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## *Sapiens* and Language

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### Abstract

Yuval Noah Harari says that it is thanks to language that *Homo sapiens* can create fictions, which enable it to cooperate collectively and establish civilizations, which other animals do not have. In short, he insists that language has made *Homo sapiens* what it is now. Can language produce fictions as he thinks? Some linguists such as Ferdinand de Saussure, Noam Chomsky and B. L. Whorf deny that words refer to things in the world. In other words, they insist that things do not exist in advance of language. If this idea is correct, then it leads to that language can create fictions as Harari says. Has language enabled *Homo sapiens* to produce fictions and thereby to cooperate collectively and to establish civilizations?

**Key Words:** fictions, language, inter-subjective, nomenclaturism, Sapir-Whorf hypothesis

### Introduction

Harari proposes one interpretation of history of humankind, in which he insists that *Homo sapiens* has created civilizations by means of language. According to him, *sapiens* got language, which enabled it to make fictions such as money, state, or human rights. Furthermore, believing in fictions has enabled it to cooperate in large numbers. As a result, *sapiens*, unlike other animals, was able to create civilizations. In short, Harari insists that language has made *sapiens* what it is now.

Then, can language create fictions? Some linguists say that words are not related to things. This means that language can create something that does not exist independently of language.

If this is true, it leads to the idea that *sapiens* can make fictions using language. So if *sapiens* believes in the fictions, as Harari says, it will cooperate to achieve something that other animals cannot. Therefore,

Harari's interpretation of history depends on whether language enables *sapiens* to create fictions.

In this paper, first we examine Harari's interpretation of history, then we consider linguists' idea of relation between words and objects.

### 1. *Homo Sapiens*

Harari answers a question of why *Homo sapiens* has continued to exist since all other human species, *Homo soloensis*, *Homo denisova*, and Neanderthals were extinct:

What was the Sapiens' secret of success? How did we manage to settle so rapidly in so many distant and ecologically different habitats? How did we push all other human species into oblivion? Why couldn't even the strong, brainy, cold-proof Neanderthals survive our onslaught? The debate continues to rage. The most likely answer is the very thing that makes the debate possible: *Homo sapiens* conquered the world

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thanks above all to its unique language.

(Harari 2011: 20–21)

How, then, did *Homo sapiens* acquire its unique language? Harari says that language emerged through mutation just as Chomsky insists:

The appearance of new ways of thinking and communicating, between 70,000 and 30,000 years ago, constitutes the Cognitive Revolution. What caused it? We're not sure. The most commonly believed theory [of Chomsky?] argues that accidental genetic mutations changed the inner wiring of the brains of Sapiens, enabling them to think in unprecedented ways and to communicate using an altogether new type of language. We might call it the Tree of Knowledge mutation. Why did it occur in Sapiens DNA rather than in that of Neanderthals? It was a matter of pure chance, as far as we can tell. But it's more important to understand the consequences of the Tree of Knowledge mutation than its causes. What was so special about the new Sapiens language that it enabled us to conquer the world?

(Harari 2011: 23–24)

Harari says that the new Sapiens language, which originated from mutation, evolved through gossiping (Harari 2011: 25–26).

Thus *Homo sapiens* conquered the world with its language, which emerged through mutation and evolved as a way of gossiping. Sapiens language transmits not only information about existing entities, but also information about non-existent things (Harari 2011: 27).

Fictions are what Sapiens can never see, touch or smell. Thanks to the ability to speak about fictions, Sapiens could develop its unique cooperation as well as the ability to imagine things:

[...] fiction has enabled us not merely to imagine things, but to do so *collectively*. We can weave common myths such as the biblical creation story, the Dream-time myths of Aboriginal Australians, and the nationalist myths of modern states. Such myths give Sapiens the unprecedented ability to cooperate flexibly in large numbers.

(Harari 2011: 27)

Like Harari, Chomsky says that we can acquire the world of imagination by language, explaining the origin of language (Chomsky 1988: 183).

Furthermore Chomsky says that human beings got biological success by gaining language, which originated from mutation (Chomsky 1988: 183–184).

Thus, *Homo sapiens* acquired language and came to be able to speak about fictions. They enabled it to cooperate flexibly in large numbers:

How did *Homo sapiens* manage to cross this critical threshold [the threshold of 150 individuals], eventually founding cities comprising tens of thousands of inhabitants and empires ruling hundreds of millions? The secret was probably the appearance of fiction. Large numbers of strangers can cooperate successfully by believing in common myths. (Harari 2011: 30)

Here “this critical threshold” is the threshold of 150 individuals. According to sociological research, the maximum natural size of a group is about 150 individuals. So people cannot cooperate successfully, if they are more than 150. In other words, common myths, which are based on language, enabled more than 150 people to cooperate successfully (Harari 2011: 30).

So, Harari says that there do not exist gods, nations, money, human rights, laws, and justice outside our imagination (Harari 2011: 31).

To illustrate this, Harari takes up Peugeot, one of the oldest and largest of Europe's carmakers, as an example of a modern institution, which does not exist outside the common imagination of human beings (Harari 2011: 31).

How, then, was the company, Peugeot created by its founder, Armand Peugeot?

How exactly did Armand Peugeot, the man, create Peugeot, the company? In much the same way that priests and sorcerers have created gods and demons throughout history, [...] In the case of Peugeot SA [the company's official name] the crucial story was the French legal code, as written by the French Parliament. According to the French legislators, if a certified lawyer followed all the proper liturgy and rituals, wrote all the required spells and oaths on a wonderfully

decorated piece of paper, and affixed his ornate signature to the bottom of the document, then hocus pocus—a new company was incorporated. When in 1896 Armand Peugeot wanted to create his company, he paid a lawyer to go through all these sacred procedures. Once the lawyer had performed all the right rituals and pronounced all the necessary spells and oaths, millions of upright French citizens behaved as if the Peugeot company really existed.

(Harari 2011: 34–35)

Thus, Peugeot SA was created just as priests and sorcerers have created gods and demons throughout history. But it exists not in the real world but as a fiction. Things like Peugeot SA are called “fictions,” “social constructs” or “imagined realities” (Harari 2011: 35).

Moreover, myths created by words can be altered because they are fictions:

Since large-scale human cooperation is based on myths, the way people cooperate can be altered by changing the myths—by telling different stories. Under the right circumstances myths can change rapidly. In 1789 the French population switched almost overnight from believing in the myth of the divine right of kings to believing in the myth of the sovereignty of the people. (Harari 2011: 36)

Therefore, myths created by *Homo sapiens* might sometimes contradict one another because they are not based on truth. For example:

The two texts [the Code of Hammurabi and the American Declaration of Independence] present us with an obvious dilemma. Both the Code of Hammurabi and the American Declaration of Independence claim to outline universal and eternal principles of justice, but according to the Americans all people are equal, whereas according to the Babylonians people are decidedly unequal. The Americans would, of course, say that they are right, and that Hammurabi is wrong. Hammurabi, naturally, would retort that he is right, and that the Americans are wrong.

(Harari 2011: 121–122)

But both Hammurabi and the Americans are not right because their claims are based on “imagined realities”:

In fact, they [the Americans and Hammurabi] are both wrong. Hammurabi and the American Founding Fathers alike imagined a reality governed by universal and immutable principles of justice, such as equality or hierarchy. Yet the only place where such universal principles exist is in the fertile imagination of *Sapiens*, and in the myths they invent and tell one another. These principles have no objective validity.

(Harari 2011: 122)

So Harari boldly says:

It is easy for us to accept that the division of people into ‘superiors’ and ‘commoners’ is a figment of the imagination. Yet the idea that all humans are equal is also a myth. (Harari 2011: 122)

Hence Harari tries to translate the most famous line of the American Declaration of Independence below into biological terms (Harari 2011: 122):

We hold these truths to be self-evident, that all men are **created equal**, that they are **endowed** by their **Creator** with certain **unalienable rights**, that among these are life, **liberty**, and the pursuit of **happiness**. (Harari 2011: 122)

So “all men are created equal” is rewritten as “all men evolved differently” (Harari 2011: 122). Furthermore, “endowed by their Creator” is altered as “born” (Harari 2011: 123). Next, “unalienable rights” is rewritten as “mutable characteristics” (Harari 2011: 123). Last of all, “life, liberty, and the pursuit of happiness” is translated into “life and the pursuit of pleasure” (Harari 2011: 123).

Here is the most famous line of the American Declaration of Independence, which is rewritten in biological terms:

We hold these truths to be self-evident, that all men evolved differently, that they are born with certain mutable characteristics, and that among these are

life and the pursuit of pleasure. (Harari 2011: 123)

Some people may object to Harari's insistence above but he has already prepared his counterargument against their criticisms:

Advocates of equality and human rights may be outraged by this line of reasoning. Their response is likely to be 'We know that people are not equal biologically! But if we believe that we are all equal in essence, it will enable us to create a stable and prosperous society.' I have no argument with that. This is exactly what I mean by 'imagined order'. We believe in a particular order not because it is objectively true, but because believing in it enables us to cooperate effectively and forge a better society. Imagined orders are not evil conspiracies or useless mirages. Rather, they are the only way large numbers of humans can cooperate effectively. Bear in mind, though, that Hammurabi might have defended his principle of hierarchy using the same logic: 'I know that superiors, commoners and slaves are not inherently different kinds of people. But if we believe that they are, it will enable us to create a stable and prosperous society.' (Harari 2011: 123-124)

Moreover, "the imagined order is not a subjective order existing in my [Harari's] own imagination—it is rather an inter-subjective order, existing in the shared imagination of thousands and millions of people" (Harari 2011: 131). What, then, is the inter-subjective order?

The **inter-subjective** is something that exists within the communication network linking the subjective consciousness of many individuals. If a single individual changes his or her beliefs, or even dies, it is of little importance. However, if most individuals in the network die or change their beliefs, the inter-subjective phenomenon will mutate or disappear. Inter-subjective phenomena are neither malevolent frauds nor insignificant charades. They exist in a different way from physical phenomena such as radioactivity, but their impact on the world may still be enormous. Many of history's most important drivers are inter-subjective: laws, money, gods, nations. (Harari 2011: 132)

Harari's inter-subjective phenomena or people's collective imagination may be like a French sociologist, E. Durkheim's *fait social*, which is not physical or psychological but constrains individuals from outside of them. He says that law, beliefs, fashions are examples of *fait social* (Durkheim 1982: 57). Or they may resemble a British biologist, R. Dawkins's *meme*, which is a unit of cultural transmission. He says that the idea of God is one example of meme (Dawkins 1989: 192-193) as Harari refers to it (Harari 2011: 270). In any case, Peugeot SA, the dollar, human rights, and the United States of America exist in the shared imagination of billions of people. So no single individual can change these imagined orders. This reminds us of Saussure's statement—individuals cannot change *langue* (Saussure 1983: 71). So is *langue* also an inter-subjective phenomenon?

In order to change an existing imagined order, we must first believe in an alternative imagined order. So we cannot escape from an imagined order at all (Harari 2011: 133).

So, according to Harari, a hierarchy of people is also a fiction (Harari 2011: 150, 161). Moreover, even a concept of manhood and womanhood is based on human imagination but not biological reality (Harari 2011: 166). So "sex" is a biological category and "gender" a cultural category (Harari 2011: 170).

Furthermore, money is also a fiction as is said before (Harari 2011: 197). Consumerism and nationalism are also fictions (Harari 2011: 406).

Harari also says about the meaning of life (Harari 2011: 438). For Harari, human life is also a fiction, a delusion. Then, if Harari is right, is Harari's insistence also a fiction, or a delusion? Does Harari not fall into a trap of self-reference? Does he not notice the self-reference?

Thus, Harari insists that *Homo Sapiens* has developed civilizations, which animals do not have, based on language, which enables *Homo Sapiens* to create fictions and thereby to cooperate collectively.

Then, have linguists thought that language enables us to create fictions?

Next we shall examine what linguists have thought of the relation between things and language.

## 2. Saussure's Criticism of Nomenclaturism

Thus, Harari insists that language creates something that does not exist, or fiction. Then, what does Saussure say about the relationship between words and things?

For some people a language, reduced to its essentials, is a nomenclature: a list of terms corresponding to a list of things. [...] This conception is open to a number of objections. [...], it leads one to assume that the link between a name and a thing is something quite unproblematic, which is far from being the case. [...] A linguistic sign is not a link between a thing and a name, but between a concept (*signifié*) and a sound pattern (*signifiant*). (Saussure 1983: 65-66)

Here Saussure denies nomenclaturism, saying that language is not a link between a thing and a name but between a *signifié* and a *signifiant*. We recognize an example of nomenclaturism in the Old Testament (*Genesis*, Chapter II).

Saussure criticizes the idea above that first things existed in the form of segmented entity and then names were given to them:

Most of the models of language which philosophers have or at least put forward are reminiscent of our first ancestor Adam calling unto him the various animals and giving each one its name. [...] language is not fundamentally made up of names. Only accident makes a linguistic sign happen to correspond to an object with a definite meaning such as *a horse, fire, the sun*, rather than to an idea such as  $\theta\eta\kappa\epsilon$  'he put'. Whatever the importance of the previous case there is no clear reason, indeed quite the opposite, for taking it as the defining characteristic of language. Doubtless for those who wish to consider it as such, this is, in a certain sense, merely a case of choosing a bad example. But implicit in this is a certain way of conceptualizing the definitive nature of language which we should not allow to pass: that is, language as a naming of objects. Of objects which are given beforehand. *First* the object, then the sign; hence (and this we will always reject) a prior external basis for the sign, and a depiction of language according to the following rela-

tionship:



whereas in fact the real configuration is:  $a-b-c$ , outside of any knowledge of a functional relationship such as  $*-a$  based on an object.

(Saussure 2006: 162)

According to Saussure, it is just an accident that words, for example, *a horse, fire, and the sun*, correspond to the things in the world not the concepts (*signifié*) respectively. But, then, if Saussure is right, where do words or concepts (*signifié*) come from? He says nothing about this question. He, however, only explains how language, or a system of signs, which consists of *signifiants* and *signifiés*, emerges:

Psychologically our thought—apart from its expression in words—is only a shapeless and indistinct mass. Philosophers and linguists have always agreed in recognizing that without the help of signs we would be unable to make a clear-cut, consistent distinction between two ideas. Without language, thought is a vague, uncharted nebula. There are no pre-existing ideas, and nothing is distinct before the appearance of language.

Against the floating realm of thought, would sounds by themselves yield predetermined entities? No more so than ideas. Phonic substance is neither more fixed nor more rigid than thought; it is not a mould into which thought must of necessity fit but a plastic substance divided in turn into distinct parts to furnish the signifiers [*signifiants*] needed by thought. The linguistic fact can therefore be pictured in its totality—i.e. language—as a series of contiguous subdivisions marked off on both the indefinite plane of jumbled ideas (A) and the equally vague plane of sounds (B). (Saussure 1959: 111-112)

In this way, Saussure insists that there are neither pre-existing ideas nor sounds in advance of language. If so, then, how does language segment both ideas and sounds?



Thought, chaotic by nature, has to become ordered in the process of its decomposition. Neither are thoughts given material form nor are sounds transformed into mental entities; the somewhat mysterious fact is rather that “thought-sound” implies division, and that language works out its units while taking shape between two shapeless masses.

(Saussure 1959: 112)

Certainly it is somewhat mysterious that “thought-sound” implies division and that language works out its units while taking shape between two shapeless masses, i.e. ideas and sounds. To make his explanation clear, Saussure compares this mysterious process to the waves:

Visualize the air in contact with a sheet of water; if the atmospheric pressure changes, the surface of the water will be broken up into a series of divisions, waves; the waves resemble the union or coupling of thought with phonic substance. (Saussure 1959: 112)

But the waves cannot be formed only by the changes of the atmospheric pressure. Other factors are also involved in the making of the waves. Furthermore, Saussure, who might have noticed that his comparison of the waves to language was not appropriate, compares language to a sheet of paper:

Language can also be compared with a sheet of paper: thought is the front and the sound the back; one cannot cut the front without cutting the back at the same time; likewise in language, one can neither divide sound from thought nor thought from sound; the division could be accomplished only abstractedly, and the result would be either pure psychology or pure phonology. (Saussure 1959: 113)

But Saussure’s explanation above only shows how closely ideas and sounds are linked to each other. Still he does not tell us how a sheet of paper is cut and also who does advance this process and so on. Nothing is made clear by his explanation. So we cannot help saying that mysterious is his description of emergence of language.

Furthermore, Saussure admits that each sign,

which is a combination of sound (*signifiant*) and concept (*signifié*), is a positive entity although sound (*signifiant*) or concept (*signifié*), if one is separated from the other, is negatively delimited (defined):

Whether we take the signified [*signifié*] or the signifier [*signifiant*], language has neither ideas nor sounds that existed before the linguistic system, but only conceptual and phonic differences that have issued from the system. The idea or phonic substance that a sign contains is of less importance than the other signs that surround it. Proof of this is that the value of a term may be modified without either its meaning or its sound being affected, solely because a neighboring term has been modified.

But the statement that everything in language is negative is true only if the signified [*signifié*] and the signifier [*signifiant*] are considered separately; when we consider the sign in its totality, we have something that is positive in its own class. A linguistic system is a series of differences of sound combined with a series of differences of ideas; but the pairing of a certain number of acoustical signs with as many cuts made from the mass of thought engenders a system of values; and this system serves as the effective link between the phonic and psychological elements within each sign. Although both the signified [*signifié*] and the signifier [*signifiant*] are purely differential and negative when considered separately, their combination is a positive fact; it is even the sole type of facts that language has, for maintaining the parallelism between the two classes of differences is the distinctive function of the linguistic institution. [...]

When we compare signs—positive terms—with each other, we can no longer speak of difference; the expression would not be fitting, for it applies only to the comparing of two sound-images, e.g. *father* and *mother*, or two ideas, e.g. the idea “father” and the idea “mother”; two signs, each having a signified [*signifié*] and signifier [*signifiant*], are not different but only distinct. Between them there is only *opposition*. The entire mechanism of language, with which we shall be concerned later, is based on oppositions of this kind and on the phonic and conceptual differences that they imply. (Saussure 1959: 120–121)

After all, Saussure cannot explain why the combination of a negative concept (*signifié*) and a negative sound (*signifiant*) produces a positive term. He stands the real process of signs on its head. In reality, every sign is positive but if we break up signs into two parts: concept (*signifié*) and sound (*signifiant*), then each part becomes negative. Saussure inverts this process and thinks that linkage of a negative sound (*signifiant*) with a negative concept (*signifié*) produces a positive sign. So his insistence is not convincing. Things and words are interrelated to each other contrary to his thought that words do not refer to things. If Saussure is right, there is no explaining why words came into being. Probably he thinks that from the outset there is language. This means that we human beings have innate ideas corresponding to words. Chomsky also has the same idea as Saussure's. He explicitly says that we are born with ideas, which are linked with words after birth. He claims that this proves that children learn a lot of words accurately and in a very short time. On this respect, Saussure and Chomsky have almost the same insistence.

Thus, Saussure insists that words do not correspond to things in the world.

### 3. Chomsky's Thought about Things and Words

Then, what does Chomsky think of the relationship between things and words?

[...] a lexical item provides us with a certain range of perspectives for viewing what we take to be the things in the world, or what we conceive in other ways; these items are like filters or lenses, providing ways of looking at things and thinking about the products of our minds. The terms themselves do not refer, at least if the term *refer* is used in its natural-language sense; but people can use them to refer to things, viewing them from particular points of view—which are remote from the standpoint of the natural sciences, as noted. (Chomsky 2000: 36)

Here Chomsky insists that humans look at the world from a particular point of view. His idea is similar to Kant's. Kant claims that humans are equipped (endowed) with a framework to look at the world at birth (Kant 2003: 22). So according to Chomsky,

objects that we take to exist in the world are not mind-independent:

Referring is an action, and the internal symbols that are used to refer do not pick out mind-independent objects. On investigation, it turns out that what we understand to be a house, a river, a person, a tree, water, and so on, is not a physical construct of some kind. Rather, these are creations of what seventeenth century investigators called our "cognoscitive powers," which provide us with rich means to interpret and refer to the outside world from certain perspectives. (Chomsky 2010: 57)

Here Chomsky completely separates language from the outside world, saying that a house, a river, a person, a tree, water, and so on are what our mind created from certain perspectives:

[...] there need be no objects in the world that correspond to what we talk about, even in the simplest cases, [...]. About all we can say at a general level is that the words of our language provide complex perspectives that offer us highly special ways to think about things—to ask for them, tell people about them, etc. Real natural language semantics will seek to discover these perspectives and the principles that underlie them. *People* use words to refer to things in complex ways, reflecting interests and circumstances, but the *words* do not refer; there is no word-thing relation of the Fregean variety, nor a more complex word-thing-person relation of the kind proposed by Charles Sanders Peirce in equally classic work in the foundations of semantics. [...] A word-thing (-person) relation seems as much of an illusion as a word-molecular motion (-person) relation, though it is true that each use of a word by a person is associated with a specific motion of molecules, and sometimes with a specific thing, viewed in a particular way.

(Chomsky 1996: 22–23)

According to Chomsky, a word-thing relation is an illusion, in other words, words do not refer to things in the world. Words are used, reflecting special ways to think about things such as interests and circumstances.

Chomsky repeatedly insists that words do not refer to things in the world, but that words provide us with specific ways to think about the world (Chomsky 1996: 24). This means that we do not derive words or concepts from things in the world, but we have words or concepts in advance of experiencing things in the world.

So Chomsky thinks that we human beings are born with ideas in advance of experiencing the world (Chomsky 1988: 134):

The speed and precision of vocabulary acquisition leaves no real alternative to the conclusion that the child somehow has the concepts available before experience with language and is basically learning labels for concepts that are already part of his or her conceptual apparatus. (Chomsky 1988: 28)

Furthermore Chomsky explains how children learn language, taking the word “climb” for an example:

There is, in fact—just to give one example—a recent issue of a linguistics journal that has a long detailed article trying to give the meaning of the word “climb.” And it is very complicated. But every child learns it perfectly right away. Now that can only mean one thing. Namely, human nature gives us the concept “climb” for free. That is, the concept “climb” is just part of the way in which we are able to interpret experience available to us before we even have the experience. [...] We simply learn the label that goes with the preexisting concept. So in other words, it is as if the child, prior to any experience, has a long list of concepts like “climb,” and then the child is looking at the world to figure out which sound goes with the concept. (Chomsky 1988: 190–191)

But if Chomsky is right, then how did words, which went with concepts, come into being? Here Chomsky evidently agrees to Descartes’s thinking that concepts are innate. In relation to this, Roy Harris points out that both Saussure’s and Chomsky’s theories are based on the idea of a fixed code that contains pairings of sound and meaning:

[...] construing a language as a fixed code is demanded by the internal logic of Saussure’s speech circuit [telementation model of communication]. Unless the code is fixed, then invoking linguistic knowledge simply does not explain how speech communication works. Given any utterance by A, it is essential that B must not only recognize this utterance as an example of the words A intended to pronounce, but must also attach to those words the same meaning as A does. Otherwise speech communication between A and B necessarily breaks down. (Harris 1990: 29)

So, Harris insists that a telementation theory assumes a fixed code:

[...] if speech communication is a telementation process, it demands a fixed code which A and B share. If A and B do not share this fixed code, [...] then speech communication between them must at some point break down, [...] So the theoretical assumption must be that, somehow or other, those who manage to communicate with each other via speech share and operate a fixed code, [...] The fixed code is their common language. (Harris 1990: 30)

So if Harris is right, Chomsky’s insistence that we are born with concepts, may be a logical conclusion from a theory of a fixed code, which is I-language in Chomsky’s terminology and *langue* in Saussure’s respectively.

But Harris argues that a fixed-code theory causes a problem of how a common language emerges from the rich variety of linguistic experience at the individual level. The solution to this problem, Harris insists, is that *homo sapiens* is a creature uniquely endowed with a special apparatus, which is Universal Grammar in Chomsky’s terminology, in the brain, genetically designed to perform the miracle of constructing communal linguistic systems:

The language myth of post-Renaissance European culture presents languages as fixed codes which enable individuals to communicate their thoughts to one another by means of words, and portrays linguistic communities as groups of individuals who use the same language. This is a myth which defines commu-



nication between human beings as thought-transference, and then postulates a social institution (the language) which makes that possible. [...]

It is essentially a language myth which ignores differences between individuals, in favour of emphasizing collective conformities. In so doing it generates an internal problem of its own. Since, from the cradle to the grave, the personal linguistic history of every individual is unique, how is it possible that this rich variety of linguistic experience at the individual level should ever give rise to a common language of the kind which the myth postulates? [...]

Mythical problems demand mythical solutions. The solution in this case lay in constructing a supporting explanatory mythology, according to which Nature prudently foresaw the difficulty and provided the answer in advance. The answer turns to be that *homo sapiens* is a creature uniquely endowed with a special apparatus [Chomsky's Universal Grammar] in the brain, genetically designed to perform the miracle of constructing communal linguistic systems.

(Harris 1987: 7)

Here, needless to say, Harris criticizes Chomsky's Universal Grammar as a myth.

#### 4. Sapir-Whorf Hypothesis

According to Whorf, what is called "snow" in English is segmented by Eskimos quite differently:

We have the same word for falling snow, snow on the ground, snow packed hard like ice, slushy snow, wind-driven flying snow—whatever the situation may be. To an Eskimo, this all-inclusive word [the English word "snow"] would be almost unthinkable; he would say that falling snow, slushy snow, and so on, are sensuously and operationally different, different things to contend with; he uses different words for them and for other kinds of snow. (Whorf 2012: 276-277)

If "snow" exists in advance of language, do Eskimos classify "snow" into several kinds of snow they call it? Are words linked with something as St Augustine thought (Augustine 2009: 10)? Or are words not connected with things in the world as Saussure and Chomsky insist? Whorf claims that nature is not segmented in advance

of language, but that language segments nature one way or another:

[...] segmentation of nature is an aspect of grammar—one as yet little studied by grammarians. We cut up and organize the spread and flow of events as we do, largely because, through our mother tongue, we are parties to an agreement to do so, not because nature itself is segmented in exactly that way for all to see. (Whorf 2012: 308)

If Whorf is right, then the way languages segment nature varies from language to language:

Languages differ not only in how they build their sentences but also in how they break down nature to secure the elements to put in those sentences. This breakdown gives units of the lexicon. "Word" is not a very good "word" for them; "lexeme" has been suggested, and "term" will do for the present. By these more or less distinct terms we ascribe a semifictitious isolation to parts of experience. (Whorf 2012: 308)

But if we are not aware of this segmentation of nature by language, we think that words correspond to distinct objects as classical physics or astronomy explains:

English terms, like 'sky, hill, swamp,' persuade us to regard some elusive aspect of nature's endless variety as a distinct THING, almost like a table or chair. Thus English and similar tongues lead us to think of the universe as a collection of rather distinct objects and events corresponding to words. Indeed this is the implicit picture of classical physics and astronomy—that the universe is essentially a collection of detached objects of different sizes. (Whorf 2012: 308)

As we have seen, Whorf's idea is similar to Saussure's and Chomsky's. But Whorf does not insist that language existed from the outset like Saussure and that human beings are born with concepts like Chomsky. For Whorf, language is what human beings created through experiences in the world.

Thus, some linguists have not thought that things exist in advance of language. In a sense, this means

that things exist after language segments the world around us. Needless to say, they have not said anything about abstract notions such as money, states, religion, and so on. But if even the concrete things, which we can see or touch and so on, do not exist in advance of language, then the abstract things cannot be exceptions. So if this line of reasoning is correct, it follows that things, whether concrete or abstract, do not exist in advance of language. As you already understand, this is just what Harari insists on in his *Sapiens*. We can imagine and create various things through language.

### Conclusion

As we have seen, Harari insists that *Homo sapiens* has developed civilizations, which other animals do not have, based on language, which enables *Homo sapiens* to create fictions such as money, state, human rights, and so on and thereby to cooperate collectively unlike other animals. In short, he says that it is language that has made *Homo sapiens* what it is today.

On the other hand, Saussure and Chomsky deny that words correspond to things in the world. They insist that language segments the world around us. So what words signify does not exist independently of language. Their ideas are very similar to Harari's. Chomsky even thinks that we are born with concepts that are associated with words. If both Saussure's and Chomsky's insistence is correct, things signified by words may be fictions as Harari insists. Furthermore, Whorf takes one more step to say that our thinking is constrained by language. If he is correct, language may determine our way of thinking.

In any case, it is safe to say (no doubt) that language has a crucial influence on *Homo sapiens*. So nobody can deny that language has played an important (decisive) role in human history as Harari points out. But ironically, it is not anything else but language that makes *Homo sapiens* live in the world of fictions.

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