
Article

Whitney and Saussure

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Abstract

We treat W. D. Whitney's and Ferdinand de Saussure's views of language and discuss their similarities and differences. The two linguists have similar ideas on the following points: 1) social character of language, 2) arbitrariness of language, 3) conception of zero sign, 4) acquisition of language, and 5) relation between linguistics and psychology. On the other hand, they disagree with the following points: 1) relation between *signifiés* and *signifiants* and 2) relation between synchrony and diachrony.

Key Words: social, arbitrary, zero sign, acquisition of language, psychology, *signifié*, *signifiant*, synchrony, diachrony.

Introduction

Saussure often referred to Whitney, for example, in "Notes for an article on Whitney (Saussure 2006: 140-156)" and *Course in General Linguistics* (1983). He admired Whitney's concept of language as a social institution expressed in *Language and the Study of Language* (1867) and *The Life and Growth of Language* (1875). E. F. Koerner discusses the two linguists in his *Ferdinand de Saussure* (1973) and John E. Joseph also refers to them in his *From Whitney to Chomsky* (2002).

In this paper, we compare the two linguists' views of language and focus on their similarities and differences.

1. Language is social

1.1. *Langue* is complete in a society

After saying that *langue* (a system of signs) is necessary for *parole* (individual utterances) to be executed, Saussure insists that *langue* is collective:

Developing and fixing this product [*langue*] is

the work of the collective intelligence. Everything that is the language [*langue*] is implicitly collective. [...] To say that a word has come into the language [*langue*] is to say that it has received collective approval. (Saussure 1993: 91a)

How, then, does *langue* exist in a society? Saussure answers this question as follows:

In the form of a deposit existing in brain of each of the persons making up the crowd like a dictionary of which all the copies were distributed to these persons. (Saussure 1993: 91a)

According to Saussure, *langue*, which is a deposit existing in brain of each of the persons making up the crowd like a dictionary, is something collective outside the will of the individual:

This thing [*langue*], although internal to each individual, is at the same time collective, lying beyond the will of the individual. $1 + 1 + 1... = 1$ (collective model) (Saussure 1993: 91a)

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Why is *langue*, which exists in the individual's brain like a dictionary, something collective or social outside the individual's will? This is not only because the individual cannot modify *langue* but also because *langue* imposes external restrictions on the individual. Miura (1967: 149-199) interprets that Saussure's *langue* is the norm of language in the form of "conceptually objectified will." From this point of view, it is understood that *langue* exists outside the individual's will and constrains the individual from outside. Moreover, *langue* is collective or social in the sense that it is shared among the members of a society. What is individual, which is not shared by the members of a society, cannot be *langue*. Thus *langue*, for Saussure, is a social fact as E. Durkheim says:

A social fact is any way of acting, whether fixed or not, capable of exerting over the individual an external constraint; (Durkheim 1982: 59)

Furthermore, *langue* is, for Saussure, social because it is not complete in any individual:

[...] doubtless this hoard [*langue*], in any individual case, will never turn out to be absolutely complete. [...] The language [*langue*], in turn, is quite independent of the individual; it cannot be a creation of the individual; it is essentially social; it presupposes the collectivity. (Saussure 1993: 7a-8a)

1.2. Speech is a social possession

According to Whitney, above all, language exists for the purpose of communication:

It [language] exists [...], not only partly, but primarily, for the purpose of communication; its other uses come after and in the train of this. To the great mass of its speakers, it [language] exists consciously for communication alone; this is the use that exhibits and commends itself to every mind.

(Whitney 1875: 149)

Therefore, it is not language that is understood and used by only one person. There does not exist or has never existed such a language:

That would have no right to be called a language which only one person understood and could use; and there is not, nor has ever been, any such in existence. (Whitney 1875: 149)

In other words, language serves the purpose of communication among the members of a society even though its acceptance is limited:

Acceptance by some community, though but a limited one, is absolutely necessary in order to convert any one's utterances into speech.

(Whitney 1875: 149)

So personal alterations and additions to language disappear and are never to reappear if they are not accepted by others and maintained in tradition:

[...], an individual's alterations and additions, if not adopted by others and kept up in their tradition, die with him, and never come to light at all.

(Whitney 1875: 149)

Thus, Whitney insists that language is a social belonging because its purpose is communication and for a successful communication we need more than one person, that is, a society as a required condition and communication is realized in more than one person, or a society. In other words, for language, a society is a condition for communication, or the purpose of language to be successfully realized. On the other hand, for a society, language is nothing but what makes communication possible. In this sense mentioned above, Whitney argues that language is a social belonging. His thought that language is social, is also based on the idea that language is what is accepted and used by the members of a society:

Speech is not a personal possession, but a social; it belongs, not to the individual, but to the member of a society. No item of existing language is the work of an individual; for what we may severally choose to say is not language until it be accepted and employed by our fellows. (Whitney 1867: 404)

Saussure thinks that *langue* is social from the

point of view that it is shared by the members of a society while Whitney claims that language (speech) is social from the point of view that it is used for communication among the members of a society. Both Saussure's and Whitney's thoughts are based on the idea that only one individual cannot make language possible. But Saussure's idea that *langue* constrains an individual from outside him or her is very close to Durkheim's social fact. It is not found in Whitney's writings, moreover, Saussure says that *langue* is different from other social institutions although he accepts Whitney's idea that language is a social institution:

[...] the other institutions [than language] are to various degrees all based on NATURAL relationships, [...] For instance, a nation's *laws*, or political system, or even fashion, even its whimsical sartorial fashions, which can never ignore the given [proportions] of the human body. [...] But language and writing are NOT BASED on a natural relationship between things. There is never in any way a link between a certain sibilant sound and the shape of the letter *S*, and similarly it is no harder for the [French] word *vache* than the [Latin] word *vacca* to refer to a cow. (Saussure 2006: 147)

It leads to the arbitrariness of signs, which we shall discuss next, that language is not based on a natural relationship between things.

By the way, Saussure divides *langage* (a linguistic activity) into *langue* (a system of value) and *parole* (actual utterances) and says that *langue* is social but *parole* is individual (Saussure 1983: 13-14). On the other hand, when Whitney says that language is social, it is thought that he means Saussure's *parole* by the word "language." If this is true, then the two linguists' view of language will not be the same as we have seen. But Whitney does not define the word "language" as clearly as Saussure. For example, he interchangeably uses two words "language" and "speech." The latter may be equivalent to Saussure's *parole*. Therefore, we put this matter aside here now.

Of course, Saussure, Whitney, and Durkheim sharply disagree with Noam Chomsky, who insists that language is biological.

2. Arbitrariness of signs

2.1. Signs are arbitrary

Saussure insists that arbitrary is the relation of a *signe's* concept (*signifié*) to its sound (*signifiant*):

The sign [*signe*] is arbitrary, that is to say that the concept 'sister[*sæur*]', for example, is not connected by any internal relation to the sound sequences *s + ø + r* which forms the corresponding acoustic image. This concept could just as well be represented by any other sequence of sounds. You have only to think of the different languages. Passing from one language to another, you see that the concept 'ox [*bœuf*]' is also represented by the sound sequence *bos*. (Saussure 1993: 76a)

If we take another example, in French 'table' can be replaced by 'sable' or reversely 'sable' can by 'table,' too:

[...] in relation to the idea [*signifié*] it represents, the signifying element sign [*signifiant*], whatever it may be, is arbitrary, appears to be freely chosen, is replaceable by another (*table* might be called *sable* or vice versa). (Saussure 1993: 94a)

Then, how can "onomatopœias" be explained? In "onomatopœias," there is something that enables us to associate sounds (*signifiants*) with concepts (*signifiés*). Saussure says about "onomatopœias" as follows:

In connexion with this there is the question of onomatopœias (words of which the sound has something that evokes the actual concept they are called on to represent). The choice, it is said, is not arbitrary here. Here there would indeed be an internal connexion. In general people greatly exaggerate the number of onomatopœias. It is sometimes said for example that *pluit* represents the sound of the rain, but if you go a little way further back, it becomes clear this is not the case (earlier *plovit*, etc.).

(Saussure 1993: 77a)

It may be a little difficult to understand this pas-

sage cited above, but what Saussure wants to say is this: although may not be arbitrary the relation of sounds to concepts in “onomatopœias,” but it is exaggerated too much and, for example, *pluit* is said to represent the sound of rain, but *pluit* was once *plovit*, which has not any connexion with the sound of rain. Furthermore, Saussure insists that “onomatopœias” are not the counterexamples of arbitrariness of *signes*, quoting other examples:

Nonetheless we have: the *tick-tock* [*tic-tac*] of a clock, the *glug-glug* [*glou-glou*] of a bottle. These words in fact behave like ordinary words, being lost in the linguistic mass. People can often make the mistake of seeing an imitation in cases where it does not exist at all. (Saussure 1993: 77a)

Again, this passage may be hard to understand, but what Saussure has in mind is this: the *tick-tock* of a clock or the *glug-glug* of a bottle is the same as ordinary words, that is to say, in both cases, the relation of the sounds (*signifiants*) to the concepts (*signifiés*) is arbitrary. Actually, we often mistake ordinary words for imitated ones. Finally, Saussure says about “exclamations,” which are, like “onomatopœias,” believed to have a connexion between sounds (*signifiants*) and concepts (*signifiés*), but that is not the case:

The extent of this part of the vocabulary is very limited, as is that of exclamations. In an exclamation it may be said that there is something that is dictated by nature, and that there is a connexion there between the sound and the concept. But for the majority of exclamations, this can be rejected, on the evidence of other languages. *Aïe*, for example, is not found in German, English, for example. Swearwords that have become exclamations and it is known that they originated in words with a very specific sense. So very marginal and controversial, these cases of onomatopœia and exclamation. (Saussure 1993: 77a)

Saussure claims that most of exclamations are not free from arbitrariness. Neither German nor English has *aïe*, which is an exclamation in French. Swearwords which have become exclamations now,

were originally words with very specific meanings. In conclusion, Saussure insists that neither onomatopœias nor exclamations deny the arbitrariness of relation between sounds (*signifiants*) and concepts (*signifiés*). In other words, onomatopœias and exclamations are not counterexamples of the arbitrariness of signs.

2.2. Words are arbitrary and conventional

Whitney insists that we learn language as follows:

The learner grasps the conception, at least in a measure, and then associates his own word with it by a purely external tie, having been able, if so guided, to form the same association with any other existing or possible word, and not less easily and surely.

(Whitney 1875: 18)

First of all, a concept is grasped and it is linked to a sound. Then, what is the relation between a concept and a sound? Whitney answers this question as follows:

An internal and necessary tie between word and idea is absolutely non-existent for him [the learner]; and whatever historical reason there may be is also non-existent to his [the learner's] sense. He may sometimes ask “what for?” about a word, as he does, in his childish curiosity, about everything else; but it makes no difference with the young etymologist (any more than with the older one) what answer he gets, or whether he gets an answer; to him, the sole and sufficient reason why he should use this particular sign is that it is used by those about him.

(Whitney 1875: 18-19)

It is interesting that Whitney thinks that the learner is not conscious of a historical reason why a word is tied with an idea. Because Saussure also says that a speaker uses his or her language without knowing its history. Now, let's get back to the main subject. According to Whitney, for a learner of language, there is nothing like a necessary and internal connexion between a word and a concept. The association is arbitrary. Therefore, the only reason why a

particular word is used is not because it is not arbitrary, that is, it is connected with something for some reason, but because it is only just conventional, that is, it is used by people around the learner. In other words, Whitney insists that words are arbitrary and conventional. Arbitrariness and conventionality of words are inseparable like a recto and a verso of a sheet of paper. Whitney sums up the idea that words are arbitrary and conventional as follows:

In the true and proper meaning of the terms, then, every word handed down in every human language is an arbitrary and conventional sign: arbitrary, because any one of the thousand other words current among men, or of the tens of thousands which might be fabricated, could have been equally well learned and applied to this particular purpose; conventional, because the reason for the use of this rather than another lies solely in the fact that it is already used in the community to which the speaker belongs.

(Whitney 1875: 19)

Words are arbitrary in the sense that in order to represent something, not a particular word but another will do. This is self-evident as Saussure says that every language has its own word [*signifiant*]. Also words are conventional in the sense that the reason why a particular word is used for expressing something, is based on the fact that it is already employed in a community. Thus, for Whitney, arbitrariness is also conventionality. Whitney also says about arbitrariness and conventionality of words, referring to Plato's *Cratylus*:

The word exists *θέσει* [thesei], 'by attribution,' and not *φύσει* [phusei], 'by nature,' in the sense that there is, either in the nature of things in general, or in the nature of the individual speaker who uses it, any reason that prescribes and determines it.

(Whitney 1875: 19)

Words are arbitrary in relation to things they signify and not natural in that human beings use them in a conventional way. Sounds or concepts can change because relations between sounds and concepts are conventional. If relations between sounds

and concepts are natural, internal, and necessary, changes of sounds should lead to those of concepts and changes of concepts to those of sounds. But this is not the case:

In this fundamental fact, that the uttered sign was a conventional one, bound to the conception signified by it only by a tie of mental association, lay the possibility both of its change of meaning and of its change of form. If the tie were a natural, an internal and necessary one, it would seem to follow that any change in either would have to be accompanied by a change in the other. (Whitney 1875: 48)

Actually, words may change their sound without changing their meaning or may gain their quite new meaning without changing their sound. After all, sounds or concepts change because relations between sounds and concepts are arbitrary or conventional, in other words, they are not natural, internal or necessary:

A word may change its form, to any extent, without change of meaning; it may take on an entire new meaning without change of form.

(Whitney 1875: 49)

Moreover, Whitney discusses the difference of means of communication between human beings and the other animals and says that in the case of human beings, the means of communication is arbitrary and conventional while in the case of the other animals, it is instinctive:

The essential difference, which separates man's means of communication in kind as well as degree from that of the other animals, is that, while the latter is instinctive, the former is, in all its parts, arbitrary and conventional. (Whitney 1875: 282)

This passage reminds us of Chomsky's insistence that recursion is found in human language but not in other animals' communication. Human language is instinctive for Chomsky while it is arbitrary and conventional for Whitney. Furthermore, Whitney also explains the arbitrariness of words as follows:

It is fully proved by the single circumstance that for each object, or act, or quality, there are as many names as there are languages in the world, each answering as good a purpose as any other, and capable of being substituted for another in the usage of any individual. (Whitney 1875: 282)

In the world, there are as many words, which signify the same thing, as the number of languages. Furthermore, a word of one language can be replaced by that of another. This means that relation of a word to the thing it signifies, is not necessary but arbitrary. In any language, there is not a single word, which is really thought to be something natural. Every word exists as what is accepted by convention:

There is not in a known language a single item which can be truly claimed to exist *φύσει* [phusei], ‘by nature;’ each stands in its accepted use *θέσει* [thesei], ‘by an act of attribution,’ in which men’s circumstances, habits, preferences, will, are the determining force. (Whitney 1875: 282)

If Whitney is right, how can “onomatopœias” be explained? Whitney says about them:

More frequent than such words as this, which only by a lucky hit gain life and a career, are those in which the attempt has been made in a rude way to imitate the sounds of nature: as when the *cuckoo* and the *pewee* and the *toucan* were named from their notes; or as in some of the descriptive words like *crack* and *crash*, *hiss* and *buzz*, which are by no means all old, but have been made, or shaped over into a pictorial form, within no long time. We call such words *onomatopœias*, literally ‘name-makings,’ because the Greeks did so: they could conceive of no way in which absolutely new language-material should be produced except by such imitation. (Whitney 1875: 120)

Whitney accepts the idea that “onomatopœias” are made by imitating natural sounds. Then, how does he explain “onomatopœias”? Whitney denies the necessary connexion between an onomatopœia’s sound and its concept. The reason is that if “onomatopœias”

were not arbitrary, then all animals and noises would be expressed by “onomatopœias” and all languages would use one and the same “onomatopœia.” But actually this is not the case. All animals and noises are not expressed by “onomatopœias” and all languages do not use one and the same “onomatopœia” for the same animal and noise:

Even where the onomatopœic or imitative element is most conspicuous—as in *cuckoo* and *pewee*, in *crack* and *whiz*—there is no tie of necessity, but only of convenience: if there were a necessity, it would extend equally to other animals and other noises; and also to all tongues; while in fact these conceptions have elsewhere wholly other names.

(Whitney 1875: 282)

Furthermore, Whitney mentions onomatopœias as the origin of language while Saussure says that the problem of the origin of language is meaningless:

Onomatopœia, in all its varieties of application, thus came in at the outset [of language], aided and supplemented by tone and gesture, to help the language-makers to find intelligible signs, but ceased to control the history of each sign when once this had become understood and conventionally accepted; while the productive efficiency of the principle gradually diminished and died out as a stock of signs was accumulated sufficient to serve as the germs of speech, and to increase by combination and differentiation. (Whitney 1867: 437)

Looking at language [*langue*] and wondering at what precise moment such a thing ‘started’ is as intelligent as looking at the mountain stream and believing that by following it upstream you will reach the exact location of its spring. *Countless things will show* that at any moment the STREAM exists when one says that it comes into being, (Saussure 2006: 63)

Whitney thinks that “onomatopœias” played a part at the beginning of language while Saussure insists that the origin of language depends on what we consider language as. In other words, if we do not decide what language is, the origin of language will

go into infinite regression. If Saussure is right, Chomsky's idea that mutation in brain is the origin of language is also meaningless.

In any case, Saussure and Whitney insist that words are arbitrary. That is self-evident if we compare various languages in the world. Furthermore, Whitney understands that the arbitrariness of words means their conventionality. Does Saussure think of the arbitrariness the same way as Whitney? Saussure says that the (absolute) arbitrariness of signs is only a part of any language although insisting that signs are arbitrary:

I have taken it as an obvious truth that the link between the sign and the idea represented is radically arbitrary. In every language, we must distinguish between what remains radically arbitrary and what can be called relative arbitrariness. Only some of the signs in any language will be radically arbitrary. In the case of other signs, we encounter a phenomenon which makes it possible to distinguish degrees. Instead of *arbitrary* we can say *unmotivated*. There are cases where the link between the sign and the sound is relatively motivated. For example, *vingt*, *dix-neuf* ['twenty', 'nineteen']. In *vingt*, it is absolutely unmotivated. *Dix-neuf* is not completely unmotivated, you can see in what sense *vingt* in fact relates to no coexisting term in the language. *Dix-neuf* relates to coexisting terms in the language (*dix* ['ten'] and *neuf* ['nine']). Well, it is trying to be motivated. What is in *dix* and what is in *neuf* is just as arbitrary. With *dix-neuf* we are into relative motivation.

(Saussure 1993: 85a)

By the way, Whitney's word "idea" is equivalent to Saussure's *signifié*, but his word "word" signifies both Saussure's *signifiant* and his *signe*, depending on situations. In any case, it is safe to say that Whitney and Saussure almost agree on the arbitrariness of words.

3. The notion of zero sign

3.1. Opposition between signs

According to Saussure, we do not always need any external form in order to express a concept:

No need always to have acoustic form corresponding to idea. A contrast is enough and x / zero will do. (Saussure 1993: 113a)

To illustrate this idea, an example of Czech is taken up:

Strictly speaking there are no signs [*signes*] but differences between signs [*signes*]. Example in Czech: *žena*, 'woman'; genitive plural, *žen*. [...] *Žena*, *žen* functions as well as *žena*, gen. pl. *ženů* which existed previously. (Saussure 1993: 141a)

The relation of *žena* to *ženů* has changed into that of *žena* to *žen*:

$$\begin{array}{ccc} \textit{žena} & \longleftrightarrow & \textit{ženů} \text{ (genitive plural)} \\ \downarrow & & \downarrow \\ \textit{žena} & \longleftrightarrow & \textit{žen} \square \text{ (genitive plural)} \end{array}$$

Here, *ženů* has changed into *žen*, but *žen* \square signifies the concept of 'genitive plural' although it has lost *-ů* in *ženů*, which has become zero \square . Although *-ů* in *ženů* has been lost or has become zero \square , *žen* functions as genitive plural of *žena* by the fact that *žen* is different from or in opposition to *žena*:

This example shows that only the difference between signs [*signes*] is operative.

Ženů works because it is different from *žena*.

Žen works because it is different from *žena*.

There are only differences; no positive term at all.

(Saussure 1993: 141a)

Thus, Saussure insists that a *signe* can express a concept as far as it is in opposition to or different from another *signe*, even if the concept is not realized in the external form, that is to say, the external form is zero \square .

3.2. Absence of signs

According to Whitney, the *s* of *brooks* modifies the concept of *brook* and means that there are more than one *brook*, namely changes a singular form (*brook*) into a plural form (*brooks*):

The *s* of *brooks*, for example, is formal in relation to *brook* as material; the added letter [*s*] indicates something subordinate, a modification of the conception of *brook*, the existence of it in more than one individual: it turns a singular into a plural.

(Whitney 1875: 214)

Similarly, *men* functions in relation to *man* as well as the *s* of *brooks* does in relation to *brook*. But unlike the *s* of *brooks*, *men* brings about an internal change (from *a* [æ] to *e* [e]) instead of an external one (from □ [∅] to *s* [s]):

Men has the like value as regards *man*, the means of making the same formal distinction having come to be of a different kind from the other, an internal change instead of an external.

(Whitney 1875: 214)

Brooks and *men* are ‘formed’ signs for concepts to which the characteristic of number is added:

Brooks and *men* are not mere material; they are “formed” material, signs for conceptions with one important characteristic, number, added.

(Whitney 1875: 214)

It can be thought that *brook* and *man* are also ‘formed’ by contrast with *brooks* and *men* respectively. In other words, *brook* and *man* mean singularity not by a sign but by the absence of a sign denoting singularity, that is, by a zero sign:

But then, by simple contrast with them, *brook* and *man* are also “formed;” each implies, not by a sign, but by the absence of an otherwise necessary sign to the contrary, restriction to a single article of the kind named.

(Whitney 1875: 214)

If, as Whitney insists, *brook* and *man* signify singularity by a zero sign, or zero in the form, Whitney’s idea is thought to be similar to Saussure’s. The use of the word ‘contrast’ also reminds us of the similarity to Saussure’s idea:

brook □ (singular)	←→	brook <u>s</u> (plural)
[∅]		[s]
man (singular)	←→	men (plural).
[æ]		[e]

It is certainly thought, as Whitney insists, that *brook* □ expresses singularity by the fact that the *s* of *brooks* is absent in *brook* or □ is a zero sign. But in the case of *man*, its singularity can be explained by the fact that a vowel of *men* is different from that of a *man* from a physical point of view. If this is true, in the case of *man* a zero sign will not signify singularity. But this can lead to an interpretation that *brook* also expresses singularity because its pronunciation is different from that of *brooks*. This means that *brook* is not an example of a zero sign, either. After all, a zero sign is applied when there is not any physical form for any concept. In English, for example, past forms of verbs are usually accompanied by some form of the word-ending, but sometimes they are not. This illustrates an example of a zero sign:

visit	←→	visit <u>ed</u> (past form)
		[id]
spread	←→	spread □ (past form).
		[∅]

In any case, Whitney’s idea that a concept emerges with one sign in opposition to another, without a physical form, may be thought to be similar to Saussure’s. If Saussure’s zero sign had been derived from Whitney’s writings, Whitney’s idea might have been a hint of Saussure’s thesis that “There are only differences; no positive term at all (Saussure 1993: 141a)”:

[...] in the language [*langue*] (that is, a language state) there are only differences. Difference implies to our mind two positive terms between which the difference is established. [...] In the language, there are only differences, without positive terms. [...] When you come to the terms themselves, resulting from relations between signifying and signified elements [*signifiants* and *signifiés*] you can speak of *oppositions*. Strictly speaking there are no signs but differences between signs. [...] There are only differ-

ences; no positive term at all. [...] So the whole language system can be envisaged as sound differences combined with differences between ideas. There are no positive ideas given, and there are no determinate acoustic signs that are independent of ideas. Thanks to the fact that the differences are mutually dependent, we shall get something looking like positive terms through the matching of a certain difference of ideas with a certain difference in signs. We shall then be able to speak of the opposition of terms and so not claim that there are only differences because of this positive element in the combination. In the end, the principle it comes down to is the fundamental principle of the arbitrariness of the sign. It is only through the differences between signs that it will be possible to give them a function, a value. If the sign were not arbitrary, one would not be able to say that in the language [*langue*] there are only differences.

(Saussure 1993: 141a-142a)

4. Acquisition of language

4.1. *Langue* is learned

According to Saussure, *langue* is not a natural instinct but what is learned:

The language [*langage*] faculty, it will be said, appears to us as a faculty given to us by nature, whereas the language [*langue*], on the contrary, is something that is acquired and conventional. It cannot take precedence over natural phenomena, natural instincts.

(Saussure 1993: 66a)

So learning is needed to acquire *langue*:

Again, inquiring whether the language [*langue*] really is separable from the rest, we see that a whole apprenticeship is necessary in order to learn the language [*langue*]. The organs are there, but the human being has to assimilate it by learning it.

(Saussure 1993: 70a)

Thus, *langue*, for Saussure, is not a natural instinct but what is learned or acquired through learning, that is, experience. Durkheim also says that a social fact, as which Saussure thinks of *langue*, is what is learned:

It is sufficient to observe how children are brought up. If one views the facts as they are and indeed as they have always been, it is patently obvious that all education consists of a continual effort to impose upon the child ways of seeing, thinking and acting which he himself would not have arrived at spontaneously. From his earliest years we oblige him to eat, drink and sleep at regular hours, and to observe cleanliness, calm and obedience; later we force him to learn how to be mindful of others, to respect customs and conventions, and to work, etc.

(Durkheim 1982: 53-54)

For Saussure, *langue* is learned not a natural instinct.

4.2. Learning of the first and the second languages

Learning of a second language is, according to Whitney, the same as that of the first language, or a mother tongue:

But in all other respects, the learning of a second language is precisely the same process as the learning of a first, of one's own "mother-tongue."

(Whitney 1875: 24)

So learning of a second language is, like that of a mother tongue, to memorize words, which do not have a natural and necessary relation to concepts they signify, that is, words, which are arbitrary and conventional:

It [the learning of a second language] is the memorizing of a certain body of signs for conceptions and their relations, used in a certain community, existing or extinct—signs which have no more natural and necessary connection with the conceptions they indicate than our own have, but are equally arbitrary and conventional with the latter; [...]

(Whitney 1875: 24)

Since learning of a second language is, for Whitney, the same as that of a first language, or a mother tongue, what is mentioned about the former is true of the latter. After all, whether a first language, or a mother tongue or a second language,

learning of language is to memorize words, whose connection with concepts is arbitrary and conventional. Therefore, we acquire a second language through various factors. Sometimes a second language becomes even dominant over a mother tongue:

[...]; and of which [a second language] we make ourselves masters to a degree dependent only on our opportunities, our capacity, our industry, and the length of time devoted to the work; even coming to substitute, if circumstances favor, the second language in our constant and ready use, and to become unfamiliar with and forget its predecessor [a first language]. (Whitney 1875: 24-25)

Moreover, the process of language learning is never-ending because language is learned:

We realize better in the case of a second or “foreign,” than in that of a first or “native” language, that the process of acquisition is a never-ending one; but it is not more true of the one than of the other.

(Whitney 1875: 25)

It is because children’s acquisition of language just means that they learn a limited number of words:

We say, to be sure, of a child who has reached a certain grade that he “has learned to speak;” but we mean by this only that he has acquired a limited number of signs, sufficient for the ordinary purposes of the childish life, together with the power, by much practice, of wielding them with adroitness and general correctness. (Whitney 1875: 25)

As we have seen, language acquisition means, for Whitney, learning of words. In this respect, his idea is similar to Saussure’s but different from Chomsky’s, which assumes that language learning is acquisition of syntax and it ends after parameter-settings of Universal Grammar while language learning is endless for Whitney. Since the number of children’s vocabulary, at most, is limited to about hundreds or so, outside the community to which they belong, the children’s target language, for example, English is thought to be unknown for them to the extent that

German, Chinese, and Choctaw are for them:

There are, probably, only a few hundred such signs, all told; and outside their circle, the English is as much an unknown language to the child as is German, or Chinese, or Choctaw. (Whitney 1875: 25)

As time goes by, children gradually acquire more and more words:

As he grows older, as his powers develop and his knowledge increases, he acquires more and more; and in different departments, according to circumstances. (Whitney 1875: 25)

Thus, a first language, or a mother tongue is acquired through listening, reading, and learning. This is generally true of acquiring a foreign language:

Nowhere more clearly than here does it appear that one gets his language by a process of learning, and only thus; for all this gradual increase of one’s linguistic resources goes on in the most openly external fashion, by dint of hearing and reading and study; and it is obviously only a continuation, under somewhat changed circumstances, of the process of acquisition of the first nucleus; while the whole is parallel to the beginning and growth of one’s command of a “foreign” tongue. (Whitney 1875: 26)

For both Saussure and Whitney, children acquire language through learning.

5. Linguistics and psychology

5.1. Signs are not the object of psychology

Signifiés separated from *signifiants*, Saussure insists, are no longer the object of linguistics but that of psychology:

If you consider the various concepts (love, see, house) in themselves, apart from their representation, a representing sign, they are a series of psychological objects. In the psychological domain, you can say that it is a complex unit. The concept must be only the value of an acoustic image if it is to belong to the linguistic domain. Or else, if you bring it [the con-

cept] into the linguistic domain, it is an abstraction.
(Saussure 1993: 79a)

The object of linguistics is, Saussure explains, an entity in which a *signifié* and a *signifiant* are combined together, using H₂O, which is a compound of hydrogen and oxygen:

You could compare the linguistic entity to a composite chemical substance, such as water, where there is Hydrogen and Oxygen (H₂O). Clearly, if in chemistry the elements Hydrogen and Oxygen are separated, you still remain within the domain of chemistry. But, on the contrary, if you decompose linguistic water [*signe*] by removing the Hydrogen [*signifié* or *signifiant*] or the Oxygen [*signifié* or *signifiant*] you are no longer within the linguistic domain (there is no longer a linguistic entity). Only as long as the association remains are we dealing with a concrete linguistic object. (Saussure 1993: 80a)

5.2. Linguistics is not a part of psychology

It is wrong, Whitney insists, to think that linguistics is a part of psychology and to put the former in a framework of the latter and to study the former in a method of the latter:

And this is most of all the case with regard to language; for language is in an especial manner the incorporation and revelation of the acts of the soul. Out of this relation has grown the error of those who look upon linguistic science as a branch of psychology, would force it into a psychologic mould and conduct it by psychologic methods: an error which is so refuted by the whole view we have taken of language and its history, that we do not need to spend any more words upon it here. (Whitney 1875: 303-304)

In other words, language is a tool for producing internal force and what is produced as a result. By language, internal consciousness is externalized:

Language is merely that product and instrumentality of the inner powers which exhibits them most directly and most fully in their various modes of action; by which, so far as the case admits, our inner

consciousness is externalized, turned up to the light for ourselves and others to see and study.
(Whitney 1875: 304)

Therefore, Whitney insists that language is not the object of psychology because language itself is not the human mind or soul. Both Saussure and Whitney claim that linguistics is not psychology or part of it although their reasons for their claims are different from each other.

6. Relation between *signifiants* and *signifiés*

6.1. *Signifiants* and *signifiés* emerge simultaneously

According to Saussure, if we did not have our *langue*, our ideas would not exist except in the indefinite form, or we could not clearly distinguish two ideas:

Psychologically, what are our ideas, apart from our language [*langue*]? They probably do not exist. Or in a form that may be described as amorphous. We should probably be unable according to philosophers and linguists to distinguish two ideas clearly without the help of a language [*langue*] (internal language [*langue*] naturally).

(Saussure 1993: 137a-138a)

Therefore, there are no various ideas in advance and there is nothing distinct in our thought prior to linguistic signs, either:

Consequently, in itself, the purely conceptual mass of our ideas, the mass separated from the language [*langue*], is like a kind of shapeless nebula, in which it is impossible to distinguish anything initially. The same goes, then, for the language [*langue*]: the different ideas represent nothing pre-existing. There are no: a) ideas already established and quite distinct from one another, b) signs for these ideas. But there is nothing at all distinct in thought before the linguistic sign. This is the main thing.

(Saussure 1993: 138a)

Thus, ideas would not have any distinct unit without a *langue*. On the other hand, neither would sounds which are linked to ideas:

On the other hand, it is also worth asking if, beside this entirely indistinct realm of ideas, the realm of sound offers in advance quite distinct ideas (taken in itself apart from the idea). There are no distinct units of sound either, delimited in advance.

(Saussure 1993: 138a)

If both ideas and sounds, as Saussure insists, do not exist without a *langue*, then how will linguistic signs come into being? Linguistic signs emerge as a relation between ideas and sounds after a *langue* divides both a mass of idea and a mass of sound at the same time:

But the signifying and signified elements [*signifiants* and *signifiés*] contract a bond in virtue of the determinate values that are engendered by the combination of such and such acoustic signs with such and such cuts that can be made in the mass.

(Saussure 1993: 139a)

If Saussure is right, it does not follow that first of all, ideas exist and then sounds, which correspond to ideas, are combined with ideas. Linguistic signs appear when ideas and sounds emerge and combine together at the same time. This process is described as being “mysterious” and compared to the waves as the contact of air with water:

The characteristic role of a language in relation to thought is not to supply the material phonetic means by which ideas may be expressed. It is to act as intermediary between thought and sound, in such a way that the combination of both necessarily produces a mutually complementary delimitation of units. Thought, chaotic by nature, is made precise by this process of segmentation. But what happens is neither a transformation of thoughts into matter, nor a transformation of sounds into ideas. What takes place, is a somewhat mysterious process by which ‘thought-sound’ evolves divisions, and a language takes shape with its linguistic units in between those two amorphous masses. One might think of it as being like air in contact with water: changes in atmospheric pressure break up the surface of the water into series of divisions, i.e. waves. The correlation

between thought and sound, and the union of the two, is like that. (Saussure 1983: 110-111)

If Saussure is right, it does not follow that an idea exists first and then a sound, which corresponds to it, is combined with the idea.

6.2. Ideas come first, then words follow them

Whitney insists that ideas come first and then names for them follow:

First, there is always and everywhere an antecedency of the conception to the expression. In common phrase, we first have our idea, and then get a name for it. (Whitney 1875: 137)

For example, when a certain kind of colour, red is produced, a word *magenta* is coined through a completely conscious process:

When a certain new shade of red had been produced by the creative ingenuity of modern chemistry, the next thing was to give it a name; and *magenta* was matched upon, by a perfectly conscious process, (Whitney 1875: 138)

The denial of this idea leads to a paradox that planets, plants, and animals do not exist until they are named and that babies are not born until they are baptized, either:

This is so palpably true of all the more reflective processes that no one would think of denying it; to do so would be to maintain that the planet, or plant, or animal, could not be found and recognized as something yet unnamed until a title had been selected and made ready for clapping upon it; that the child could not be born until the christening bowl was ready. (Whitney 1875: 137)

Moreover, the thought that ideas cannot exist without words which represent them, is an indefensible paradox except that it is based on misunderstanding or false arguments:

The doctrine that a conception is impossible

without a word to express it is an indefensible paradox—indefensible, that is to say, except by misapprehensions and false arguments.

(Whitney 1875: 139)

Whitney thinks that it is ridiculous for names to exist before things they express or to insist that ideas do not exist if words for them are not present:

Every idea had its distinct existence before it received its distinctive sign; the thought is anterior to the language by which it is represented. To maintain the opposite, to hold that the sign exists before the thing signified, or that a conception cannot be entertained without the support of a word, would be the sheerest folly;

(Whitney 1867: 125)

For Whitney, it is impossible to claim that ideas and words for them emerge at the same time:

We always make a new word, or bestow upon an old word a new meaning, because we have an idea that wants a sign. To maintain that the idea waits for its generation until the sign is ready, or that the generation of the idea and of the sign is a simple and indivisible process, is much the same thing as to hold, since infants cannot thrive in this climate without clothing and shelter, that no child is or can be born until a *layette* and a nursery are ready for its use, or that along with each child are born its swaddling-clothes and a cradle!

(Whitney 1876: 412)

According to Whitney, an idea for a word is floating as something ambiguous in a community. Then, someone clearly grasps the idea and names it. Eventually the idea also takes some kind of form in the minds of other members in the community although it is delusive:

[...]; it [an idea] floats obscurely in the mind of the community until some one grasps it clearly enough to give it a name; and it at once takes shape (perhaps only a delusive shape), after his example, in the minds of others.

(Whitney 1875: 139)

As we have seen, Whitney insists that ideas ap-

pear first and then words for them follow. This is completely different from Saussure's thought that ideas and sounds emerge at the same time. According to Saussure, if an idea existed before a sign, then every language would have the same idea for the sign. But this is not the case:

If ideas were predetermined in the human mind before being linguistic values, one thing that would necessarily happen is that terms would correspond exactly as between one language and another.

French	German
<i>cher</i> ['dear']	<i>lieb, teuer</i> (also moral)

There is no exact correspondence.

<i>juger, estimer</i>	<i>urteilen, erachten</i>
['judge, estimate']	have a set of meanings only partly coinciding with French <i>juger, estimer</i>

We see that in advance of the language [*langue*] there is nothing which is the notion 'cher' in itself.

(Saussure 1993: 139a)

Here, it may be thought that Saussure denies Chomsky's and Descartes's idea that children are born with a list of ideas. Phonemes do not exist in advance of concepts. Saussure also denies an idea that phonemes are universal across languages. Therefore, every language has its own concepts and phonemes, which vary from language to language.

7. Relation between synchrony and diachrony

7.1. Synchrony takes priority over diachrony

Saussure explains the difference between a synchronic point of view and a diachronic point of view, using mountain climbing:

The observer [the mountain climber] placed at a fixed, determinate point is the speaker, or the linguist taking his place. If you imagine a moving observer, going the whole way from Reculet to Chasseral the movement of the drawing the changing relations of the mountains will represent historical change, evolution. But it is clear that in order to draw this panorama you must focus on a certain state. You cannot make use of the language except in a state.

(Saussure 1993: 107a)

A diachronic point of view is like a viewpoint of a mountain climber who is moving from one mountain to the other, for example, from Mt. Reculet to Mt. Chasseral. So the changing landscapes or the changing relations of the mountains correspond to historical changes of a language. In order to describe the whole scenes or historical changes of the language, the mountain climber or a linguist must place himself or herself at a certain fixed point or a certain state of the language. Moreover, the difference between synchrony and diachrony is also illustrated as that between a horizontal section and a vertical section of plants:

If we take a horizontal section of certain plants, we discover a more or less complex pattern. This pattern is nothing other than a certain perspective, a certain view of the vertical fibres to be seen by taking another section, the vertical section. The two are interdependent. The horizontal section is determined by what there is in the vertical direction, but this view is a fact which is independent of the one given by the vertical development through the fact that horizontal section already creates unity of relations between what is on the left and what is on the right. These [relations] alone, apart from anything else, confer unity. The two things are independent. These sections may be called: synchronic section and diachronic section. (Saussure 1993: 124a)

A horizontal section of plants corresponds to synchrony and a vertical section to diachrony. Then, which one of the two takes precedence over the other, synchrony or diachrony?

Which is the more important, which may be considered as taking priority? Carrying the image over into linguistics, it is the horizontal slice which takes priority because one speaks in the horizontal slice. Every horizontal slice is a state which is used for speech. The vertical section will be considered only by the linguist. (Saussure 1993: 124a-125a)

According to Saussure, synchrony takes priority

over diachrony, because actual speech is carried out only in synchrony. Diachrony is nothing but an object only for linguists. As we have seen so far, synchrony and diachrony are totally different from each other and they do not have anything in common:

No synchronic phenomenon has anything in common with any diachronic phenomenon. One is a relationship between simultaneous elements, and the other a substitution of one element for another in time, that is to say an event. We shall also see that diachronic identities and synchronic identities are two very different things. (Saussure 1983: 90)

Synchrony is a system of relationship between *signes*, or a system of *valeur*. Diachrony is a change of one *signe* into the other in time. As an example to show the difference of two points of view, synchrony and diachrony, Saussure takes up the word *pas* in modern French. *Pas* is both the negative particle *pas* (not) and a noun *pas* (pace or step):

Historically, the French negative particle *pas* is the same as the noun *pas* ('pace'), whereas in modern French these two units are entirely separate. Realising these facts should be sufficient to bring home the necessity of not confusing the two points of view [synchrony and diachrony]. (Saussure 1983: 90)

The negative particle *pas* in *Je n'irai pas* (I will not go) is originally derived from a noun *pas* in *Je ne ferai un pas* (I will not take a step). Saussure says that the negative particle *pas* and a noun *pas* is one and the same word from a diachronic point of view. In modern French, however, the negative particle *pas* and a noun *pas* are quite different words. In other words, these two words are not the same as each other from a synchronic point of view or for speakers of modern French. Thus, for Saussure, it is absolutely crucial not to confuse the two points of view, synchrony and diachrony.

7.2. Linguistics is a historical science

Whitney insists that we must date back to the past in order to understand the present state of a language:

If we would understand anything which has *become* what it is, a knowledge of its present constitution is not enough: we must follow it backward from stage to stage, tracing out the phases it has assumed, and the causes which have determined the transition of one into the other. (Whitney 1867:54)

This corresponds to the diachronic point of view explained by Saussure. Then, what does Whitney think of a synchronic point of view?

Merely to classify, arrange, and set forth in order the phenomena of a spoken tongue, its significant material, usages and modes of expression, is grammar and lexicography, not linguistic science. The former state and prescribe only; the latter seeks to explain. (Whitney 1867: 54)

Whitney insists that grammar, which corresponds to Saussure's synchrony, is not linguistic science. By contrast, Saussure is sure that historical studies of language, which correspond to Whitney's linguistic science, are not linguistics. Saussure and Whitney are totally opposed to each other in this respect. Moreover, as we have seen, Saussure claims that a synchronic point of view takes priority over a diachronic point of view, but on the contrary, Whitney argues that for linguistics as a historical science, historical studies of language are more important than grammar, or the study of language in the present state:

[...] to declare that the true and fruitful field for linguistic research is the living and spoken dialects of the present day, is not less narrow and erroneous. It overlooks the character of linguistics as a historical science; it forgets that the explanation of the present is by the past, and that the record of by-gone conditions casts on existing conditions a light that nothing else could yield. (Whitney 1875: 190)

For Whitney, a synchronic point of view is not enough. Because it misses the nature of linguistics as a historical science and it does not understand that the past explains the present state of language and that considering the past enables us to grasp the pres-

ent. Rather, Whitney insists that a diachronic point of view is the subject matter of linguistic science, which is not compatible with Saussure's thought that a synchronic point of view is nothing but a theme of linguistics. As is well known, Saussure starts his research as an Indo-European philologist who is concerned with comparative and historical studies. Late in life, however, he declares that synchronic linguistics, which studies a language system at a given time, is what linguistics tries to seek, but that diachronic linguistics, which historically studies a language, is not, in the lecture "Course in General Linguistics" given at University of Geneva. Considering the historical background above, we can clearly realize that Whitney's thought that the study of language is concerned with historical studies of language and that grammar is not linguistics, corresponds to the methodology of linguistic enquiry which Saussure criticizes more than once in "Course in General Linguistics."

Conclusion

So far we have considered both Whitney's and Saussure's similarities and differences, comparing and contrasting their views of language. There are not only a lot of common ideas of language but also completely different ones between the two linguists. Some researchers (for example, Geoffrey Sampson) insist that Durkheim has considerable influence upon Saussure's idea of language. However, Whitney's influence on Saussure is much wider than Durkheim's. On the other hand, other researchers (for example, Koerner) say that it is Saussure's achievements that he has systematized Whitney's view of language. But is it Saussure's creativity that he has formulated his own ideas of language which are different from Whitney's? Of course, it cannot be denied that Durkheim has some influence on Saussure's idea of language.

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