able to keep and transmit all that has to do with modern society reworded in the terms of the new agricultural order	Commerce, Education, Memory, Legal documents, Mythology, Ritualistic documents, History, Scribes	Libraries, Archives, Conservation and preservation, Librarians and archivists

But we have to keep in mind another element that we tend to ignore in modern times. If we consider 300,000 BCE was the time when Homo Sapiens started its evolution, its emergence (based on what they inherited from their Homo Erectus and Homo Ergaster ancestors), Homo Sapiens society and culture were purely oral up to the invention of writing that occurred around 3000 BCE in various places in the world, certainly not in only one place from where writing would have spread. That might be right for the Middle East, with Sumerian, or linear Elamite in Iran[14], and this writing spread, but the concept spread more than the writing system itself, and other writing systems were devised in Egypt, among the Phoenicians, and then the Greek, the Romans, the Celts, the Germanic tribes, etc. With two tendencies: to represent syllables or to represent independent sounds, and in this latter case to

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[14] Étienne Dumont, "Le Français François Desset a déchiffré au bout de dix ans l'élamite linéaire," 31. décembre 2020, in *Bilan*, depuis 1989, Bilan est le média de référence dans le domaine économique en Suisse romande. https://www.bilan.ch/opinions/etienne-dumont/le-francais-francois-desset-a-dechiffre-au-bout-de-dix-ans-lelamite-lineaire. "Iran had its own independent writing system 4,400 years ago: study," December 25, 2020, *The Tehran Times (TT)*, https://www.tehrantimes.com/news/456174/Iran-had-its-own-independent-writing-system-4-400-years-ago

represent all the sounds or only the consonants. Homo Sapiens was an oral civilization for 297,000 years and has been a written civilization for only 5,000 years, and if you consider the invention of the printing press for only 570 years, or the invention of mechanical oral or audio-visual communication, then, Homo Sapiens has been an audio-visual communicator only for 120 years or so. We must also consider that the paintings in the cave and all the engraving on bones, antlers, or mobile rocks were also some kind of pictorial, or representative autonomous ways to communicate even if it was not a writing system per se. And before Homo Sapiens used durable media, they probably used some non-durable media that have been lost, but they may have lasted for some time and have been some communicational media for Homo Sapiens before engraving, painting, and carving on stone or bone. What I say here is that communication requires some level of abstraction, conceptualization, and a communicational situation, and human communication have lasted a long time more than what some consider (there undoubtedly was some oral communication in older Hominins), blocking their own thinking with some supposed symbolic, conceptual, or cognitive revolution. Human communication, hence human conceptualization, hence human abstraction, and symbolical thinking started a long time before 70,000 BCE. It started as soon as human language assumed the full power of the first articulation based on the rotation of vowels and consonants in numbers sufficient to produce several hundred thousand "phonetic units" that could not be calls anymore and started becoming lexical items. By 160,000 BCE at the latest (and I would personally push it a lot more in the past to 250,000 BCE) that first articulation was reached and fully operational, otherwise the migration to northern Africa, and what's more, Crete, would not have occurred at all.

The second thing I say is that no retrospective, reconstructive procedure trying to reconstruct from a later state of language what language was in an earlier state is doomed to get blocked before the peak of the Ice Age, in fact, somewhere around 15,000 BCE, that is to say, the Magdalenian divide. That's the practical proof that the change that took place then, the development of agriculture and herding, the tilling of the soil by workers controlled by some kind of authority, the shift from hunting territory to tilling land was deep enough to cause a rewriting of what existed before. In linguistics, even Proto-Indo-European is tentative and problematic, but in culture and mythical or literary representations it is even more problematic because we are not dealing with phonemes but with constructed mental signifying and significant representations of the life existentialist experience of their own evolution by Homo Sapiens themselves without any intermediary, not even a writing system that could leave something behind as a testimony of what it was like before.

And that's where I consider the binary system of phylogenic trees is misleading because the experience of life is never binary but always at least and basically ternary. Phylogenetic trees have to represent real life. What is important is not so much two mythemes set side by side. What is important is the contact point, the relational point between these two side-by-side mythemes, just like in phonology (for synthetic voice production) what is important is not the two phonemes that are connected, but the point of connection between the two phonemes, hence the articulatory point between these two phonemes, and this articulatory point changes from one individual to another, from one language to another (provided we are considering similar phonemes), etc.

Julien d'Huy does mention the three basic animals he identifies as the mammoth seen as an underground digger of big tunnels or caves and coming out of it from time to time, but also as the one who makes mountains come up. Then the snake, and finally the bird. He

associates snake and bird with the reference to dragons. This is quite centered on Eurasia and it does not take into account other continents. In Mesoamerica for example, among the Mayas and other civilizations, we find another triad of animals. One feline, voracious and aggressive, most of the time the jaguar, then the serpent, and the bird, those latter two often merged into the famous "plumed serpent," "Quetzalcoatl" or "Kukulkan." Another animal is often referred to, bats that live in caves and come out at night. They are dangerous and they drink blood. What is important here is that these triads of animals represent the cycle of procreation. You first have to ingress in order to impregnate the woman (mammoth or another symbol of such penetration). Then the mountain that can come out of it, or the snake that develops inside, then the bird that escapes from it and represents life, birth, the child. Three movements: penetration (impregnation) – growth inside (pregnancy) – take flight (delivery). You find this triadic set of movements in many mythologies, but you have to conceptualize the three phases from what is only a metaphorical representation. Penetrate inside: go down into the under-the-surface cave or plunge into the water to recuperate some earth from the bottom. Then it has to grow, expand to become something that emerges from the original watery ocean, or that grows from the earthen surface like a mountain. Then it has to emerge and fly on its own. It is also the cycle of the sun that emerges from under below in the East, then goes up to its climax, and then goes down and is buried under below in the underworld for the night, and the cycle starts again. It is also the menstrual cycle that emerges from the period and moves to the fertile phase of a few days and then goes down to be buried into the period that is the end of the cycle. That's also the cycle of life, birth first, life second, death third. It is also the cycle of death: death first, then the confrontation with the Death Lord in "Xibalba" and the underworld, then victory and rebirth in the north to climb the ceiba tree to the sky, "chaan/kaan." This ternary symbolical or real functioning is fundamental. The fact that it is elaborated as ternary is a human ideology, but it is essential and universal experiential and existential consciousness.

I just gave the vision from the Mesoamerican point of view. But you have the same in Europe with the Triple Goddess that comes from very far away. Demeter in Greek mythology who is three goddesses in one, long before the Christian God: Hecate the goddess of magic, witchcraft, the night, moon, ghosts, and necromancy; Diana the virgin goddess and protector of childbirth; Selene the goddess of the moon. In my village, in the 10th-century church, there is a stone that represents a female wolf with a dedication around it to DRIMIDRI which a twice ternary Demeter (Tremeter if you prefer) who carries her ternarism in her own name. And of course, this ternariness can be found in the three Furies or Harpies, Aello ("squall"), sometimes named Nicothoé ("quick feet"), Ocypèt ("fly fast") and Podarge ("light feet"), sometimes named Céléno or Celaeno ("dark"). Then the three Fates, Nona (Greek equivalent Clotho), who spun the thread of life from her distaff onto her spindle; Decima (Greek Lachesis), who measured the thread of life with her rod; Morta (Greek Atropos), who cut the thread of life and chose the manner of a person's death. And they become in European Germanic folklore the Three Beten: The name Beten first appeared in the works of Hans Christoph Schöll in the 1930s, derived from the common ending of the three women's names, of which some variants are: Einbet(h), Ambet(h), Embet(h), Ainbeth, Ainpeta, Einbede, Aubet; Worbet(h), Borbet, Wolbeth, Warbede, Gwerbeth; Wilbet(h), Willebede, Vilbeth, Fürbeth, Firpet, Cubet. They are associated with colors: The Austrian author Georg Rohrecker gives an interpretation of the colors as follows: white – becoming, waxing – sunrise; red – fertility, being in full blood – midday; black – waning, going down, being at

home – nightfall. Unfortunately, the first depictions of the Bethen in these colors date from the high middle ages. There is no way of telling if the colors are an invention of medieval artists or if they are indeed rooted in the pre-Christian past. In their Christianized version, the Bethen are St. Margaret, St. Barbara, and St. Catherine. In Bavaria and parts of Austria, they are known by the old folk rhyme.

"Margareta mit dem Wurm,
Barbara mit dem Turm,
Katharina mit dem Radl,
das sind die drei heiligen Madl."[15]

The "Wurm" is a dragon in standard Medieval language who lives in some cave. The Turm is a tower and could be considered as equivalent to the mountain caused to grow by the mammoth. The Radl is a wheel from which the thread comes, is produced. They are also associated with the fundamental activity of women in ancient times, hence the distaff, the spindle, and the spinning wheel that produce the thread that will be used to weave cloth or sew and embroider.

If I follow the idea that the Magdalenian divide changed the labor division for women, then women remain the progenitors, but they also get some new activities like spinning and weaving. What is fundamental is that this ternary definition of women is in phase with the fundamental cycles of women as procreators. The Magdalenian divide or shift has taken away from women the spiritual dimension they had, and they only kept their knowledge about delivering children and they will remain midwives who will be turned into witches in the Middle Ages, and their knowledge of plants, hence of medicine, was turned against them, their concoctions becoming of course poisonous.

5./ THE CANONICAL FORMULA OF LEVI-STRAUSS

If I insisted on this ternarism of mythologies, it is because it is fundamental in the human mind, in human thinking. When something is reduced to a binary relation there is always a loss of one element. Julien d'Huy starts with a simple quotation from Claude Lévi-Strauss's 1955 contribution in the *Journal of American folklore*.[16]

"Any myth (considered as the set of all its variants) is reducible to a canonical relation of the type: fx (a) : fy (b) :: fx (b) : fa-1 (y) (in which, two terms and two functions being given simultaneously, we assume that an equivalence relation exists between two situations where the terms and the relations are inverted, under two conditions: 1° that one of the terms is replaced by its opposite: 2° that an inversion occurs between the function value and the term value of two elements). (Lévi-Strauss, op cit., p. 442-443)"[17]

It is what Julien d'Huy calls "double twist" carried by the canonical formula. It is used to build phylogenetic trees in which the characters have three possible states (-1, 0, +1) and he implements this fact by reducing it to Claude Lévi-Strauss principle that only one is

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[15] Margaret with the worm, Barbara with the tower, Catherine with the wheel, those are the three holy girls.

[16] Claude Lévi-Strauss, "The Structural Study of Myth," *The journal of American Folklore*, vol. 68, n° 270, p. 428-444

[17] Tout mythe (considéré comme l'ensemble de ses variantes) est réductible à une relation canonique du type : fx(a) : fy(b) :: fx(b) :fa-1(y) (dans laquelle, deux termes et deux fonctions étant donnés simultanément, on pose qu'une relation d'équivalence existe entre deux situations où les termes et les relations sont inversées, sous deux conditions : 1° qu'un des termes soit remplacé par son contraire : 2° qu'une inversion se produise entre la valeur de fonction et la valeur de terme de deux éléments). (Lévi-Strauss, op cit. p. 442-443)

replaced by its opposite. Then he can only have four branches from one knot: (0, -1), (0, 0), (+1, 0), and (+1, +1). Mathematically a fifth branch, a fifth possibility exists but it is not taken into account by Julien d'Huy. We can wonder what this fifth branch would be when mathematically defined as (-1, -1). He gives an example of the implementation of this approach with the myth motif F40B of the myth of the Bird-Woman.

"The story of the Bird-Woman seems to be in a transformative relationship with motif F40B ("A man goes to a village of women; he must satisfy every woman against his will or a woman claims him for herself alone.") reconstructed in the previous chapter, at the time of leaving Africa… By taking up the relationships uniting motif F40B and the story of the Bird-Woman, it then becomes possible to propose the following application of the formula [canonical formula of Lévi-Strauss, MY COMMENT]: F endured marriage (husband) : F female requester (wife(ves)) :: F endured marriage (wife) : F husband - 1 (requester), which can be read: the "endured marriage" function of the husband is to the "female requester" function of the wife(ves) what the "suffered marriage" function of the wife is to the "husband - 1" function of the male requester, the male requester being married only for a limited time. [Julien d'Huy's note: F aggressive opponent (man) : F peaceful partner (women) :: F aggressive opponents (women) : F men - 1 (peaceful male spouse), which reads: the function "aggressive adversary" of the man is at the function of the "peaceful partners" of the women what the function "aggressive adversaries" of the women is to the "man - 1" function of the peaceful male spouse.] Is it possible to corroborate this transformation making the story of the Bird-Woman a continuation of motif F40B? The answer is positive if we consider that this story could transform that of the primitive matriarchy (F38), reconstructed in the previous chapter as having belonged to the same complex of stories before man's exit from Africa as F40B) … The Melusinisian[18] myth [whose structure is similar to that of the Bird-Woman] tells […] almost always the passage from a type of society dominated by women (as long as the prohibition is respected) to a type of society ruled by men.[19]

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[18] Melusina is a figure of European folklore and mythology, a female spirit of fresh water in a sacred spring or river. She is usually depicted as a woman who is a serpent or fish from the waist down (much like a mermaid). She is also sometimes illustrated with wings, two tails, or both. Her legends are especially connected with the northern and western areas of France, Luxembourg, and the Low Countries.

[19] Julien d'Huy, op. cit., "Le récit de la Femme-Oiseau semble en rapport de transformation avec le motif F40B (« Un homme se rend dans un village de femmes ; il doit satisfaire chaque femme contre sa volonté ou une femme le revendique pour elle seule. ») reconstruit au chapitre précédent , au moment de la sortie d'Afrique… En reprenant les relations unissant le motif F40B et le récit de la Femme-Oiseau, il devient alors possible de proposer l'application suivante de la formule [canonique de Lévi-Strauss : F épousailles subies (époux) : F demandeuse (épouse[s]) :: F épousailles subies (épouse) : F époux - 1 (demandeur), ce qui peut se lire : la fonction « épousailles subies » de l'époux est à la fonction « demandeuse » de la ou des épouse(s) ce que la fonction « épousailles subies » de l'épouse est à la fonction « époux - 1 » du demandeur, le demandeur n'étant époux que dans un temps limité. [Note de Julien d'Huy : F adversaire agressif (homme) : F partenaires pacifiques (femmes) :: F adversaires agressifs (femmes) : F hommes - 1 (conjoint pacifique), ce qui se lit : la fonction « adversaire agressif » de l'homme est à la fonction « partenaires pacifiques » des femmes de que la fonction « adversaires agressifs » des femmes est à la fonction « homme - 1 » du conjoint pacifique.] Est-il possible de corroborer cette transformation faisant du récit de la Femme-Oiseau une continuation du motif F40B ? La réponse est positive si l'on considère que ce récit pourrait transformer celui de la matriarchie primitive (F38), reconstruit dans le chapitre précédent comme ayant appartenu au même complexe de récits antérieurs à la sortie de l'homme d'Afrique que F40B)… Le mythe mélusinien [dont la structure est similaire à celle de la Femme-Oiseau] raconte […] presque toujours le passage d'un type de société dominé par les femmes (tant que l'interdit est respecté) à un type de société gouverné par les hommes.

We could discuss the connection of these stories to the time when Homo Sapiens left Black Africa. There were several migrations, hence several times. But what I am interested in here is that if we follow the conclusions we can get from Marshack[20] and other paleolithic researchers about prehistorical women, and men, before the development of agriculture and herding, going as far back as 50,000 BCE when we have archaeological artifacts, the shift in the Magdalenian is not from a society dominated by women, but from a society in which women and men were living on a division of labor that made both sexes equally indispensable for the survival and expansion of the community, and the species, men with the spiritual ritualization of hunting and women with the spiritual ritualization of procreation, to a society dominated now by the control of land and of working this land, and men became dominant, in fact, an elite of men became dominant and they produced ideological mythology about a society dominated by women to justify their present society dominated by men, or nostalgically fantasize about the past. It will take a good 10,000 years for it to become vastly dominant in Europe, around the Mediterranean Sea, and in the Middle East. Beyond it will occur on its own timeline in each concerned region.

My point here is that we do have a shift from an equal-opportunity society to a male-dominated society, but it did not occur before leaving Black Africa, not right after. It occurred at least 35,000 years later, as of the last migration out of Black Africa (third-articulation language speaking people), but something like 100,000 years after the last but one migration out of Black Africa (second-articulation language speaking people) and not far from if not even more than 200,000 years after their leaving Black Africa (first-articulation language speaking people). The shift is connected to a change in the division of labor, and such a change could only happen when Homo Sapiens shifted from hunter-gatherer societies to agriculture-herding societies, and that happened sometime in the Magdalenian or later, according to the area in the world. We can note that slavery appeared in the same period and for the same reason: to control the workers in the fields or keeping the herds.

To conclude on this point let's quote this passage: "The *kojiki* story, therefore, did not represent a **primitive** [MY EMPHASIS] state of the myth. The polytomy grouping together the different Eurasian versions and some Amerindian versions, a set also identified thanks to the software *Structure*, pleads rather for the existence of a vast Americano-Eurasiatic complex, corresponding to the "**archaic** [MY EMPHASIS] mythological layer" of Lévi-Strauss (*The other Face of the Moon, Writings on Japan*, Le Seuil, Paris, 2011, p. 142)"[21]

The two words in the bold underlined font are dangerous in what they convey. "Primitive" is too often understood as un-developed. The Jacques Chirac Museum in Paris has been at the center of a debate on "arts primitifs" (primitive arts) which was finally dropped for phrases like "arts primordiaux" (primordial or primeval arts) that exclusively refers to a point of origin in time. The word used by Lévi-Strauss is even worse because "archaïque" in modern French, or "archaic" in modern English, exclusively mean something

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[20] Dr. Jacques Coulardeau, *Paleolithic Women, For Gendered Linguistic Analysis*, [Alexander Marshack – The Roots Of Civilization – Revised And Augmented Edition – 1991 – A Review], Éditions La Dondaine, Kindle format, Amazon, 2020

[21] « Le récit du *kojiki* ne représentait donc pas un état **primitif** du mythe. La polytomie regroupant les différentes versions eurasiatiques et quelques versions amérindiennes, ensemble également identifié grâce au logiciel *Structure*, plaide plutôt pour l'existence d'un vaste complexe américano-eurasiatique, correspondant à la « couche mythologique **archaïque** » de Lévi-Strauss (*L'Autre Face de la Lune. Écrits sur le* Japon, Le Seuil, Paris, 2011 : 142) »

backward, completely irrelevant, or non-relevant anymore. But this leads me to the last point here, contained in this quotation: the "vast Americano-Eurasiatic complex." First, Julien d'Huy is aware that the American side of this set of myths is deficient since it is reduced to "some Amerindian versions," and it is even more restrictive in French "quelques versions amérindiennes," the quantifier "quelques" meaning clearly "reduced in number" though it stops short of "restricted in number." That's the very mistake that leads him to identify a link between myths or tales in South East Asia and Melanesia on one hand, including Australia, and on the other hand, South America, but asserting later on that these myths and tales migrated (necessarily meaning the people carrying them) to Siberia to cross to Alaska, and they remained separate and uninfluenced by the other people migrating with them from Siberia and bringing in myths that are common in North or Great North America. Julien d'Huy even goes as far as to say that once in America they migrated to South America. That is not acceptable, and I think we should seriously explore the hypothesis that the Melanesian and South-East Asia people went on moving east after Australia and reached Chile around 35-30,000 BCE in Monte Verde, a place they could never have reached if they had crossed the Bering Strait around 25,000 BCE. So I will say there were, as Julien d'Huy says, three migrations to the Americas: the first one to Chile (35-30,000 BCE) and then north to South America and Mesoamerica; then the second from Siberia to Alaska (ca. 25,000 BCE) and going south to what is today North America with a meeting and mixing zone in South West USA and Northern Mexico; and finally a third one from Siberia (after the Ice Age Peak hence in Magdalenian times and later) that remained in the Canadian Great North and eventually went to Greenland. Two cultures essentially moving in different directions: one from South America going North and another one from Alaska and going south. These are the two essential cultures in the Americas if we keep the last migration restricted to the Great North and Greenland, as it seems to have been the case.

## 6./ JULIEN D'HUY AND THE AMERICAS

I will only give a quick discussion of one aspect of the book under discussion. The book is in French and will be sidetracked by many who do not speak French. That's why I include a long quotation I have translated for readers to capture the stake of this approach on this particular point which concerns the limited and faulty inclusion of Native Americans in the reasoning that remains altogether extremely Eurasia-centered, Black Africa only quoted once as "Sub-Saharan Africa," and Native Americans being seen as some kind of extreme appendage to this Eurasia-centeredness.

In his one-page summary of the passage of various myths from out of America into the Americas, too many origins are not specified (twelve possible origins, only four specified) in this conclusive page, though some information might be scattered in the whole book to be collected by the readers. Three out of four specified origins are Oceania. One out of four specified origins is Eurasia. We all know the passage via the Bering Strait, but we also know the extreme anteriority of the archaeological site of Monte Verde in extreme South Chile with a layer, not yet open, going back to 35,000 years ago according to Steven Mithen.[22] We have to hypothesize a southern route that goes on beyond Australia (note it also goes to Madagascar that is in no way linguistically African but is connected to the Australian

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[22] Steven Mithen, *The Singing Neanderthals: The Origins of Music, Language, Mind and Body*, Harvard University Press, 2007; Steven Mithen, *After the Ice: A Global Human History, 20,000-5000 BC*, Harvard University Press; 2008.

Aboriginal language, and it is 8,826 km away from Australia) to New Zealand (which is 9,158 kilometers away from Chile with plenty of islands in-between), New Caledonia, and then from island to island in Polynesia to Chile (the distance between Easter Island and Chile is only 3,689.06 km). They could navigate from Australia to Madagascar, so why not Chile? But that goes against the traditional western belief that the first population of Madagascar arrived at the earliest ca. 2,000 BCE, though some go back to 10,500 years ago (8,400 BCE). We have to hypothesize they could navigate in the South Pacific from one island to the next, the way they still do today from traditional learning and know-how, and they could do it before the Ice Age Peak, hence more than 22,000 years ago.
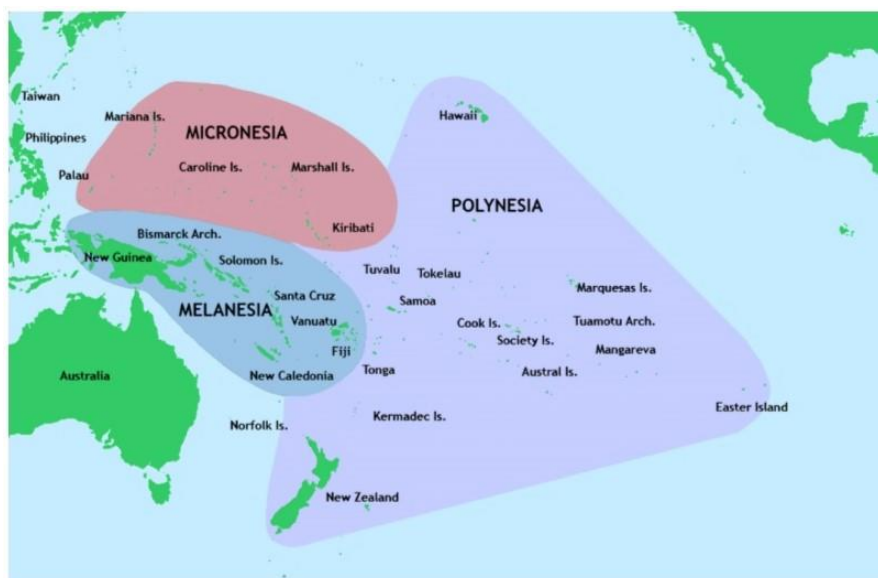
The three major cultural areas in the Pacific Ocean: Melanesia, Micronesia, and Polynesia (it actually looks like a double shafted arrow pointing East).

But Julien d'Huy yields to the dominant idea coming from North America in the wake of the Clovis Theory stating one migrating route only and all of it happening after the Ice Age Peak somewhere around 15,000 BCE, or maybe even later, a theory that anyone serious about Native Americans today considers as foreclosed and no longer valid. It is interesting to find a synthesized version of what he thinks in his conclusive chapter.

"We can note that the clade uniting all the cultural areas of South America is often separated from that uniting the cultural areas of North America only by the inclusion of Melanesia and Australia, this which tends to indicate that Native American mythology of the northern hemisphere and that of the southern hemisphere share a large number of motifs.

"It is then possible to imagine a model of diffusion of myths on the continent according to the genetic data. It is known that people from northern and southeastern Eurasia met in northeastern Siberia and exchanged genes before the conquest of America. However, nothing prevents each group from retaining, at least partially, its social structure and its own mythology.[23]

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[23] "On peut relever que le clade unissant l'ensemble des aires culturelles d'Amérique du Sud n'est souvent séparé de celui unissant les aires culturelles d'Amérique du Nord que par l'inclusion de la Mélanésie et de l'Australie, ce qui tend à indiquer que la mythologie amérindienne de l'hémisphère nord et celle de l'hémisphère sud partagent un grand nombre de motifs.

"Il est alors possible d'imaginer un modèle de diffusion des mythes sur le continent s'accordant avec les données génétiques. On sait que les populations venues du nord et du sud-est de l'Eurasie se sont rencontrées en

[The example from Lévi-Strauss of the Mandan and the Hidatsa Indians in the Great Plains of North America that follows is badly chosen since the two tribes are of the same Siouan language and culture. Differences can be easily kept within a diversified community and it proves the Siouan people, though speaking languages that were similar did not target homogenization. But unluckily Julien d'Huy refuses to consider the languages of the people he speaks of. It is surprising that Claude Lévi-Strauss did the same mistake and considered two Siouan tribes as different enough to be opposed or at least contrasted.]

"The two populations from Siberia would then have colonized different spaces on the new continent, the groups from Southeast Asia reaching South America, and those from Northern Eurasia settling in North America, preserving thus the morphological continuity of each hemisphere. Later, a third and fourth wave would have joined in the Far North, at the origin of the Paleo- and Neo-Eskimos, who also carried their own myths.

[DNA considerations follow.]

"The case of South America is more complex. Some Amazonian peoples are found to be genetically closer to the Australian, New Guinea, and Andaman Islands groups than to any other Eurasian or Native American group. This wave of this settlement would have been the first to reach the New World. […]

"It is possible to propose a second hypothesis to explain the bipartition of mythology in America. An initial settlement by hybridized humans from both the eastern and to a lesser extent from northern Asia would have spread the same mythology from the Bering Strait to Tierra del Fuego. This migration would have been followed by another of less intensity and limited to North America, which would have brought along new mythology."[24]

We can note the total absence of considerations on the languages of the concerned Native Americans, but also of the concerned populations in Siberia or South-East Asia. But Julien d'Huy never hypothesized in his own personal approach – when we can assume what he writes is not a reference to someone else – the fact that two vast migrations reached Asia as a whole, one around 120,000 BCE, people speaking second-articulation languages known as isolating languages, mainly of the Tibeto-Chinese group today but also of the Khmer-Birman group in South-East Asia, and a second later around 70,000 BCE, people speaking third articulation languages known as Turkic, Altaic, Uralic, Sami and some other agglutinative languages that also colonized the whole of Europe, at the time the original home of Neanderthals. And we should mention the Denisovans in Asia. These two

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Sibérie du nord-est et ont échangé leurs gènes avant la conquête de l'Amérique. Or rien n'empêche que chaque groupe y ait conservé, au moins partiellement, sa structure sociale et sa mythologie propre." (page 295-296)

[24] "Les deux populations venues de Sibérie auraient ensuite colonisé des espaces différents sur le nouveau continent, les groupes d'Asie du Sud-Est atteignant l'Amérique du Sud, et ceux d'Eurasie du Nord s'établissant en Amérique du Nord, préservant ainsi la continuité morphologique de chaque hémisphère. Plus tard seraient venues s'adjoindre, dans le Grand Nord, une troisième et quatrième vagues à l'origine des Paléo- et des Néo-Esquimaux qui elles aussi auraient transporté leurs propres mythes.

[Suivent des considérations ADN]

"Le cas de l'Amérique du Sud est plus complexe. Certains peuples amazoniens s'avèrent génétiquement plus proches des groupes d'Australie, de Nouvelle-Guinée et des îles Andaman que de n'importe quel autre groupe eurasien ou amérindien. Cette vague de peuplement aurait été la première à atteindre le Nouveau Monde. […]

"Il est possible de proposer une deuxième hypothèse pour expliquer la bipartition de la mythologie en Amérique. Un premier peuplement par des humains métissés provenant à la fois de l'est et pour une moindre part du nord de l'Asie aurait diffusé une même mythologie du détroit de Béring à la Terre de Feu. Cette migration aurait été suivie par une autre de moindre intensité et limitée à l'Amérique du Nord, qui aurait amené une nouvelle mythologie." (page 297-298)

populations from these two migrations found themselves sharing the whole of Siberia, but also Mongolia, Central Asia, and Manchuria. The concept of "métissé" that Google translates "mixed-race" which is racist since both groups are members of only one species, the human species, and that I translate "hybridized" is not realistic since still today the two linguistic communities can be found with more or less vigor for one or the other side of this fundamental bilingualism according to the countries or areas where they live. The second problem is the link between Australia, Oceania, New Guinea, Melanesia, on one side, and southern Native Americans, on the other, hence the route of the migration from this vast south Pacific area to South America, what Julien d'Huy calls the southern hemisphere including southern Africa in this set of regions, though Homo Sapiens never went out of Black Africa to these various regions east, including Madagascar, in the southern hemisphere. They always moved to what is today the Middle East and Pakistan that Julien d'Huy calls South-West Asia.

I will only add one element that Julien d'Huy never considers because he completely ignores the Mesoamerican culture represented by the Olmecs and other people older than them and still not identified, and of course their descendants, the Mayas, the Toltecs, and many others. One mention of the Aztecs is badly inspired since the Aztecs came from the north, meaning probably the South West of the USA today. If he had taken into account this most brilliant Olmec-Maya-Toltec culture or these most brilliant cultures in South and Mesoamerica,[25] he would have been obliged to completely revise what he says about the Mother Corn, the Goddess of Maize, and what's more, based on what Gudmund Hatt[26] says about it connecting Indonesia to it. Gudmund Hatt has it wrong and couldn't have it right since the Maya writing system was not yet deciphered when he wrote his book and his later article. Julien d'Huy should have checked this detail because today we cannot ignore the Maya writing system and Maya culture anymore. Maize was developed in Mesoamerica and maybe before in Amazonia (satellite pictures show great numbers of architectural structures under the jungle), but the plant grows wild with many different species and subspecies in Mexico and probably a little more to the south. The modern plant that cannot reproduce itself at all, all by itself, was developed by the Mayas, probably the Olmecs before them and we do not know beyond before the Olmecs, except that we are not able today with all our genetic science to produce the biological evolutionary route from the wild plants to the domesticated plant. Maize is not native to any other region in the world, and the Spaniards were the agents of its spreading to Europe in the 16th century and to Asia with their halfway commercial harbor in the Philippines where they met with Chinese merchants to sell their goods, the Chinese selling cloth, silk, etc., and the Spaniards selling silver, and various crops like corn, sweet potatoes, and other beans, squashes, tobacco, etc. And that happened only in the 17th-18th centuries, certainly not before. By then Native American populations had been reduced by 75% and enslaved in one way or another into the missionary colonial world of Spain, Portugal, France, and not-missionary-at-all England.

He would thus have come to the famous Mayan and other Maize God who is a man and the central piece of the Hero Twins' adventures in the *Popol Vuh*. That would have led him to wonder why twins are Hero Twins all over Mesoamerica, who bring the Maize God back to

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[25] Charles C. Mann, *1491: New Revelations of the Americas Before Columbus*, Vintage, 2006; Charles C. Mann, *1493: Uncovering the New World Columbus Created*, Vintage, 2011)

[26] Hatt, Gudmund, *Asiatic Influences in American Folklore,* I kommission hos ejn Munksgaard, Kobenhavn, 1949. Hatt Gudmund, "The Corn Mother in America and in Indonesia," *Anthropos*, vol. 46, n° 5-6, p. 853-914.

life, but when the Aztecs arrived one millennium at least later in Mexico they rejected twins, and when twins were born, the parents killed one because twins were no heroes whatsoever for the Aztecs but a very bad omen.

There sure is a lot of work left to do in this direction and linguistics is crucial, will be crucial. I guess the Russians, Yuri Berezkin, and his followers like Julien d'Huy and his own master Jean-Loïc Le Quellec, will have to relearn the language policy of Vladimir Lenin, Valentin Voloshinov, Mikhail Bakhtin, and Lev Vygotsky, that they seem to have forgotten, without forgetting the world-leading role in the deciphering of Maya language, Maya writing system, and Maya culture of Yuri Valentinovich Knorozov, a professor at the University of Leningrad for several decades. This research is proof that it will never be finished, and we will always have some more to discover, hypothesize, and I hope not too much theorize. Theories tend to ossify into dogma, like this concluding remark by Julien d'Huy on the last but one page of the main text of his 384-page book:

"If we agree on the basic entity – the mythological type we are referring to – the veracity of my version cannot be objectively contradicted by my speaker, but only dialogically, through the selection of the traits that I retain which differ from those he himself retained."

The point is this sentence seems to mean that if we do not accept what the author states as a possible explanation, we have no right to question what he says and to suggest some very basic elements are wrong and should be reconsidered from a different perspective. I mean particularly the question of languages and the question of the migrations out of Black Africa to finally consider the Afro-Asiatic or Semitic migration out of Black Africa to Egypt, Northern Africa, and Saharan Africa. And this migration out of Black Africa would only leave Africa for the Middle East around 35,000 years ago when all the other migrations out of Black Africa would have been finished for at least 20,000 years.

CONCLUSION

Julien d'Huy's book is great science and as such is worth considering, discussing, enriching, and assimilating in our own research. Quite different is Y.N. Harari.[27] The first book may seem to be historical, but the second is just plain dystopia in the form of a scientific-looking utopia similar to Ray Kurzweil's approach.[28] But I will expand a little bit on Y.N. Harari. For him, Homo Sapiens never spoke/speaks, and he only considers humanity after the last migration out of Black Africa (70,000 BCE).

He defines dataism, his fifth stage of human history, the dataist revolution, as the full merging of humanity in ONE data processing system, the Internet-of-all-things. Then the conclusion is absolute:

"Once this mission is accomplished, Homo Sapiens will vanish." (*Homo Deus, p.*443)

Humanity has moved from a deocentric vision to a homocentric conception and finally to a data-centric logic. That sounds like a nightmare. On his last page, his last words are **three interlinked processes** and **three key questions**. First, **the three processes**:

 ☐ Science is converging on an all-encompassing dogma.

 , Intelligence is decoupling from consciousness.

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[27] Harari, Yuval Noah, *Sapiens, A Brief History of Humankind*, London, Vintage, 2011. Harari, Yuval Noah, *Homo Deus, A Brief History of Tomorrow*, London, Vintage, 2015

[28] Kurzweil, Ray, *The Singularity is Near: When Humans Transcend Biology*, New York, Viking, 2005

ƒ Non-conscious highly intelligent algorithms will know us better than we know ourselves.

And then, **the three key questions**:

Œ Are organisms just algorithms?

☐ What's more valuable—intelligence or consciousness?

Ž What will happen to society, politics, and daily life when non-conscious highly intelligent algorithms know us better than we know ourselves?

This last question sends us back to the three processes like the last sentence of the seventh and last volume of Stephen King's initial series of novels *The Dark Tower* is the very same first sentence of the first volume. There is no freedom, just adventure in a programmed world where we have absolutely no say as for the end target of this adventure which sounds more and more like a Virtual Reality game.

This kind of ideological campaign is only possible as a propaganda-dogma because it negates the heart of man's cognition and evolution, the couple MIND/LANGUAGE that both develop from man's physiological mutations naturally selected to make Homo Sapiens a fast bipedal long-distance runner, the only chance he had to survive 300,0000 years ago. In this survival battle, Homo Sapiens had to develop the communication he inherited from his ancestors, Homo Ergaster, and progressively integrate the communicational situation of his as the syntax of his communication. The phylogeny of his articulated languages dictates the three phases leading to the full integration of the communicational syntax in the langues[29] of his languages. The "langue" of a language is the mental virtual system of systems that command the architecture of the language and the production of any discourse in this language. Along the way, the migrations out of Black Africa produced three vast families of languages with minimally, then partially and further on maximally integrated communicational syntax into langue with a conceptualized discursive syntax inversely proportional to the syntax integrated into langue.

Man is thus not an algorithm because his mind/language can develop constantly and new machines (he has invented and will invent) will produce changes in his mind and his language (individual and collective) that will enable him to keep control of these machines. Y. N. Harari seems to forget that man is an autonomous self-learning organism that is a lot more powerful as for that than any machine he has so far invented and will invent. There surely is a challenge in this stake but so far humanity has always been able to solve even its worst possible challenges.

At least Julien d'Huy is the proof and hard evidence that Homo Sapiens has always been creative and up to his task to survive and some may say his mission to survive. Did his/her/their at least 300,000 years of history prove our phylogenetic nature contains our future in its deep recesses and cerebral folds? Predestined to perdition? Probably not. But predisposed to be creative? Definitely. That's what is good in Julien d'Huy and that's what is alienated in Yuval Noah Harari.

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[29] « La langue, toute langue, est dans son ensemble un vaste système d'une rigoureuse cohérence, lequel se recompose de plusieurs systèmes reliés entre eux par des rapports de dépendance systématique qui font de leur assemblage un tout. » (Gustave Guillaume, *Principes de Linguistique Théorique*, Klincksieck, Paris & Les Presses de l'Université Laval, Québec, Canada, 1973, p. 176) "Language, any language, as a whole is a vast system of rigorous coherence, which is in its turn composed of several systems linked to one another by relationships of systemic dependence which make their assembly into a whole. » (Annie Boone & André Joly, *Dictionnaire Terminologique de la Systématique du Langage*, L'Harmattan, Paris, 1996)

BIBLIOGRAPHY

[1] ---, *The Dresden Codex: Full-Color Photographic Reproduction*, CreateSpace Independent Publishing Platform (January 23, 2015), ISBN-13: 978-1507685877

[2] Bakhtin, M.M. (1929) Problems of Dostoevsky's Art, (Russian) Leningrad: Priboj.

[3] Bakhtin, M.M. (1963) Problems of Dostoevsky's Poetics, (Russian) Moscow: Khudozhestvennaja literatura.

[4] Bakhtin, M.M. (1968) Rabelais and His World. Trans. Hélène Iswolsky. Cambridge, MA: MIT Press.

[5] Bakhtin, M.M. (1975) Questions of Literature and Aesthetics, (Russian) Moscow: Progress.

[6] Bakhtin, M.M. (1979) [The] Aesthetics of Verbal Art, (Russian) Moscow: Iskusstvo.

[7] Bakhtin, M.M. (1981) The Dialogic Imagination: Four Essays. Ed. Michael Holquist. Trans. Caryl Emerson and Michael Holquist. Austin and London: University of Texas Press.

[8] Bakhtin, M.M. (1984) Problems of Dostoevsky's Poetics. Ed. and trans. Caryl Emerson. Minneapolis: University of Minnesota Press.

[9] Bakhtin, M.M. (1986) Speech Genres and Other Late Essays. Trans. Vern W. McGee. Austin, Tx: University of Texas Press.

[10] Bakhtin, M.M. (1990) Art and Answerability. Ed. Michael Holquist and Vadim Liapunov. Trans. Vadim Liapunov and Kenneth Brostrom. Austin: University of Texas Press [written 1919–1924, published 1974-1979]

[11] Bakhtin, M.M. (1993) Toward a Philosophy of the Act. Ed. Vadim Liapunov and Michael Holquist. Trans. Vadim Liapunov. Austin: University of Texas Press.

[12] Bakhtin, M.M. (1996–2012) Collected Writings, 6 vols., (Russian) Moscow: Russkie slovari.

[13] Bakhtin, M.M., V.D. Duvakin, S.G. Bocharov (2002), M.M. Bakhtin: Conversations with V.D. Duvakin (Russian), Soglasie.

[14] Bakhtin, M.M. (2004) "Dialogic Origin and Dialogic Pedagogy of Grammar: Stylistics in Teaching Russian Language in Secondary School". Trans. Lydia Razran Stone. Journal of Russian and East European Psychology 42(6): 12–49.

[15] Bakhtin, M.M. (2014) "Bakhtin on Shakespeare: Excerpt from 'Additions and Changes to Rabelais'". Trans. Sergeiy Sandler. PMLA 129(3): 522–537.

[16] Boone Annie & Joly André, *Dictionnaire Terminologique de la Systématique du Langage*, Lharmattan, Paris, 1996

[17] Coe, Michael D. & Van Stone, Mark, *Reading the Maya Glyphs*, Thames and Hudson, New York, 2001

[18] Coulardeau, Dr. Jacques, Ivan EVE, *Cro-Magnon's Language: Emergence of Homo Sapiens, Invention of Articulated Language, Migrations out of Africa* , Format Kindle, Éditions La Dondaine, 2017

[19] Coulardeau, Dr. Jacques, *Paleolithic Women, For Gendered Linguistic Analysis*, [Alexander Marshack – The Roots Of Civilization – Revised And Augmented Edition – 1991 – A Review], Éditions La Dondaine, Kindle format, Amazon, 2020

[20] Díaz Gisele, Rodgers, *The Codex Borgia: A Full-Color Restoration of the Ancient Mexican Manuscript*, Dover Fine Art, History of Art, Dover Publications, 1993

[21] d'Huy, Julien, *Cosmogonies, La Préhistoire des mythes*, La Découverte, Paris, 2020

[22] Guillaume Gustave, *Principes de Linguistique Théorique*, Klincksieck, Paris & Les Presses de l'Université Laval, Québec, Canada, 1973

[23] Harari, Yuval Noah, *Sapiens, A Brief History of Humankind*, London, Vintage, 2011.

[24] Harari, Yuval Noah, *Homo Deus, A Brief History of Tomorrow*, London, Vintage, 2015

[25] Hatt, Gudmund, *Asiatic Influences in American Folklore,* I kommission hos ejn Munksgaard, Kobenhavn, 1949.

[26] Hatt, Gudmund, "The Corn Mother in America and in Indonesia," *Anthropos*, vol. 46, n° 5-6, 1951, p. 853-914.

[27] Jakobson, Roman Osipovich, *Essais de Linguistique Générale,* translation Nicolas Ruwet, Éditions de Minuit, Paris.

[28] Knorozov, Yuri Valentinovich, La antigua escritura de los pueblos de America Central. Mexico City: Fondo de Cultura Popular. 1954.

[29] Knorozov, Yuri Valentinovich, Sistema Pis'ma Drevnih Mayya. Moscow: Institut Etnografii, Akademiya Nauk SSSR. 1955.

[30] Knorozov, Yuri Valentinovich, Diego de Landa: Soobshchenie o delah v Yukatane, 1566. Moscow: Akademiya Nauk SSSR. 1956. (Knorozov's doctoral dissertation)

[31] Knorozov, Yuri Valentinovich, Pis'mennost' Indeytsev Mayya. Moscow-Leningrad: Institut Etnografii, Akademiya Nauk SSSR. 1963.

[32] Knorozov, Yuri Valentinovich, Tatiana Proskouriakoff, ed. (1967). "The Writing of the Maya Indians". Russian Translation Series 4. Sophie Coe (trans.). Cambridge MA.: Peabody Museum of Archaeology and Ethnology.

[33] Knorozov, Yuri Valentinovich, Ieroglificheskie Rukopisi Mayya. Leningrad: Institut Etnografii, Akademiya Nauk SSSR. 1975.

[34] Knorozov, Yuri Valentinovich, Maya Hieroglyphic Codices. Sophie Coe (trans.). Albany NY.: Institute for Mesoamerican Studies. 1982.

[35] Knorozov, Yuri Valentinovich, "Compendio Xcaret de la escritura jeroglifica maya descifrada por Yuri V. Knorosov". Promotora Xcaret. Mexico City: Universidad de Quintana Roo. 1999.

[36] Knorozov, Yuri Valentinovich, Stephen Houston; Oswaldo Chinchilla Mazariegos; David Stuart, eds. (2001). "New data on the Maya written language". The Decipherment of Ancient Maya Writing. Norman OK.: University of Oklahoma Press. pp. 144–152.

[37] Kurzweil, Ray, *The Singularity is Near: When Humans Transcend Biology*, New York, Viking, 2005

[38] Lawrence, D.H., *The Plumed Serpent* , Vintage; Reissue edition, 1992.

[39] Lenin, Vladimir, *Lenin on Language*, Raduga Publishers, Moscow, 1983

[40] Lévi-Strauss, Claude, "The Structural Study of Myth," *The journal of American Folklore*, vol. 68, n° 270, 1955, p. 428-444

[41] Lévi-Strauss, Claude, *Anthropologie* Structurale, Plon, Paris, 1958

[42] Lévi-Strauss, Claude, *L'Autre Face de la Lune. Écrits sur le* Japon, Le Seuil, Paris, 2011

[43] Mann, Charles C., *1491: New Revelations of the Americas Before Columbus*, Vintage, 2006.

[44] Mann, Charles C., *1493: Uncovering the New World Columbus Created*, Vintage, 2011)

[45] Mithen, Steven, *The Singing Neanderthals: The Origins of Music, Language, Mind and Body*, Harvard University Press, 2007

[46] Mithen, Steven, *After the Ice: A Global Human History, 20,000-5000 BC*, Harvard University Press; 2008.

[47] Montgomery, John, *Dictionary of MAYA hieroglyphs*, Hippocrene Books, New York, 2002, free access athttp://www.famsi.org/mayawriting/dictionary/montgomery/index.html#:~:text=John%20Montgomery's%20Dictionary%20of%20Maya,part%20of%20speech%2C%20and%20meaning.

[48] O'Halloran, **Kay L.,** Tan, **Sabine, and** Wignell, **Peter**, "Intersemiotic Translation as Resemiotisation: A Multimodal Perspective," in *Signata*, 7 | 2016, 199-229.

[49] Voloshinov, Valentin Nikolaevich, *Marxism and the Philosophy of Language*, 1929, Chapter 1: The study of Ideologies and Philosophy of Language; Chapter 2: Concerning the Relationship of the Basis and Superstructures, *Marxism and the Philosophy of Language*, Seminar Press, in liaison with the Harvard Univerity Press and the Academic Press Inc., 1973. One section reproduced under "Fair Use." Transcribed: by Paul Lamplugh. https://www.marxists.org/archive/voloshinov/1929/marxism-language.htm

[50] Vygotsky, Lev, *Pensée Et* Langage, Messidor, 1985, SNEDIT LA DISPUTE, 1997, ISBN-13 : 978-2843030048