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***Homo narrans*: the role of narration in the emergence of human language**

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1. Introduction

What is at stake in this paper is the emergence of the human species-specific language from an evolutionary point of view. The idea, which is shared by most authors in this field, is that the transition from *Homo erectus* and archaic *Homo sapiens* to our own species has been accompanied by an important improvement in the communication system of hominids. This improvement, the emergence of fully-fledged human language, has in turn drastically changed the rate and the nature of human evolution, which since obeys more to socio-anthropological factors than to genetical-biological constraints. In a way, what we have to understand is how a neo-Darwinian evolutionary process led to a last move, the emergence of human language, which allowed one species to escape to a certain extent from neo-Darwinian evolutionary laws.

Following Bickerton (1990), I shall assume that pre-human hominids were endowed with a protolanguage without syntax and some other important properties of human language but which was fitted for simple acts of communication about 'here-and-now' perceptible reality, in which pragmatic considerations can compensate for the lack of these properties. I will leave aside the problem of the emergence of protolanguage as such: several authors (Dunbar 1996, Dessalles 1998, 2000, among others) have shown that this problem (bringing up the 'Machiavellian Intelligence' paradox - see Byrne & Whiten 1988) can be dealt with from a Darwinian perspective, even if there is no easy solution readily available.

I will neither take any stand on the controversial issue of the exact nature and function of the protolanguage. Some authors, like Bickerton (1990, 1995), claim that a lexicon was one of its main features, and that it grew continuously during the evolution of *Homo erectus* in phase with the augmentation of the brain. Some others develop an opposite point of view. For instance, Donald (1991) argues that a real lexicon could not have been in the place before the acquisition of a symbolic capacity, which, according to him, is linked with the apparition of complete human language. Actually, the only hypothesis that I need about the protolanguage consists of its inability to evoke remote or imaginary events that are not on the immediate focus of the speakers. To my knowledge, this is a point on which all authors agree.

To explain the transition from protolanguage to language, I will argue in favour of the emergence of a novel function of communication which could have started the process that led to the acquisition of the very specific properties the human language is endowed with. In this respect, what I suggest belongs to the category of the 'function-centred' scenarios, in which approaches such as Donald (1991) and Knight (1998) can be placed, contrasting with the 'mechanism-centred' scenarios which can be found in Pinker (1994) or in Bickerton (1998). This novel function is the narrative function, which constitutes one of most important usage of language in all contemporary human societies, be they technologically modern or in a pre-agricultural stage, and which is of course out of reach for a protolanguage, whatever we put under this term. As we will see, the narrative function can explain most of the specificities of human language, and its emergence could have been the decisive factor that explains the difference of destinies between our direct ancestors and their close cousins like Neanderthals.

2. Human language specificities

One of the most important methods when dealing with the issue of the origin of language is to look for hints by examining properties which are shared by all human tongues (universals of human language) and which are not shared by other communication systems (specificities of human language). Obviously, the chances are that such properties are related to fundamental functions of language that were there from the beginning. Actually, many authors using this method focus exclusively on syntactic properties of language. Almost no attention is paid to semantic properties, and this is perhaps an important weakness in those studies. Syntax must not be neglected, of course, but semantics deserves as much consideration and may lead to very different conclusions. Looking at syntax, Pinker and Bloom (1990), as well as Bickerton (1998) stressed properties like recursion and hierarchical embedding that tie up natural language with logics and formal languages. As we will see just now, looking at semantics as well gives a very different picture where human language appears to obey specific constraints which are not found in formal languages.

One striking specific feature of human language concerns the expression of time. Contrary to logical languages, basic sentences in human languages are inherently dynamical. The most basic sentences in “natural” languages are not so the famous *Socrates is mortal* or *Every man is mortal*, but rather *It started raining*, *The baby is still crying*, or *I leave Paris tomorrow morning*. In other words, human languages are designed for speaking of dynamical situations and events in a very simple and direct manner, and this is not the case for formal languages, as shown by the complexity of temporal logic (cf. Gabbay *et al.* 1995).

If we look more precisely at the semantic markers used to express dynamical situations and events, we find that all human languages possess complex systems of markers devoted to a very specific semantic category: aspect. The category of aspect is very different from that of tense: aspect refers, not to the time relation between a situation and the moment of its being mentioned in speech, but rather, to how the situation itself is being viewed with respect to its own internal makeup (cf. Comrie 1976). For instance, the difference between *He was crossing the bridge one hour ago* and *He crossed the bridge one hour ago* is not a question of time since the two sentences refer to past events. But they differ by their aspectual features: the first one shows the crossing as if we were looking at it during its processing, whereas the second one shows the crossing as a global completed event.

The importance of aspect in human languages cannot be overvalued. Many languages, as Chinese for instance (Li and Thompson 1989), have no grammatical markers for tense, though they do have aspect morphemes. Many other languages, like Slavic languages for instance (cf. Schuyt 1990), possess different lexical forms (marked by several affixes) for most verbs in order to express aspectual distinctions. Therefore, aspect systems vary extensively from one language to another, but the general category of aspect is certainly one of the most uncontroversial semantic universal of human language.

What is aspect useful for? It is easy to see that aspect points to the central place of the narrative function of language. Actually, aspect is not really needed when the goal of the communication is simply reduced to transmission of factual information. It is also worth noticing that there is no trace of aspectual notions in logical languages, even in those dealing with temporal logic. However, aspect is absolutely necessary for the purposes of narration: it allows the narrator to present an event from a specific point of view, depending on the relation between the event and the characters on which the narrator focuses.

Actually, semantics of tense itself is best explained in terms of narrative mechanisms. As pointed out by Turner (1996:149-154), tense expresses the relation between a temporal focus and a temporal viewpoint, and the temporal viewpoint depends on the choice of the narrator: nothing in language forces the narrator to choose the moment of speech as the temporal

viewpoint. This is why the present tense can so easily be used to evoke past or forthcoming events. In this connection, Gosselin (1996) and Klein (1994) have proposed complete models of time and aspect in several languages, in which aspect is defined in terms of relation between the temporal focus (called “reference interval” or “assertion interval”) and the time interval of the evoked process or event. These models show that linguistic markers of time and aspect are perfectly adapted to narration: the speaker can open at his will a precise “temporal window” on the events that he wants to put on the stage, as easily as if he was a moviemaker.

Observations of the same kind can be made about other semantics domains, including expression of spatial relations, modalities, animacy and agency, etc. Semantic systems may seem imperfect to a logician or an information theorist, but they are perfect tools for a narrator who wants to present in his own way past or imaginary scenes and events, with no direct link to the 'here-and-now' situation.

Let us illustrate this point by the example of modalities. It is well known that in many languages, modal markers can take at least two very different meanings, called ‘epistemic’ and ‘deontic’. For instance *may* in English has a deontic meaning when it is synonym of *be allowed to* as in *You may smoke here*, and an epistemic meaning when it can be paraphrased by *perhaps*, as in *It may rain up there*. The same type of distinctions exists for the meanings of the other English modal verbs *can*, *must*, as well as their equivalent in other Indo-European languages, and many more besides: Kronning makes a list of about twenty languages from ten other families of languages (Sino-Tibetan, Austronesian, etc.) presenting an equivalent of *must* with both deontic and epistemic meanings (Kronning 1996:92-93). From a logical point of view, this situation seems very bizarre. The truth-value of what is asserted is very different in the two cases, and some sentences are really ambiguous, as *Our son may smoke in his bedroom*, where the two interpretations diverge drastically. Therefore, it is difficult to understand why the phenomenon is so common in human languages, if it constitutes a cognitive burden for speakers, who have to select the right meaning every time these so frequent markers are present in a sentence.

On the other hand, if we give up the too narrow information processing point of view and if we consider that language units are first of all tools to construct narrative scenes, the issue can be clarified. As shown by several linguists (Sweetser 1990, Culioli 1999), the semantics of modal markers can be completely explained in terms of access. Modal markers are perfect to indicate the status of the new scene that is being evoked with respect to the scenes that have already been constructed (cf. also Fauconnier 1997). The access from the previous scenes to the new one can be necessary (no other path towards another situation), just possible (at least two paths leading one to the evoked new scene and the other not), or impossible (no path to the new scene). These distinctions are the most important ones from the point of view of a narrative process in which each new scene is constructed from what is already present in the intersubjective space produced by previous discourse. And these distinctions are the only ones that are grammaticalized in many languages. Distinctions between epistemic and radical meanings can of course be expressed in any language, but they are less fundamental, less basic in language systems.

The same remarks hold for another important set of grammatical markers: demonstrative pronouns and determiners. In most languages (not to say all languages), demonstratives have two different uses, called anaphoric and deictic. They can refer to a real entity, present in the situational context (deictic use), or designate a discourse entity, which have just been evoked (anaphoric use). Such a systematic ambivalence has been thoroughly discussed by linguists (for a review, see for instance Kleiber 1991), who try to find out its cognitive foundation. Once more, it can hardly be understood in an information-processing framework, while it is

easily explainable in the logic of narrative construction. If we accept the idea that the main objective of language is to give a phenomenological presence to all the entities and events evoked by the discourse, it is obvious that the use of the same markers for referring to real as well as discourse entities is a very efficient way to endow these discourse entities with the same unquestionable presence in the intersubjective space. In fact, language appears as a better device to give strength to the phenomenological existence of what is said, than to ensure secure transmission of factual information.

At last, syntax as such can also be explained in the same framework. Turner (1996:143-148) shows that grammatical constructions, with thematic roles, can be viewed as projections of "basic abstract stories". He shows also that embedding and recursion can also be viewed as projections of story nesting, i.e. combining one basic abstract story inside another. As he notices (Turner 1996:161), this view of grammar as « a dynamic system of interrelated grammatical constructions », in which basic grammatical constructions represent basic stories, agrees with several cognitive linguistic theories, such as Goldberg's Construction Grammar (Goldberg 1995) and Talmy's analysis of grammar in terms of "force dynamics" (Talmy 1988). But another important set of syntactic phenomena, which has been emphasized by functional grammar theorists (Givón 1995, Halliday 1994), is perhaps even more relevant for our discussion. These phenomena fall within the domain of what is called "information structure" (Lambrecht 1994) or "functional sentence perspective". In a few words (for a concise and accurate presentation, see Van Valin and La Polla 1997, chap. 5), this domain concerns all the syntactic mechanisms offered by languages to introduce new entities, events and relations (which are called 'new information', or 'focus' or 'rheme'), by "anchoring" them into a framework composed by the entities, events and relations already shared with the addressee (called 'presupposition', 'topic' or 'theme'; see also the distinction between 'profile' and 'landmark' in Langacker's Cognitive Grammar, Langacker 1986, and the notion of 'repérage' in Culioli's enunciation theory, Culioli 1990, 1999). It is clear that these mechanisms are of particular interest for narrative purposes, since the success of a narration depends crucially on the capacity of evoking new characters or events on the unique basis of what has already been put on the stage. Actually, some of these syntactic mechanisms seem entirely conceived for narrative needs, such as the various "reference-tracking systems" that can be found in many languages (cf. Van Valin and LaPolla 1997:285-290).

To summarize, most of the specificities of human language, which differentiate it from other animal communication systems as well as from logical and other formal languages, seem to be directly linked to its narrative function. Therefore, a plausible hypothesis is that the narrative function is at the root of human language. This is what is claimed by Mark Turner, in his refreshing book, *The Literary Mind* (1996, chap. 8). He assumes that narrative imagining first arose as an individual cognitive ability, resulting from the increase of hominid general-purpose intelligence and memory. Then, the narrative structure, already present in individual minds, has been projected into the communication system, transforming it into human language. Thus, for Turner, it is the functional need of telling stories that has produced human language properties, and not the other way around, as advocated by the tenants of the "language bioprogram hypothesis" shared by Chomsky (1995), Pinker and Bloom (1990), as well as Bickerton (1984). As he says (Turner 1996:162):

« Perhaps the main argument that grammar must arise in the individual human being exclusively from some special-purpose device, genetically coded and neurobiologically expressed, is that grammar is too arbitrary, subtle and quirky to arise otherwise. But if the influence on language acquisition is not only the language an infant hears, but also all of narrative imagining, including all of the systems from which narrative imagining recruits,

there is plausibly an overabundance of sources of subtleties and quirks without conjecturing a special device to introduce them ».

3. The problem of the nearly total extinction of archaic *Homo sapiens*

Turner's proposal is appealing because it can be put in relation with the last steps of hominid evolution. One of the most puzzling facts about hominisation is the extinction of almost all the archaic *Homo sapiens*, including Neanderthals. According to contemporary theories supported by both paleoanthropology and population genetics (see for instance Lewin 1989, Cavalli-Sforza 1996, Tatterstall 1998, de Lumley 1998), all the descendants of *Homo Erectus*, who dispersed all over the Ancient World one million years ago, and who evolved locally into different groups of archaic *Homo Sapiens*, disappeared subsequently (some thirty thousand years ago for Neanderthals), except, of course, our species, coming from a small group living in East Africa one hundred thousand years ago. It is hard to understand why such intelligent beings (the brain size of Neanderthals was even slightly larger than ours), well adapted to various environmental conditions, were erased from the earth without any descent.

Most authors agree on finding this fact very puzzling, even if some of them propose tentative explanations. The reasons put forward are generally external, such as climatic changes, epidemics, or competition with our own species, but they are not really convincing. Reichholf (1990) for instance suggests that the changes in climatic conditions which took place at the end of the last glaciation could have proved fatal to Neandertals. They could have been too dependent on some big game animals (mammoth, rhinoceros, etc.) that disappeared from Europe at that time. This reasoning cannot be easily accepted: all the evolution of *Homo erectus* has focused on cognitive developments insuring a better adaptability to very diverse environmental conditions. It would be surprising that the descendants of this species, with an even more sophisticated cognitive system, should not have been able to change their way of life along with the change of climate, while they have mastered the use of fire, group hunting and collecting, habitation building, and so on. Another frequent explanation put forward the possibility of epidemics. But archaic *Homo sapiens* were scattered all over the Ancient World, and it also would be surprising that epidemics would have struck in all that places. Moreover, epidemics rarely prove fatal to entire groups, unless they are already numerically weak. So if archaic *Homo sapiens* were really so few as to be endangered by epidemics, one has to wonder why they became so few after the success story of *Homo erectus* dispersal. Thus, epidemics cannot be the final answer. The last frequent reason put forward in this debate is the competition with our own species. As says Donald (1991), it seems that there is room only for one species in the ecological niche occupied by *Homo*. Modern *Homo sapiens* would have been more efficient than the others would and he would have replaced them everywhere. Again, this cannot be the last word. Unless our ancestors had systematically planed and achieved the complete eradication of their far relatives (and this sounds too modern to be plausible), one has to explain why other *Homo sapiens* disappeared entirely in such a process instead of being simply pushed away in somewhat less convenient regions (it was not a so small world!), and if they were, why so adaptive beings could not survive in such environments. Moreover, modern *Homo sapiens* does not seem to have had any important technological advance that could explain his superiority. Therefore, we have to discover anyway what was the advantage that explains the success of our ancestors over their contemporaries, or, more accurately, what was the disadvantage of the former that could explain their so radical defeat.

Surprisingly, no one, to my knowledge, has proposed to look at endogenous reasons, such as social disturbances, to explain what happened to archaic *Homo sapiens*. This comes perhaps from the difficulty to think of the continuous augmentation of cognitive faculties during the

evolution of *Homo* as something else but a progress. However, it could be that the evolutionary path followed by *Homo* led to a dead end (Victorri 1997, 1999). The idea is that at one stage, increase in individual intelligence could have become contradictory with social organisation. It is well known that intelligence is not at all a defence against antisocial behaviour. In animals, behaviours that are dangerous for the survival of the species, such as killing siblings or eating offspring, are prevented by instinctive reactions. However, one consequence of the great development of the neocortex that characterises hominisation is precisely the control of instinctive behaviour: even if we feel that an action is repulsive, we can carry it out anyway. Killing his brother or his father to replace him as the chief of the tribe, killing and eating children during a lengthy period of food shortage, are examples of intelligent behaviour that ensure a short-term individual well-being, which prove fatal to the group prosperity in the long range.

It is worth noticing that in every human society, such behaviours are explicitly prohibited. It proves two things. First, if they have to be forbidden, it is because they belong to the set of behaviours that are really possible for our species. If they were not attested behaviours, such prohibition would not have any sense. Second, if they are socially forbidden in our species, and not biologically inhibited as in other mammals, it means that there has been a shift at some time during the evolution of *Homo*. It is implausible that social rules preceded the loss of the instinctive behaviours: so, the conclusion is that there has been inevitably a period during which the biological inhibitions were already weakened and the social interdictions were not yet established. The species that has experienced such a situation has necessarily been endangered since the most important rules for survival were lacking, or at least insufficiently deep-rooted in every individual member of the species. My hypothesis is that this situation happened to all archaic *Homo sapiens* groups, during a period that lasted from –200.000 years to –40.000 years.

If we try to imagine what did social life look like in those times, we do not have to assume particularly violent aggressive behaviours in everyday life. But we can think that the history of each group was punctuated by important dramatic crises breaking out from time to time. Suppose for instance that two closely related males are competing for the leadership of one group. This is a very common situation in all groups of social monkeys and apes. It creates of course some tension in the group, and it is resolved for a while after some direct confrontations between the two rivals, when one of them gets the upper hand systematically during these “fair” fights, which present no danger for their life. But suppose that in this group of archaic *Homo sapiens*, the defeated male, far from accepting his fate, plans to kill his rival, not at all in a fair way, but as a really premeditated murder: waiting for the right moment and ready to use his most lethal weapons. Here the situation changes completely. Everyone can feel what is about to happen, and first of all, the dominant male, who is left no other choice but to precede his opponent by planning to kill him before. Notice that even if the dominated male do not actually plan to resort to a so radical action, the simple idea that he could do so may be sufficient for the dominant to decide to act on his own. These are intelligent behaviours, which can be expected from animals with high-level cognitive abilities and insufficient instinctive inhibitions. Notice also that the whole group is concerned by what is going on. Several members of the group can be linked to one of the rivals by coalition relations or affectively close enough to him to feel directly involved in the conflict, so the chances are that the first murder will be followed by others... Therefore, such situations could provoke important crises, triggering off uncontrollable violence with disastrous consequences to the life of the group. Even without generalized violence, the loss of one male at the height of his powers is anyway an important handicap by its own for the survival of the group.

Other situations could also give rise to as serious crises. As already mentioned, eating offspring can also be an intelligent behaviour in certain circumstances. During a long period

of unsuccessful hunting, dominant males may think that it is the unique solution to save themselves as well as the rest of the group: they need to recover their strength, if they want to get any chance of bringing back some game in the next days, and the babies are going to die anyway, since their mothers cannot feed them anymore. Again, as everyone is gnawed by the same hunger and the same feelings, the whole group can anticipate the intentions of these males, and in the first place, the mothers, which are certainly not ready to let them do, since their instinctive protective behaviour is more deeply rooted. Again uncontrollable violence is to be expected, as well as more killing for eating than it would have been strictly necessary. Of course, these crises should not go without internal conflicts for the ones who are ready to act. They should have been in highly strained emotional states, torn apart by the contradictory drives coming from on one hand their instincts and on the other their desires supported by their intelligence. The same pattern applies also to the group as a whole. It can even be expected that some members, less involved than the main protagonists, try to prevent the forthcoming drama but they lack the means to do it efficiently.

4. Emergence of the narrative function

Then, the hypothesis that I want to put forward is that language emerged in such crises, allowing avoiding them. We can assume that when a crisis was about to break out, most members of the group remembered the preceding crises, adding the recollection of past disasters to the instinctive repulsion. If an individual was able to express what happened in the past by his voice and his gestures, he had a chance of winning the support of the whole group and stopping the imminent catastrophe.

Let us look at our first example of crisis, the rivalry between two closely related males. Suppose that at a critical time, after the burst of one more clash between them, as everyone is watching anxiously to the scene, an old member of the group begins to catch the attention and tries to evoke a past event in which a similar situation provoked a disastrous spread of violence. Of course, the question is how such an evocation could have been initiated, if language were not already there to allow reference to facts and persons not directly related with the here-and-now situation. This is the question that any scenario of the emergence of human language must tackle. As long as protolanguage is concerned, it is not an issue: the referent of any new sign can be guessed from the situation, and can gradually acquire a conventional meaning. However, this cannot work for language when the intended referent is not the centre of the attention. Notice that in our example the purpose of the discourse is precisely to divert the attention from the ongoing situation in order to bring it under control. On the other hand, notice also that the particular conditions of the new enterprise are optimal. As we said, many members of the group have in mind the past event that our apprentice narrator wants to put on the stage. Moreover, they know that this old individual is not directly involved in the present conflict, and is scared as they are of its consequences. Therefore, they can guess that his intentions are to stop its course by any means he can find.

Suppose then that our narrator manages to make himself understood when he tries to evoke one character of the past crisis, using some mimetic trick: imitating one of his physical particularity, simulating an animal that he was good at hunting, etc. The success of such a trick could produce a very deep impression among the group. For the first time, the image of a dead member of the group appears in front of them, each of them feeling that the others share the same "vision". What was confined in individual memories acquires a new intersubjective status. As the narrator progresses as he can in the story, he gives a new life to its characters, and the group experiences a new way to be together. It would bring a new cohesion to the group, constructing a new collective conscience able to offset individual desires. Expressing what happened in the past was also expressing what could happen again and what should never happen any more. It had a chance to stop the ongoing conflict, both protagonists

becoming aware of the new collective pressure from the group pushing in the same direction as their own instinctive repulsion for what they intended to do, and, most of all, each of them becoming aware that the other shares the same internal conflict.

Of course, such a “narrative trick” should have been far from a one hundred percent success, and it can be thought that most of these attempts failed. However, even if it happened rarely, a successful outcome would have had immediate consequences for the survival of the group in which it took place. Therefore, it could have generalized in the long run, exactly like an advantageous genetic trait, which spreads over a species by natural selection rules. One important step in this process could have been the “ritualization” of the narrative behaviour: instead of waiting for the outbreak of a crisis, it would have been much more efficient to organize regular events in which the famous ancestors and the prohibited acts were evoked. Of course, during this evolution of the social behaviour, the narrative techniques would have improved continuously, leading to fully-fledged language.

Thus, the first use of the narrative function could have consisted in expressing specific social events, creating a totally novel social organisation in the animal kingdom, which permitted our species to control the social disturbances that could explain the extinction of the other archaic *Homo sapiens*. Human language, with all its syntactic and semantic properties, would then have stemmed from the needs of narration, leading to what Donald (1991) calls “the mythic culture”. It is well known that all the myths and religions rest the fundamental prohibitions upon narrative accounts of origins that put precisely on stage the prohibited behaviours. As a matter of fact, the two examples that we have chosen, murdering one’s brother (or close relative) and eating one’s children, are among the most widespread myths all around the world, and the corresponding prohibitions have the status of universals for whole humanity. Notice that this is of course not true for killing human beings in general, neither even for eating human flesh in general: until recently, external cannibalism was a fundamental practice in several human societies, like the Tupi-Guarani (cf. Combès 1992) or the Aztec Empire (??).

Many authors used analyses of the different myths that are still available to us in their attempts to reconstruct the beginnings of human culture and societies. Chris Knight (1991, 1998) is certainly the author that made the most important work in this direction as far as the emergence of language is concerned. My proposal here is closer to René Girard’s theory (Girard 1979, 1989), even though he did not address directly the issue of the origin of language. In his attempt to explain why myths systematically put on stage characters which are both venerated as gods and the ones who violated prohibitions, he puts forward the interesting idea that these characters come from real ancestors who have been killed by their tribes because they did such acts, or, more precisely, because they were accused of doing so. They became gods because they permit first to renew the bounds of the tribe during a crisis by attracting all the violence against themselves, and second to establish the prohibition as a social rule. My proposal corresponds to a slightly different and in a certain way more literal reading of the myths: they became gods and were venerated as such not because their behaviour permitted a happy resolution of a crisis during their life (ending it by the way), but more simply because the evocation of their past behaviour permitted the avoidance of new similar crises. In my view, the “scapegoat” mechanism, which is central in Girard’s theory, cannot be there at the very beginning, since one needs full language with already narrative capacities to accuse somebody of having done something wrong, be it true or false.

What is common in Girard’s theory and the present proposal is that the resolution of crises by new collective behaviours opened the path to a new social order, with laws imposed from above by the awareness of belonging to a same group endowed with a collective history. The general idea is that an acquired social behaviour supported by language relayed biological

determination in avoiding a fatal outcome of human evolution, and that this process is at the foundation of human culture.

We can even assume that language proper was first limited to this particular religious function, and that during a long period its development was independent (to a certain extent) from the utilitarian protolanguage that our species must have possessed, like the other archaic *Homo sapiens*. Still now, we can find some traces of the specificities of language when it is used in the religious sphere. Most religions use language in a very conservative way. This is obvious for written texts in major religions (Hebrew for Judaism, Latin for Catholic Church, Sanskrit for Hinduism), but it is also true for most oral traditions, where religious language is considered as a powerful and often magic tool or even weapon, which must be used with serious precautions. Even if we accept the idea that language could have borrowed some features to protolanguage, its use could have been very different. Specially, if we accept the idea that protolanguage possessed an important lexicon, and that language borrowed a part of this lexicon for its own purposes, it could have been used in a totally different way in the two systems. For example, if we turn back to our first apprentice narrator, he could have used some lexical words of the protolanguage to evoke the ancestor that he wanted to put on the stage, pronouncing for instance the name of a plant or a fruit that he was very fond of, or the name of an animal that he could be compared to. In other words, he would have used one of the fundamental mechanisms of our lexical semantics, metonymy and metaphor, to evoke the dead ancestor and future god. Therefore, from the beginnings, words would have been polysemous in language, while they were not in protolanguage. In protolanguage, the word for 'lion' is nothing but the animal, whereas in language 'lion' could also mean a famous mythic ancestor, the totem from which some people belong because they descend from this ancestor, as well as the strength and the courage that are believed to be the main qualities of both the animal and the ancestor. It is worth noticing that polysemy is another specific feature of human language that differentiates it from other communication systems, including formal languages (Victorri and Fuchs 1996).

If we accept that the extension of the use of language to other domains, beyond religious practice, could have happened much later, after the stabilization of the main characteristics of language, it could explain the delay between the apparition of our species, more than one hundred thousand years ago and the "symbolic explosion" that took place some forty thousand years ago (cf. Tattersall 1998). The use of language to describe everyday tasks could have been a very slow process, since first, the protolanguage was perfectly adapted to this usage, and second, the language was too "magic" and powerful to be used in everyday life. This slow process would then have been accompanied by the gradual establishment of symbolic thinking and culture on every aspect of human life, leading first to the Upper Palaeolithic symbolic revolution, and more generally, triggering the deep hunger of knowledge that characterize our species. Once more, it is obvious that the narrative function takes a major role in this last process, since telling stories to explain phenomena is almost always the first path towards more scientific accounts of world events.

5. Conclusion

The hypothesis of the emergence of the narrative function as the starting point of the emergence of language takes three main points into account:

- First, it can explain the unique syntactic and semantic properties of language, specially those semantic properties that make human language different not only from animal communication systems but also from logical and other formal languages.
- Second, it is compatible with our current knowledge of the last steps of hominid evolution, including the puzzling extinction of almost all the archaic *Homo sapiens*, which contrasts with the great evolutionary success of our species.

- Third, it permits to understand the development of a novel level of organisation, specific to our species, in which socio-cultural laws replace, to a large extent, the socio-biological constraints governing all the rest of the animal kingdom.

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