TRAVAUX DES COLLOQUES

LE COURS DE LINGUISTIQUE GÉNÉRALE, 1916-2016.

L'ÉMERGENCE, LE DEVENIR

Saloua CHATTI, « On the Asymmetry Between the Four Corners of the Square »

Pour consulter le programme complet de l'atelier de Jean-Yves Beziau,

The Arbitrariness of the Sign :

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On the Asymmetry between the Four Corners of the Square
Saloua Chatti

ABSTRACT. As is well known, the three first corners of the square of opposition, i.e. **A**, **E**, and **I**, are expressed by single words, in English, French and other Indo-European languages, whether the square is quantified, modal, temporal, or deontic, while **O** is expressed by two words, and is not lexicalized. This has given rise to the following question: why is the **O** corner always expressed in a complex way in these languages? Why isn't it lexicalized? Some people such as Laurence Horn, for instance, provide solutions based on the meaning of **O** and its intimate link with **I**, which makes it more complex than **E** and justifies the asymmetry. However, in Arabic, there is no asymmetry, given that the two negatives are expressed by groups of words, while the affirmatives are expressed by single words. This feature gives rise to a different problem, related rather to the **E** corner, which can be raised as follows: Given that **E** is as complex as **O**, being negative *and* quantified, why is it expressed in the Indo-European languages by a single word rather than a group of words? In this paper, I answer this question by making use of Saussure's *Course in General Linguistics*, and by applying the concepts of agglutination and analogy, introduced by Saussure in this text, to the expressions corresponding to the corners of the quantified, modal, temporal and deontic squares of oppositions. This relativizes the singularity of **O**, and confirms the arbitrariness of the sign by showing the differences of functioning between these various languages.

1. Introduction

The square of opposition has four corners, which are **A**, **E**, **I** and **O**, in the quantificational case and their correspondents in all other cases. The quantified corners are expressed in English as follows: **A**: Every (all), **E**: None, **I**: Some, **O**: *Not all*, and in French as follows: **A**: Tout, **E**: Aucun, **I**: Quelques, **O**: *Pas tous* (*Quelques… non*). These expressions show an asymmetry between the four corners, for **O** is expressed in a complex way, while the three other corners are expressed by single words. In the other cases, we find the same asymmetry. This asymmetry raises the following problem: Why is **O** always expressed in a complex way while **E**, which is also negative and quantified, is expressed by a single word?

Many solutions have been proposed by logicians and linguists, such as Laurence Horn, Dany Jaspers, Jean-Yves Beziau etc…. These solutions focus on the specific and complex meaning of **O** in the ordinary languages which makes it different from **E**.

However, in Arabic we don't find such an asymmetry, for **E** and **O** are both expressed in complex ways in most cases. So the problem becomes related to the **E** corner rather than the **O** one, and can be raised as follows: Given that **E** contains the negation plus something else, why is it expressed in Indo-European languages by a single word rather than a complex one?

In answering this question, I will use some concepts introduced by Ferdinand de Saussure, such as agglutination and analogy. These concepts explain why some words are constructed starting from disparate elements, which enables them express complex ideas by a single item. I will apply these concepts to the four corners of the square starting from their original elements. However, these concepts are not applicable in the same way to the Arabic language, whose functioning is not similar to that of French and English, for instance. This difference corroborates once again the arbitrariness of the sign stressed by Ferdinand de Saussure.

2. **The expressions of the corners of the square in the four cases**
  The quantified corners are expressed in English as follows:
  A: Every (all), **E**: None, **I**: Some, **O**: *Not all*
We find in that language the same asymmetry in the three other squares. Thus:
    - in the modal square:
  A: Necessary, **E**: Impossible, **I**: Possible, **O**: *Not necessary*
    - in the temporal square:
  A: Always, **E**: Never, **I**: Sometimes, **O**: *Not always*
    - and in the deontic square:
  A: Obligatory, **E**: Prohibited, **I**: Permitted, **O**: *Not obligatory*

  In French, the same phenomenon can be observed for the four corners in all cases as appears below. So in the quantificational case, we have the following:
  A: Tout, **E**: Aucun (or Nul), **I**: Quelques, **O**: *Pas tous* (*Quelques… non*)
    - In the modal case:
  A: Nécessaire, **E**: Impossible, **I**: Possible, **O**: *Non nécessaire*
    - In the temporal case:
  A: Toujours, **E**: Jamais, **I**: Parfois, **O**: *Pas toujours*
    - And in the deontic case:

A: Obligatoiire, **E**: Interdit, **I**: Permis, **O**: *Non obligatoire*

  To solve this problem of asymmetry, many linguists and logicians rely on the ambiguous meaning of the negative particular **O**. For instance, Horn following Blanché (1969), says that "The use of either of the subcontraries (the I or the O value) tends to implicate the other… " [Horn 2001, p. 255], for "If I say (in a neutral context) that some are, you will infer that some are not (= not all are), and vice versa" [Horn 2001, p. 255]. As a consequence, he notes that "a language conforming to the account of the subcontraries I have drawn here does not essentially need separate lexicalizations for both subcontraries" [Horn 2001, p. 255, emphasis added]. However, although **I** and **O** imply each other, **I** (unlike **O**) is lexicalized when it is "the subaltern of **A**" [Horn 2001, p. 255], **A** being always lexicalized, but **E** only often. This equivalence between **I** and **O**, however, does not exclude a pragmatic difference between them. For if one wants to deny the sentence: "All your friends came", one would say: No "some of them did not", while the denial of the sentence "None of your friends came" is rather: No, "some of them came" [Horn, 2001, p. 255]. So even in the ordinary language, **I** is the contradictory of **E**, while **O** is the contradictory of **A**; therefore they are not exactly equivalent.

As to Blanché, he also notices the absence of lexicalization of **O** by saying that the ordinary language (French, here) has only three simple words: "tout, nul et quelque" [Blanché 1969, p. 35]. But he says that the particular has three distinct meanings: the existential **I**, the restrictive **O** and the neutral (**I** ∧ **O**) meanings [Blanché 1969, p. 36], which should all be taken into account.

According to Blanché, the absence of lexicalization of **O** does not mean that **I** is more natural than **O**. On the contrary, **I**, despite its logical simplicity is semantically confused, for it does not express the whole meaning of the particular. In the ordinary languages (French and Latin, for instance), "quelque" and its corollary "*aliquis*" have in the same time an existential *and* a restrictive meaning [Blanché, 1969, p. 36]. It is often opposed to 'all' rather than to 'none', for instance, the sentence "Il reste quelques places disponibles" means that there are only some places, which indicates that "Some", here, has its restrictive meaning, i.e. it means "not many" rather than "one or more", which is its technical and usual meaning in logic. So the real particular of the ordinary languages is expressed by '**I** and **O**'. When one adds this particular to the square one gets a hexagon, which is precisely the figure that Blanché has discovered and focused on in his analyses of the logical oppositions. This hexagon contains the three kinds of particulars **I**, **O**, and **I** and **O**, and their respective contradictories, which are **E**, **A** and **A** ∨ **E**. It also contains one triangle of contrariety (**A**, **E** and '**I** ∧ **O**'), plus one triangle of subcontrariety (**I**, **O**, and '**A** ∨ **E**'). These triangles are related to each other by the subalternations and the contradictions. The hexagon applies to the modal concepts such as necessary, impossible, and possible, for **O** expresses the non-necessary, while '**I** and **O**' expresses the bilateral kind of possibility.

This view on the modal hexagon has been endorsed by Jean-Yves Beziau, who uses it [Beziau 2003, p. 218] to distinguish between three kinds of negations: classical, paracomplete and paraconsistent. In his view, the classical negation expresses contradiction (= never true nor false together), while the paracomplete negation expresses contrariety (= possibly false together but never true together) and the (proper) paraconsistent one expresses subcontrariety (= possibly true together, but never false together). So, **O** (that is '~□' in the modal hexagon) is what represents the proper paraconsistent negation, since its relation with its correspondent affirmative is subcontrariety [Beziau 2003, p. 223].

Nevertheless, the **O** corner is not considered as unnatural in this view, despite the absence of lexicalization. On the contrary, Beziau says that "The Square seems more natural if we observe that the **O**-corner can be interpreted as a paraconsistent negation" [Beziau 2003, p. 222]. For the fundamental concept is the concept of opposition, given that "the background of negation is opposition" [Beziau 2003, p. 223]. So, all kinds of oppositions are comparable and each is just as natural as all others.

As to the temporal and the deontic concepts, they also are expressible by means of a hexagon, which includes "sometimes but not always" in the first case and "permitted but not obligatory" in the second one, and their contradictories. For "sometimes" has very often its restrictive or its bilateral meanings in ordinary language, and "permitted" is often understood in its bilateral meaning. For instance, when one reads in a restaurant "It is permitted to smoke" [Blanché 1969, p. 96], this does not mean that "It is forbidden not to smoke". Rather

what it means is that smoking is not forbidden in that particular place, unlike what may happen in other ones.

If one uses the word 'permitted' in some other contexts, such as the following sentence "It is permitted to respect the life of other people" [Blanché 1969, p. 96], the word "permitted" sounds oddly, because it is obligatory to respect the life of other people, not only permitted. So the subalternation "obligatory implies permitted" is not always natural, although it is logically valid, because the ordinary uses of 'permitted' are very often bilateral, i.e. "permitted but not obligatory". So we can say that the sentence above sounds oddly because the word "permitted" is most of the time, if not all the time, used in its bilateral meaning and not in its unilateral affirmative meaning. Let us now turn to the analysis of the corners of these different squares in the Arabic language.

3. The absence of asymmetry in the Arabic language and its justification

As we said above, in Arabic, there is no asymmetry, because both negative corners are complex and expressed by two linguistic items. These corners are expressed by several items in the four cases considered:

- In the quantified case:

A: *Kull*, **E**: *Lā aḥada*, **I**: *Baʿḍ*, **O**: *Laysa Kull*

- In the modal case:

A: *Wājib* (= *Ḍarūrī*), **E**: *Laysa Mumkinan* (= *Mumtanaʿ*), **I**: *Mumkin*, **O**: *Ghair ḍarūrī*

- In the temporal case:

A: *Dāʾiman*, **E**: *Laysa al battata*, **I**: *Aḥyānan*, **O**: *Laysa Dāʾiman*

- In the deontic case:

A: *Mūjib* (*Lāzim*), **E**: *Mamnūʿ* (= *ghair jāʾiz*), **I**: *Jāʾiz*, **O**: *Ghair mūjib* (*ghair lāzim*)

As we can see, the Arabic expressions of **E** and **O** are both complex especially in the quantified and the temporal cases, unlike those of the Indo-European languages. However, in the modal and the deontic cases, we find single items to express **E**, even in Arabic. These items are: "*mumtanaʿ*" (modal **E**) and "*mamnūʿ*" (deontic **E**); they both are adjectives coming from the same root, which is the verb "*manaʿa*", which means "to forbid". This verb expresses the idea of prohibition, either natural or human. So there is no need to add a further word to express the negation.

In English and French, the same thing happens in the deontic case, for the adjectives "prohibited" in English and "interdit" in French express clearly and directly the idea of prohibition, which is intrinsically negative. But in the modal case, the words expressing **E** contain a negative prefix, which is "im", because it is the simplest and perhaps the only way to introduce the negation.

However, in Arabic too, the particulars are complex, for "*baʿḍ*" in the ordinary language, means also "some but not all". The same holds for "*aḥyānan*" (= sometimes), which presupposes "sometimes but not always" in its usual acceptation. The modal particular "*mumkin*" also means "possible but not necessary" in everyday life and in logic. For in al-Fārābī's and Avicenna's theories this bilateral meaning is considered as the authentic or real meaning of possibility. As to the deontic particular "*jāʾiz*", it is also complex, because it excludes both obligation and prohibition.

The difference between Arabic and western Indo-European languages has to do with the expression of **E**. For in classical Arabic, there are no negative prefixes, the only potential prefix being the particle "*lā*" (or "*mā*"), which can be used as a prefix (in modern times especially), e.g. to translate a word such as "irrational" (= *lā-maʿqūl*). But this use is far from its unique one, nor even its most frequent one. On the contrary, it can be considered as a very seldom use of the particle "*lā*" both in ordinary life, in literature and in sciences, including logic. So we can say that the Arabic language does not make much use of prefixes.

This is so because, in the Arabic's functioning, all words are constructed starting from a root, which leads to other words having different structures. For instance, starting from the root "*kataba*" (= to write), we may construct different items, such as "*kitābun*" (book), "*kātibun*" (= writer), "*kitābatun*" (= writing), "*kuttābun*" (= writers), "*maktabatun*" (= library), "*maktūbun*" (= letter, or in general, something written), "*takātaba*" (to write to each other, to correspond), "*maktabun*" (= office), etc…But nobody says "*lā-kātibun*", for instance, to talk about someone who is not able to write, for this is not one of the structures usually admitted in grammar.

This contrasts with French, where the word "analphabète", for instance, means (literally): who does not know the alphabet, "an" being a negative prefix. In Arabic, "analphabète" (= "illiterate", in English) is expressed by the word "*ummīyun*" (= not able to write nor to read), which does not contain any prefix. Unlike the Arabic word, both the French word "analphabète" and the English word "illiterate" contain prefixes ("an" and "il" respectively).

However, in Arabic there are also roots that have an intrinsic negative meaning, such as the roots "*manaʿa*" (to prohibit), "*jahala*" (to ignore), "*ghāba*" (to absent oneself, "s'absenter" in French), etc… These words (or verbs) are also combined in the same ways as the other ones, which leads to the **E** vertices of the modal and the deontic squares, given that "*mumtanaʿ*" expresses the modal **E** and means "naturally prohibited", while *mamnūʿ* expresses the deontic **E** and means "legally prohibited".

But why isn't the **O** corner expressed by this kind of intrinsically negative words? We may answer by considering the following hypotheses:

1. **O** is more complex than **E**, because it is mixed with **I**, in Arabic too.
2. **O** is a particular, which means that the prohibition would be partial.

But is there any partial prohibition, i.e. something that would be half prohibited and half permitted? This seems very unlikely and means that **O** is less susceptible to be expressed by a single item than **E**, which contains an absolute and simple prohibition.

Anyway, in Arabic, the **E** and **O** vertices are both complex in the quantificational and temporal squares, even if in the modal and the deontic squares, the intrinsic negative words make it possible to express **E** by a single item. This is so because **E** contains, in all cases, the negation plus something else. So, it is, in some way, complex.

The problem is then the following: given this complexity, why is it expressed by a single word in French and English, among others? To answer this question, we have to reconsider the usual words expressing **E** in these two languages. We will do so by considering the processes that Ferdinand de Saussure analyses in his seminal book "The Course of General Linguistics", namely the processes of agglutination and analogy. Let us introduce these concepts and see how Saussure defines them and how they can be applied to the cases of the **E**-corners of the squares.

4. Saussure's concepts of agglutination and analogy

In order to analyse the concepts of agglutination and analogy and to apply them to the **E**-corners of the different squares, let us first recall the expressions of these **E**-corners in French and English. The English and French words corresponding to the **E**-corners are the following:
- "Aucun" or "nul" (quantificational **E**), "Jamais" (temporal **E**), "Impossible" (modal **E**) and "Interdit" (deontic **E**), in French.
- "None" (quantificational **E**), "Never" (temporal **E**), "Impossible" (modal **E**), and "Prohibited" (deontic **E**), in English.

In order to understand how these words have been constructed, we may consider the processes which Saussure analyzes in the *Course of General Linguistics* and calls "agglutination" and "analogy".

According to Saussure, many linguistic simple items are constructed by agglutination. Agglutination is a way of sticking together two initially independent words, which leads to a single one [Saussure, 1967, p. 242]. It occurs when the two original words are often used together in ordinary sentences and in everyday life [Saussure, 1967, p. 242]. For instance, the word "Toujours" in French is produced by agglutination from the two words "tous" and "jours", literally "all days". So people say "toujours" instead of saying "tous jours" (= tous les jours). According to Saussure, it is because people have seen "one simple idea" in the meaning of the word that they have created a simple word (Saussure, 1967, p. 243]. Agglutination is a process that occurs spontaneously without any previous decision. "It occurs by itself" [Elle se fait d'elle-même]" says Saussure [Saussure, 1967, p. 243] and it is a mechanical process [Saussure, 1967, p. 244]. Thus, when one finds "a simple element which was previously composed of two or more elements, then we are in front of an agglutination" [Saussure, 1967, p. 245, my translation].

On the contrary, analogy is a process which "supposes analyses and combinations, (…) an intention" [Saussure, 1967, p. 244, my translation]. It is a way of constructing a word by imitating the structure of other ones, according to "a determined rule" [Saussure, 1967, p. 221]. Analogy is comparable to the mathematical calculus of the "fourth proportional" (quatrième proportionnelle) [Saussure, 1967, p. 222]. For instance, we may create the word "réactionnaire" by analogy by using the following analogy: "pension / pensionnaire"; therefore "réaction / réactionnaire" [Saussure, 1967, p. 225].

In the same way, by analogy, one may add prefixes or suffixes to some already existent words. For instance, from the word "connu", we can have "in-connu", exactly like from "sensé" we have "in-sensé" by adding the prefix "in" [Saussure, 1967, p. 227]. One can also add the suffix "able", to get the word "pardonnable" in the model of "mani-able" by using the following analogy: "manier / maniable", therefore "pardonner / pardonnable".

However, not all analogies are admitted in language, for Saussure notices that infants may create all kinds of words by analogy, but these words are not retained by other people. For instance, the (pseudo) verb "viendre" may come from the following analogy: "éteindrai : éteindre = viendrai : x. x = viendre" [Saussure, 1967, p. 231]. But "viendre" is not grammatically correct and has never been admitted in French.

So analogy is a complex and sophisticated process whose results must be accepted by all the linguistic community, but are not always predictable, given that some very admissible words produced by analogy can be rejected by the linguistic community. A word produced by analogy must be accepted by all people to become part of the language. Saussure describes in the CLG the linguistic process which leads to the admission of such a word. This process includes the following steps:

1. One speaker creates the word by analogy

2. Other people imitate him

3. These people repeat the word several times

4. Then the word enters the language and is regularly used [Saussure, 1967, p. 231]

So the word is admitted only if all the speakers of some language accept it and use it regularly. As a consequence, the new words produced by analogy must be confirmed by imitation and repetition, in order to be admitted by all the speakers. Analogy is thus confirmed by a social process.

Now, how can we apply these concepts and processes to the **E**-corners of the squares? This will be the subject of the next section.

5. Application of these concepts to the corners of the squares

Let us start by the French expressions of these corners, i.e. the following: "Aucun" (or "nul"), "Jamais", "Impossible" and "Interdit".

"Aucun" comes from two Latin words: "*aliquis*", which means "quelque" in French (some in English) and "*unus*" (which means "un" = one). Originally, it is thus complex, since it combines two distinct words. According to some historians, the passage from the Latin "*aliquis unus*" to the French "aucun" followed the following (probable) steps:

"1. aliquis unus (classical Latin)

2. aliquunus (popular Latin)

3. alicunus

4. alcunus

5. alcun (French, Xth century)

6. aucun (French, XIIIth century)" [*Druide*, 2008, numerals added].

As we can see, step 2 is a kind of agglutination, since two words are grouped into a single one. The other steps are simplifications of the word thus produced, which, as the author of this hypothesis assumes and claims, took much time (many centuries) to produce the final French result. The agglutination happened precisely when Latin became spoken, since the author says "popular Latin" when dating the period where the word appeared.

Note that "aucun" has a negative meaning only when one adds the negative particle "ne" (or "sans" in some cases). With this particle, it means "pas un" (no one) and is equivalent to "nul" (= "*nullus*" in Latin), which is naturally and intrinsically negative.

As to "jamais", it comes from "ja", from the Latin "*jam*" (= déjà) and "mais", from the Latin "*magis*" (= plus) [*Le Robert*, 2015]. Here too, two words are combined and joined together. These words express the continuity in time ("now" and "more or after"). When one adds the negation "ne", the meaning becomes negative and indicates "a continuity in the absence", expressed by "en nul temps" (= in no time). The process looks then like an agglutination, given that "ja" and "mais" are just stuck together to become one unique word.

The passage from Latin to French may have followed several simplification steps as with the word "aucun".

The third word is "Impossible". This contains the adjective "possible" plus the negative prefix "im" and has most probably been constructed by analogy with other words containing the same prefix. As to the word "Interdit", it comes from the Latin "*interdictum*", itself coming from "*interdicere*". Here, from the start we have a single linguistic item. But this item has an already negative meaning, as was the case with the Arabic "*manaʿa*".

What about the English words? The first one is 'None'. This means "No one", i.e. the negative particle plus the word "one". The grouping of these two words into "None" may also be seen as a kind of agglutination. However, since the vowel "o" is repeated twice, the grouping eliminated one of its occurrences, probably for more simplicity.

The same may be said about the second English word "Never". For "Never" means 'No ever' or 'Not *ever', i.e. the negative particle 'no' or 'not' plus the word 'ever' (= at any time)* [Douglas Harper, 2017]. The grouping of these two words seems also to be a kind of agglutination, which eliminates one of the vowels and simplifies the pronunciation.

As to 'prohibited', it has a Latin origin, for it comes from the Latin 'prohibitionem' and 'prohibitio', through the old French word 'prohibition'. This word contains "*pro*" (= away, forth) and "*habere*" (= to hold) [Douglas Harper, 2017]. The whole meaning is thus merely negative. But the word seems to be the result of a grouping and agglutination. So these Saussurian processes seem to explain the existence of single items in the **E**-corners of the different squares.

But why don't these processes apply to the **O**-corners of the squares? Why don't we have, for instance, "nall" instead of "not all" or "nalways" instead of "not always"?

The usual answer is the complexity of **O** and the naturalness of the triangles of contrariety, which makes '**I** and **O**' be the natural expression of the particular. But we can add that the agglutination process may not apply to **O** in natural languages, since this process is supposed to be spontaneous and mechanical and to apply to items which are used frequently and naturally.

However, in some cases, the analogy may create some simple **O** items, for instance, the English 'Unnecessary', which is produced by analogy with other words containing "Un", such as "Untenable" or "Unbelievable". "Unnecessary" means "not necessary" in logic, but in ordinary life, it also means "not needed" or "not expected", which are used rather often by people in conversations. This could explain why it has been created and is used in ordinary life.

But in French, no single word corresponds to "Unnecessary". Rather its French counterpart is "non nécessaire", and is complex. So despite their (relative) closeness, French and English function differently in some cases. This confirms the arbitrariness of the sign, since each language has its own functioning, even when the processes governing the languages and their evolution are the same or very close.

The arbitrariness is even clearer when the languages are really very different, as is the case with Arabic on the one hand and the Indo-European languages on the other. For the grammatical rules of Arabic are different from the French and English grammatical rules and the processes that Saussure is talking about are not applicable in the same way in Arabic.

In Arabic, the process of agglutination is very rarely used, especially if we consider classical Arabic. One example of agglutination could be the word "*ḥinadhāka*" (= at that time), which contains two words stuck together (*hīna* = time, and *dhāka* = that). Other examples are transcriptions of scientific and technical terms already produced by agglutination in the European languages, for instance, "*jiulūjiā*" (= geology) or "*biulūjiā*" (= biology) etc...

Some words are also produced by agglutination, by adding the particle "*lā*", which functions as a negative prefix. For instance, "*lā-maʿqūl*" (irrational), "*lā-mutanāhī*" (infinite), "*lā-markazī*" (decentralized) and so on. Almost all of these pertain to modern Arabic and are directly related to modern sciences or philosophy. The process of agglutination, however, is not as natural and mechanical in these cases as the one described by Saussure, for these words are not that much used in ordinary life. Rather they pertain to some theoretical disciplines such as philosophy or economics, and the words are created almost artificially by translation from English or French. They pertain to Arabic by means of these translations but they are used only in these technical, philosophical and scientific disciplines.

On the contrary, analogy is used rather often to create new words, but these new words must have the usual allowed structures that we saw above. These structures have specific meanings and are not applied in the same way to all words. For instance, the structure "*fāʿala*" may be applied to the root "*kataba*" and produces "*kātaba*" (= to write to someone, to correspond), but it is not applied to other roots such as "*haraba*" (to escape), for "*hāraba*" does not mean anything, although "*hāribun*" *does* mean the fugitive and "*harraba*" means "to make [somebody] escape or to help him escape".

This confirms Saussure's principle according to which "the linguistic sign is arbitrary" [Saussure, 1967, p. 100], since the symbols used in Arabic, French and English are all different, although they express similar ideas and designate the same objects. The arbitrariness means that there is no natural link between the signified and the signifier, since the signifier is conventional. The grammatical rules and processes are also arbitrary because they are conventional and differ from one language to another.

But why are the same processes (for instance, analogy)differently applied in different languages, even when these languages are rather close?

For instance, although the two prefixes "un" (in English) and "in" (in French) are very rarely used in front of a word starting by the letter "n", "unnecessary" exists in English but "innécessaire" does not exist in French.

Generally speaking, the (few) French words where the prefix 'in' is used in front of a word starting by "n" are the following: "innocent", "innommé", "innocuité", "innombrable", "innommable", "innover" and its derived words ("innovant", "innovateur", "innovation", etc…) and "innerver".

In English, the (also few) English words containing such a prefix in front of a word starting by "n" are the following: "unnamed", "unnecessary", "unnatural", "unneeded", 'unnegotiable", "unnerve", "unnoticed" and "unnumbered".

So the presence of "unnecessary" and the absence of "innécessaire" are not only due to the rules of both languages, but to the social practices and usage, which are conventional, hence, in some way, arbitrary. We could try to explain this difference in the case of these two words by saying that "unnecessary" in English is not only the contradictory of "necessary", it has other meanings which are much more used in ordinary life, as we noted above. These other

meanings are expressed by other kinds of words in French. As we said above, "unnecessary" in English can mean "not needed" and "not expected". In French "not needed", for instance, which is one of the meanings of "unnecessary" is better expressed by the words "inutile" and "superflu", which are usual translations of "unnecessary". So, for some reason, the French usage privileged these two words upon the word "innécessaire", which, by the way, is not very easy to pronounce because when one puts the two sounds "in" and "né" together, the vowel "i" is pronounced as it is pronounced when it is alone. It is not pronounced as it is in the prefix "in". This difficulty in the pronunciation of the word can explain why the word "innécessaire" does not exist in French. This difficulty does not exist for the word "unnecessary" in English, which is very easily pronounced. Here too, the usage of both languages and the choices made by the speakers, which are also practical, can explain the differences between both languages.

6. **Conclusion**

The above analysis shows that the asymmetry between the four corners of the squares is not present in all languages. This means that, unlike some recent opinions it is not a universal phenomenon, generalizable to all languages. It is not either a natural phenomenon, as Dany Jaspers, for instance, seems to assume, when he applies this asymmetry to his analysis of colours and says that the **O**-corner is "not naturally lexicalized in the realm of colours either. From the perspective of the architecture of cognition, the isomorphism suggests that the foundations of logical oppositions and negation may well be much more deeply rooted in the physiological structure of human cognition than is standardly assumed" [Jaspers, 2012, abstract]. It seems that although the **O**-corner is intrinsically complex in all languages, there is no asymmetry in some languages, because the expression of the **E**-corner may also be complex. The asymmetry, thus, is more related to the linguistic conventions and usage than it is to the natural human cognition. It exists in some languages but not in other ones, because the processes described by Ferdinand de Saussure are not applicable in the same way in all languages. In particular, agglutination seems to be very rarely used in Arabic, while analogy is used in all languages but its use is various and not always predictable. These variations and above all this unpredictability confirm the arbitrariness of languages stressed by Saussure.

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