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The Language on the Internet, an Ancient Know-How Digitalized

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Abstract: The digital paradigm to which these new technologies (NTIC) belong is at the origin of particular linguistic practices. Internet is an innovator in this field. Indeed, its users want their written communications to be as fast as during oral exchanges; they will choose their knowledge to write on a saving in expressive type. Also wishing to transmit feelings and emotions, they will call upon an iconography, which uses the diacritics as material serving creation of logograms. This redundancy of a diverted punctuation of its original use, but being used "to punctuate" the speech by figurines translating the emotional state of the speaker, is a characteristic of this numerical space. Through the analysis of the corpus taken on the Internet and put in comparison with the hieroglyphic system introduced by Champollion Le Jeune [5] and the graphic evolution of some ideograms, it will be shown that it is always about the same used model, in which a key always initiates a semantic field, and that this process orders a reorganization of the objects of the world through a new scriptural writing.

Keywords: Internet, Pictogram, Ideogram, Smiley, Punctuation

1. Introduction

The author, Boulanger [3], when evoking the written code, mentions that: "all writings have a pictographic origin" and that "the pictograms are used to restore, in their layout, a referent of the real world" (2003: 49). Contrary to the Sumerian writing, primarily centred on accounting and on the conservation of commercial, legislative and grammatical transactions, the Egyptian writing, was used from the beginning, to represent the spoken language. It transcribed abstract and concrete realities: religious anthems, official or private inscriptions on burial monuments, medical treaties, administrative acts and letters, etc. This writing consisted of three types of signs: pictograms, stylised drawings representing objects or beings, sound records representing sounds, and finally, the determinative ones indicating to which category they belonged (*ibid*.: 97).

2. Pictogram and Ideogram

Contrary to the pictogram, which is monosemantic and univocal, the meaning of the object of the world represented only itself, the ideogram has a polysemous, univocal or plural function, according to the cases; these last characteristics depend on the sophistication of the ideogram presented. In order to clarify this last point, I will call upon ideograms used in the Chinese language. This language is made up of simple symbols, which have a double function. On the one hand, they mean a specific object and, on the other hand, they are the semantic keys being used to classify by fields and in a proximity manner with such or such indicated object.

In his work entitled: *Evolution of the Chinese Writing*, 500 examples, the author Li Leyi [6] presents the Chinese lexeme "mù" which corresponds, in English, to the "tree" with the following calligraphy (1993: 226).

Figure 1. Lexeme "mù" which corresponds, in English, to the "tree".

Starting from this simplified ideogram, all the lexemes in relation to adjacency to this object, in this case the tree, will include this key. Composed of several pictograms, the unit can represent a concept, an idea. Thus "lin", which means "forest", is transcribed in the shape of a double ideogram

representing two trees (*ibid.*: 197).

Figure 2. *Lexeme "lin" which corresponds, in English, to the "forest".*

Through his work, Li Leyi [6] presents the formation and the graphic evolution of some five hundred ideograms. In this study, the passage of C-Ws communication [1] of the pictographic type of C-Ws communication of the ideograph type is evoked. For example, the Chinese ideogram "bèi", meaning "shell", went from the analogical mode, with the representation just as it is of the object "shell", to the digital mode, in a stylised and symbolised communication of such object. We can see, in the following figure, left margin, the diachronic evolution of this communication.

Figure 3. *Example of the evolution of C-W communication of an ideographic type - From shell drawing to signification of richness (Bèi: shells in Chinese language).*

Reference: Evolution of the Chinese Writing, 500 examples (Li Leyi [6], 1993: 10)

The author provides the following explanation:

"[...] 貝 is a shell. The character resembles an open shell. The men from another era used the shells as currency. This is why the Chinese characters provided with a radical 貝 often evoke the richness" (*ibid.*: 10).

3. The Creation of the Language of the Communication on the Internet

Keeping in mind the examples presented above, it would seem that the language functions in the analogical mode, at the beginning and during initialisation of the written code, only evolved, into a more complex graphic system later on. The latter, which calls upon the symbolic system function, will allow the installation of the code written in digital mode; i.e. a sign that will correspond to the idea of an object and no longer the chart of the object itself. The analysis of this author is totally adaptable to the pictographs used on the Internet. Now, back the object of our study, the computer keyboard is both the support of the linguistic codes, and the media allowing the transcription and the sending of the written messages. The latter are written using a combination of the various signs in

1 Communication World (CW)

the table of characters shown in Figure 4.

Figure 4. *Count of the characters for the Arial police font.*

In this table are the alphanumeric characters of the Latin alphabet, the punctuation marks as well as unique logograms such as @. Starting from various corpora collated on the Web, I gathered the keys which, on the one hand, could be used for the creation of complex logograms and, on the other hand, could initialise such or such semantic field; they were indexed and classified in several groups. These various graphs are presented in the following synoptic tables; for each one of them, the basic icons are those which appear in the table of characters in the XP version of Windows. Each key is listed and is followed by the semantic field which it initialises. Thus, the facial expressions present several keys, which goes right down to facial mimicry as we can see it in the table 1.

Table 1. *Semantic field of the expressions of the face.*

Eyes			
:	;	'	,
Open eyes	Winke	Left eyebrow	Right eyebrow
Expressive Mimicry of the mouth			
)	(	!	<
Smile	Wry face	Indifference	Deception
>	o	X	}
Sarcasm	Surprise	Hold your tongue	Lipstick
P	~	#	O
Smirk	Cold or dribble	Hold your tongue	Laughter

Reference: Martin [10] 2007: 89.

The semantic field of accessories proposes several groups of complementary objects such as glasses, wig, moustaches, hair, hats, teeth, all objects related to smokers, and various other objects (Table 2).

Table 2. *The pictograms with one icon or more.*

Glasses			
8	B	:	,
Glasses	Glasses scales frame	Very simple glasses	Right eyebrow
Wing, moustache or hair			
{	X	8	[[[
Moustache	Hair	Hair	Hair
@@@	\V\V	(	~~
Hair	Hair	Wig	Hair
Teeth			
#	[	E	F
Braces	Vampire teeth	Vampire canines	Vampire canines
Cigarette and pipe			
Q	?	'	

Smoke	Pipe	Tobacco	
Hats			
*<	<	*	C =
Santa Claus	Pointed hat	Pompon	Chef's toque
Objects			
(_) ?	[_]	< 3	@@@>--
Coffee	Tea	Heart	Flower/Rose

Reference: Martin [10] 2007: 90.

The presentation of the semantic field of an emotional state or concept as abstract as death or religion also being pictographs rewritten (Table 3).

Table 3. Emotional states and concepts.

xxxxx	~	+	]
Kisses	Fire or cold	Religious authority	Sleep
'	X	x	{{{Jo}}}
Tear	Suicide	Death	Hugs

Reference: Martin [10] 2007: 91.

Finally, we can establish that:
- Autopoïetic (creation) fact is at the origin of the installation of pictograms with prescriptive method,

because the use of these C-W is suggested by Net surfer's councils who propose them to the users by means of personal sites or of works dedicated to these new languages;
- These logograms can also play the part of radicals since they subsume such and such semantic field. *A fortiori*, a complex logogram could be deciphered starting from the radicals it is made of;
- Simple C-Ws communications are univocal and monosemantic;
- Finally, these pictograms, called "smileys", punctuate the linguistic speech since they mitigate the impossibility of the para-verbal exchange and non-verbal set up during the course of a normal conversation being carried out in the civil society.

In their complex version, the reading of these pictograms requires a legend. Usually, their creators include a short explanatory text. Without the latter, these logograms would be hermetic to the neophyte. I have indexed several complex series of logograms; composed of three or more icons, they form a small sentence. An explanatory legend is included in the synoptic tables presented below (Table 4, 5 and 6).

Table 4. The pictograms made up of three icons.

:-c	:-/	:-o
The user is annoyed	The user doubts	The user is surprised
3: [	3: E	d8 =
Domestic animal	Malicious domestic animal	Beaver wearing glasses
:-9	%-6	(:!
The user licks his lips	The user is clinically dead	The user is stupid
k: p	:-o	:-:
The user is a kid with a windmill	The user is quiet	The user has a weird smile
.-)	'-)	x- (
The user has only one eye	But he winks	Suicide on the Net

Reference: Martin [10] 2007: 93.

Table 5. The pictograms made up of four icons.

-:- (	':-)	,:-)
The user is true punk who never smiles	The user shaved one eyebrow	The user shaved the other eyebrow
o:-)	< !-)	(8-o
The user is an angel	The user is Chinese	It is Mr. Bill
*: o)	[:-)	<:- !
It is Bozo the clown	The user carries a walkman	The user is a dunce
@:-)	8:-)	o !-)
The user wears a turban	The user is an ace	Religion from the Net

Reference: Martin [10] 2007: 94.

Table 6. The pictograms made up of five icons.

:-)-8	+-:-)	c =:-)
The user is a woman	The user is the pope or a religious authority	The user is a cook
*<:-)	E-:-)	~~:- (
A Santa Claus hat	The user is radio amateur	Internet is burning
@@>--	E-:- !	
Sending a rose	Station of radio amateur	

Reference: Martin [10] 2007: 94.

The analysis of the ensemble of these pictograms highlights the existence of keys or radicals. In the series which features "the user", namely a human subject, this recurring key corresponds to the double point which symbolises the glance, without which these small faces (smiley) lose their significance. This language is carrying a number of characteristics: if its complex C-Ws communication is the fruit of the creative process, its

simplified C-Ws communication tends to standardisation. These pictograms also serve the poetic play; thus the following logograms are close to a form of poetry called "calligram"; I put them in opposite to the writing of Apollinaire [2] (Table 7 and 8).

Table 7. Presentation of a series of logograms complex.

@}------	@--,--'--	[⁰@"]	: ^) ⁰O > []	(:|)(⁰⁰⁰)	> []
Flower	Rose	Camera	Snow man	Snow man	TV

Reference: Martin [10] 2007: 95.

Table 8. The famous calligram of Apollinaire – EiffelTower (Calligrammes, 1917) [2].

```
                S
                A
               LUT
                M
               O N
              D   E
              DONT
             JE SUIS
             LA LAN
             GUE    E
            LOQUEN
           TE   QUESA
          B  O  U  C  H  E
         O            PARIS
        TIRE ET TIRERA
       TOU            JOURS
      AUX            A   L
     LEM                 ANDS
```

With this new language, we note a diversion of linguistic praxis dependent upon the use of punctuation. If the diacritics correspond to "the ensemble of visual signs of organisation and of presentation accompanying the written text, inside the text and common to the manuscript and the printed paper form; the punctuation includes several classes of graphic signs, supplementing or substituting alphabetical information [...] the majority of the punctuation has a separating or organisational function" (Catach [4], 1980: 21).

Within the Internet, these same pictograms, by themselves are used as keys or radicals of semantic fields; incorporated, they form new logograms of which the significance no longer has anything to do with the use and the direction that they had in their capacity as a poncteme. This redundancy of punctuation diverted from its original use, but being used to "punctuate" the speech by figurines translating the emotional state of the speaker, is one of the characteristics of this digital space. This cannot be without us returning to the study of logograms, such as ideograms or hieroglyphic system structured around semantic fields whose common denominator is either a key for the ideograms or a determinative for the hieroglyphic writing.

The setting in a sign of the oral examination purpose is attested in Egypt. In its work entitled "Egyptian Grammar or general principles of the Sacred Egyptian Writing applied to the representation of the spoken language", Champollion Le Jeune [5] states that: "right from the start, the purpose of transferring real objects into images, the first elements of the hieroglyphic writing [...] were essential the imitation of the objects" (1836, 1997: 2) and the author added that: "the oldest Chinese characters, and the Mexican tables, give a good idea of what can be the people's first trials within the linear imitation of objects" (*ibid.*: 13). However, these scriptural practices, correlated with the narration of complex situations, have evolved: "The first attempt was to reduce the hieroglyphic characters to the smallest number of possible features, but in such a way as to not only preserve the general ensemble of the forms, but also, and especially, this type of individuality which distinguishes each image of quadrupeds, birds, reptiles, etc., from the image of other objects in the same category, employed in the hieroglyphic writing" (*ibid.*: 12).

Mentioning the radicals which introduces the semantic fields, the author specifies that: "Other signs added at the end of phonetically written words are, to be strictly accurate, generic determinative, since each one of them is joined, to indicate its acceptance, with a more or less considerable number of names different in their significance, but, which all express individuals or objects belonging to the same type of beings although from different species" (Champollion le Jeune, 1836, 1997: 82).
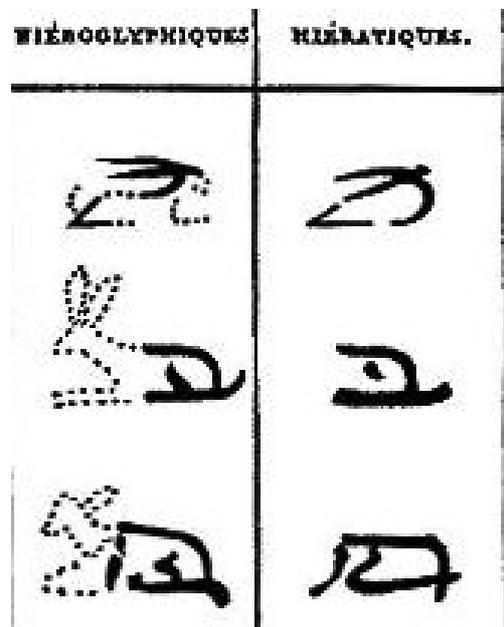
Figure 5. An extract of the Egyptian grammar of Champollion Le Jeune (XIXe century) showing the process of graphic symbolisation (from the real object to the symbolic object, for example the first animal: a rabbit) ([5] 1836, 1997: 17).

Thus, it is the same for the pictograms presented on the Internet: the use of diacritic and alphanumeric characters

helped the Net surfers to create a basic logographic system. The "two dots" have no other significance than the one that is attributed to them in the punctuation system, namely an opening on an enumeration or a quotation; used in the construction of basic electronic pictograms, they can be analysed like a key. Indeed, they are analysed like eyes, those of the speaker, transmitters or receivers, and signifies that the circumscribed semantic field is that of the expressions of the face, which reflects the emotional state, because if we add this key to a close parenthesis, it becomes a smiling face, while its replacement by an open parenthesis becomes a sad face. The use of the letter "O" instead of the parenthesis is read as an expression of joy (laughter), astonishment or amazement. This creative process makes it possible for the sender of a message to divulge his current emotional state to the recipient (Martin [9] 2010). As mentionned by Anis [1]: "How can we express ourselves freely, spontaneously, respond to the written word learned at school, respecting the subtle rules of our grammar and avoiding the pitfalls of our spelling?" (7-8). So, "the permanent connectivity of people through digital interfaces (binary type) is at the origin of the implementation of completely new paradigms" (Martin [7] p. 1).

4. Conclusion

The digital paradigm, to which new communication and information technologies belong to (NTIC), is at the origin of particular linguistic praxis. The Internet media is an innovator in this field. It seems that the electronic pictograms system is built in the same way as that of the installation of the hieroglyphic system or the ideograms, i.e. the initialisation of semantic fields starting from basic C-Ws communication. The analysis of these C-Ws communication shows that their construction was done around a chart of the objects from around the world; each C-W communication only represents itself: it is univocal and monosemantic. When they evolved, these C-Ws communications transformed into symbols, will represent an object of the world without necessarily picturing it. Whether it is a hieroglyphic, an ideogram or a smiley, we always refer to the same reactualized model, in which a key always initiates a semantic field. As As well as Martin [8] specifies: "The language function is a verbalization of translation and/or the transfiguration of reality" (p. 142). This process orders a reorganisation of the objects of the world through a new scriptural writing. Whether it is in the written languages first beginning or the Internet era, logographic creation initialises simple graph and "ready to be understood". Is not this "digital era" an act of a new appropriation of an ancient know-how?

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