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# Thinking Scripts Existential Graphs and Chinese Ideography

Roteiros de pensamento Gráficos existenciais e ideografia chinesa

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## **Abstract**

Chinese traditional characters share with Peirce's existential graphs the fact of being endowed with an object-language that they describe through a nonlinear syntax and in an iconic way. Here iconicity is not restricted to images and perceptive similarity since diagrams and graphic metaphors are iconic too. The graphs are shown to be a borderland between Western traditional logic and Chinese traditional writing and culture, so the *écart* (Jullien's concept for cultural distance) between characters and graphs is preserved even though graphs break with the Western prejudice in favor of conventionality at the expense of iconicity in logical systems. The take-home lesson for the study of writing systems is to substitute the orality-writing duality with the interplay among orality, writing, and pictures thus shifting from a linguistic typology to a semiotic one.

## **Keywords**

Writing Systems. Interculturality. Peirce. Iconicity. Logic.

## Resumo

Os caracteres tradicionais chineses compartilham com os gráficos existenciais de Peirce o fato de serem dotados de uma linguagem-objeto que eles descrevem por meio de uma sintaxe não linear e de forma icônica. Aqui, a iconicidade não se restringe às imagens e à semelhança perceptiva, pois os diagramas e as metáforas gráficas também são icônicos. Os gráficos são mostrados como uma fronteira entre a lógica tradicional ocidental e a escrita e cultura tradicionais chinesas, de modo que o *écart* (conceito de Jullien para distância cultural) entre caracteres e gráficos é preservado, embora os gráficos rompam com o preconceito ocidental em favor da convencionalidade em detrimento da iconicidade nos sistemas lógicos. A lição que fica para o estudo dos sistemas de escrita é substituir a dualidade oralidade-escrita pela interação entre oralidade, escrita e imagens, passando assim de uma tipologia linguística para uma semiótica.

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Palavras-chave

Sistemas de escrita. Interculturalidade. Peirce. Iconicidade. Lógica.

Angus C. Graham and François Jullien contributed to a post-comparativist approach to Chinese culture (cf. MOELLER, 2022). By combining their insights, I will try to show how Peirce's last system of notation for his logic of relations i.e., the existential graphs, produces an *écart* from Western logic tradition and implicitly builds an *entre* with the traditional Chinese script<sup>1</sup>. Graham described Chinese ethical thinking as endowed with "an implicit logical form approximating to the syllogism, applicable directly to concrete situations" (GRAHAM, 1989, p. 383). It is fascinating that Graham adopted something like Jullien's topological jargon speaking of approximation rather than similarity. My claims about Chinese script take the same form so I might say that the Chinese iconic language is built upon an approximately iconic logic, applicable directly to the life world or leaf-world (cf. SINI, 2009, p. 12). Yet few words of advice are in order in this subject matter. By claiming that Chinese "writing is constituted in such a marked way as it diverged from orality (as the sinologist Léon Vandermeersch has convincingly shown)" (JULLIEN, 2020, p. 348), Jullien suggests Derrida was right to highlight the contrast between the Western alphabet and Chinese writing. There was a debate on the Orientalist nature of Derrida's remarks on Chinese ideography (cf. JIRN, 2015 and MILESI, 2018). Here I want to show that the exact nature of Chinese script is a matter of controversy among linguists too and offer an interpretation that is compatible with what Chinese scholars say about their script from a semiotic standpoint.

1. Linguistic Interpretations of the Chinese Script

The Chinese writing system is neither a matter of curiosity nor a marginal case from a typological and historical viewpoint: "Almost all writing systems in use today stem ultimately from either the Chinese or the Semitic writing systems" (ROGERS, 2005, p. 5). Thus, it is not

<sup>1</sup> I'm using Jullien's notions (cf. JULLIEN, 2012), which do not exactly correspond with "gap" and "between". It must be kept in mind that the *entre* is a substantivized form of the French word for "between".

surprising at all that Saussure's typology of writing results in a contraposition between ideographic and phonetic systems softened by the fact that ideographic systems tend to become mixed systems in the long run (cf. HARRIS, 2000, pp. 121-160) for an exposition and a sharp criticism of Saussure's claims). Defining the Chinese writing system is substantially setting up a whole theory of writing because one has to make it clear what the alternative way of representing language to the one responding to phonology is. The standard answer is morphology (cf. PAE, 2018):

If we agree upon the fact that the nature of a writing system should be ascertained in light of the specificity of the signs it uses, the Chinese script has to be acknowledged as morpho-syllabic writing considering the correspondence among character, morpheme, and syllable, thus it can be properly described as logographic writing that employs graphemes constituted by meaningful syllables (ABBIATI, 2017, p. 19)<sup>2</sup>.

As foreseen by Saussure, the Chinese system is shown to be mixed as far as it refers to syllables (phonematic units) along with morphemes (semantic units), and logography "shows a substantial affinity with the phonographic criterium while structurally conforming to the ideographic one" (VALERI, 2001, p. 18). Yet this is not true of the traditional Chinese system i.e., the system as it was before the early Twentieth-century formation of modern Chinese and the simplification of the characters started in 1956 by the People's Republic of China. Traditional writing is still employed today "in Hong Kong, Macao, and Taiwan (as well as Kinmen and the rest of the Republic of China)" (MYERS, 2019, p. xi). So, Vincenzo Valeri correctly remarks that logography is just a tendency in the actual system rather than a feature of the traditional one (cf. VALERI, 2001, p. 84). On the other hand, logographic and even ideographic tendencies are observable nowadays in the so-called phonographic systems (cf. VALERI, 2001, pp. 197-202; 206-210). Apart from contemporary tendencies towards logography due to visual communication and informatics (e.g., emoticons and abbreviated slang employing acronyms), the morphological principle of representation can also be highly effective in phonographic systems. For instance, English diverges from Chinese because of its

<sup>&</sup>lt;sup>2</sup> Magda Abbiati previously limited her definition of Chinese writing to the morphemic principle alone without mentioning logography (cf. ABBIATI, 1992, pp. 88-90).

alphabetic rather than syllabic nature but is one of the closest written languages to Chinese when it comes to morphography (cf. ROGERS, 2005, p. 275): "English is a phonemic system, but its orthography often contains morphological information" (ROGERS, 2005, p. 273). Indeed, Derrida's insights about ideography can easily sound Orientalist in the standard framework. Yet every writing system somehow combines phonography and morphography to some degree. So, we are left with doubts concerning how to express the peculiarity of traditional Chinese writing. The point made by Jullien referring to Vandermeersch is that there are scientific reasons to acknowledge such peculiarity. On an intuitive level, this was clear to Jiantang Han:

the frequent appearance of pictophonetic characters actually extended the use of graphic components and strengthened the characters' function of indicating meanings. Therefore, when the majority of Han [Chinese, Han is the main ethnic group of China] characters became pictophonetic, their graphic quality became more prominent. Now we have found an answer to the question as to why there are such an enormous number of pictophonetic characters in the Han system, with a strong graphic function of form components, and this also gives us an important reason for why Han characters did not eventually become phonograms (HAN, 2009, p. 73).

His insight is pivotal to the latest and structured scientific attempts to capture the peculiarity of Chinese script (cf. VANDERMEERSCH, 2013 and MEYRS, 2019), even if he is not quoted in them. According to Vandermeersch, it is the feature highlighted by Han that makes Chinese script capable of remaining ideographic: "Far from being the beginning of ideography's rapprochement to the alphabetic principle, the employment of phonetic [components] is rather an expedient tool for staying faithful to the ideographic principle" (VANDERMEERSCH, 2013, p. 83). From Jullien's standpoint, Chinese script may be a *graphocentric* alternative to the phonocentric tradition of Western alphabets i.e., a writing system in which the morphographic principle prevailed. At least, it is implied by Vandermeersch himself: "in the Chinese graphic language, the mirage of the logos is not anymore a matter of spoken word, rather what is called  $wen \ \dot{\mathbf{X}}$  i.e., the 'ideographic letter', is not hypostatized as a creator's written word, rather it is, as Dao, a transphenomenal projection of the graphic reason of things" (VANDERMEERSCH, 2013, p. 148). A further element is the exclusively graphical nature of traditional written Chinese syntax exemplified by what Vandermeersch calls *semantic-syntactic symmetry*: "Two

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parts of a sentence or two sentences or more sentences that are in correspondence are made symmetric at the same time in the form of the signifying and in the signified referent" (VANDERMEERSCH, 2013, p. 163). Vandermeersch exemplifies it through the following lines by the Chinese poet Du Fu along with some other lines by the same author and other ones by Du Fu's contemporary Li Bai (cf. VANDERMEERSCH, 2013, pp. 163-164)<sup>3</sup>:

莽莽萬重山, 孤城山谷間。(OWEN, 2016, v. 2, p. 136).

Stretching vast, ten thousand folds of mountains, a lone fortress in a mountain valley (OWEN, 2016, v. 2, p. 137).

The poem depicts the opposition between vastity and loneliness as specular to the opposition between a chain of mountains and a singular valley. The symmetry that keeps the two lines together is reflected in the second line since the fortress is lonely compared to the vastity of the mountain valley which is just a valley in the vastity of the mountain chain. The disposition of the characters mirrors the composition of the landscape it portrays. In the sinologist's terms, "semantic-syntactic symmetry is a figure that makes the cosmic order of the myriad things reflected by the structure of *wen* itself – of the graphic language – that expresses this order" (VANDERMEERSCH, 2013, p. 164).

Despite his work being well-documented and consistently argued, someone might still consider Vandermeersch too involved in Derrida's insights and terminology. Yet the core of Vandermeersch's interpretation i.e., the traditional Chinese writing system is a graphic language so traditional written Chinese is a different and independent language from spoken Chinese, is shared by James Myer's claim that Chinese traditional characters have their grammar that "is productive and psychologically real and is formally similar to the morphology, phonology, and phonetics of natural spoken and signed languages" (MYERS, 2019, p. 2). The

<sup>&</sup>lt;sup>3</sup> A similar structure is observable in Laozi and Wang Bi (cf. WAGNER, 1980).

giving morphological information:

strength of Myer's interpretation is that it assesses exactly the kind of morphological information Rogers thinks is conveyed by English spelling – "Orthographic depth in English is greater because of the many heterophonous allomorphs which are spelled the same: e.g., south-southern, child-children, sign-signal" (ROGERS, 2005, p. 275). In traditional Chinese, the so-called semantic radicals tend to individuate semantic families as much as English spelling departs from pronunciation to manifest morphological derivation. The peculiarity is that the semantic radicals work like morphological affixes of a fully-fledged language rather than just

Consider the English words *greenish* and *greenhouse*. The first word is analyzed as suffixed because *-ish* (a) cannot appear on its own, (b) cannot be easily replaced with a similar morpheme (new affixes are very difficult to coin), (c) has an abstract semantic function rather than a concrete referent (*X-ish* means 'somewhat *X'*), (d) always appears after the root, and (e) must be unstressed. By contrast, in the compound *greenhouse*, *house* (a) may also be used as a free word; (b) can be replaced with a potentially unlimited number of similar morphemes (nouns like *back*, *belt*, or *card*); (c) has rich semantics; (d) may appear in other positions in other words (e.g., *houseboat*); and (e) receives some stress. Semantic radicals display all of these affix diagnostics [...]. More accurately, semantic radicals are affix-like, as if the historical development of character morphology was frozen before they could be fully grammaticalized (MYERS, 2019, p. 48).

Rather than through pronunciation (absence of stress), Chinese affixes are marked by the preference for the left edge of the character in a dominant share of pictorial-phonetic characters given their graphic rather than spoken nature (cf. MYERS, 2019, pp. 50-54). In the following examples, the character for the mouth is situated on the left of the characters for eating and calling and expresses that the character it constitutes is in the semantic family of mouth-related meanings while the pronunciation of the character is suggested by the other component of these pictorial-phonetic compounds:

Chinese affixes corresponding to the semantic radicals are nowhere to be found in spoken Chinese, so either they contribute to the orthographic depth of Chinese writing, or they must be another distinctive feature of Chinese as a graphic language along with semanticsyntactic symmetry. Thus, linguistic interpretations of Chinese script seem to either dissolve

the peculiarity of this writing system or express it by claiming that it is not just a writing system

since it is a linguistic system like signed languages are.

2. Metalanguage and Iconicity: Semiotic Interpretations of the Chinese Script

To better understand the peculiarity of traditional Chinese writing, I think it is necessary

to move from a linguistic approach to a semiotic one. Once again, it is not out of curiosity, but

the issue is typological. It is a matter of reconciling the fact that Chinese script is a writing

system like all others with the fact that it has a strikingly developed or better-preserved

pictorial nature. Antonio Perri proposed a semiotic typology of writing systems in terms of a

continuum between the following extreme poles:

[...] it is possible to individuate an abstract typological polarity which some historical writing systems tend

to approximate to a major or minor extent i.e., the *signal-writings* [...]. I propose to thus call all graphical systems whose principle *does not restructure* the expression plane of a linguistic scheme and leave unmodified the 'contents of signs' one [...], even though they manifest a partial non-conformity with

phonic expression (PERRI, 2007, 156).

[...] we will speak of metasemiotic-writing: indeed, whatever signifying ensemble, as far as it can be

articulated, [...] can constitute itself as a non-scientific metasemiotic of an object-language – and indeed it is what always happens, in the case of notations, when one does not find a complete elaboration of the

'phonetic principle' of one to one match between the system of graphemes and the systems of phonemes

(PERRI, 2007, pp. 160-161).

In Louis Hjelmslev's terms (one of Perri's theoretical references), non-scientific

signifying systems endowed with an object-language are defined as connotative i.e., "non-

scientific semiotic one or more of whose planes is (are) (a) semiotic(s)" (HJELMSLEV, 1969, p.

138), where "semiotic" means a system of signs that can be analyzed into at least one expression

(signifiant, if it is a linguistic system) plane and at least one content (signifié, if it is a linguistic

system) plane. While Hjelmslev's definition forbids calling a connotative system metasemiotic

since a metasemiotic is meant to be scientific and a connotative system is meant to be non-

scientific<sup>4</sup>, it is still possible to call a connotative system metalinguistic if one of its planes is a language and the system describes it in a non-scientific manner<sup>5</sup> – this distinction will be pivotal to section 3. It is evident that traditional Chinese is a writing system of a metalinguistic type in this framework (cf. PERRI, 2007, p. 163), yet Peirce's conception of *hypoicon* must be added to clarify the pictorial nature of traditional Chinese<sup>6</sup>:

A possibility alone is an Icon purely by virtue of its quality; and its object can only be a Firstness. But a sign may be *iconic*, that is, may represent its object mainly by its similarity, no matter what its mode of being. If a substantive be wanted, an iconic Representamen may be termed a *hypoicon*. Any material image, as a painting, is largely conventional in its mode of representation; but in itself, without legend or label, it may be called a *hypoicon*. Hypoicons may roughly [be] divided according to the mode of Firstness which they partake. Those which partake the simple qualities, or First Firstnesses, are *images*; those which represent the relations, mainly dyadic, or so regarded, of the parts of one thing by analogous relations in their own parts, are *diagrams*; those which represent the representative character of a representamen by representing a parallelism in something else, are *metaphors* (PEIRCE, 1998, pp. 273-274)<sup>7</sup>.

The standardization of script styles and the development of the graphic lexicon made it unlikely that traditional characters could still be similar to the things they portray (cf. VANDERMEERSCH, 2013 and BONTA, 2020, p. 52). Yet the pictorial components of traditional characters can be interpreted in terms of diagrams and metaphors (cf. FARIAS and QUEIROZ, 2006, pp. 294-295). Indeed, semantic-syntactic symmetry is a case of diagram. Despite neither quoting nor knowing Perri's elaboration of Hjelmslevian concepts, Sixia Liu provides us with the best synthesis between a metalinguistic reading of Chinese writing and its inherent iconicity thanks to the following tables (cf. BONTA, 2020, pp. 52-54 for the iconicity of Chinese characters from a Peircean standpoint):

<sup>&</sup>lt;sup>4</sup> A metasemiotic is a "scientific semiotic one or more of whose planes is (are) (a) semiotic(s)" (HJELMSELV, 1969, p. 138).

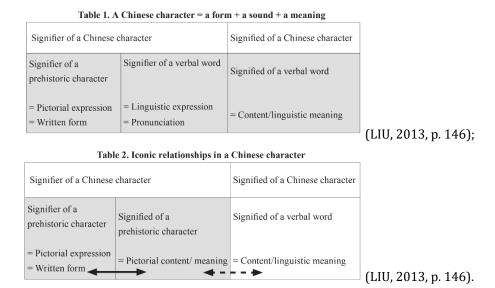
<sup>&</sup>lt;sup>5</sup> This was already noticed by Roland Barthes (cf. PERRI, 2007, p. 160).

<sup>&</sup>lt;sup>6</sup> A synergy of Peirce's icon with Hjelmslev's connotation and metasemiotic is not new in semiotics (cf. TANAKA-ISHII and ISHII, 2007) and Sixia Liu's semiotics of Chinese characters refers to Kumiko Tanaka-Ishii's work (cf. LIU, 2013, p. 147).

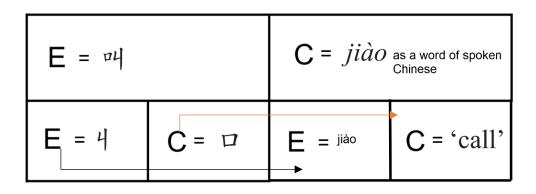
<sup>&</sup>lt;sup>7</sup> Perri seems to focus just on resemblance and diagrams (cf. PERRI, 2006, pp. 59-64), thus almost neglecting metaphors – the exception being the reference to the metaphorization of time through space (cf. PERRI, 2006, 65).

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The semiotic analysis of pictorial-phonetic compounds forces us to combine the two tables into the following diagram (the black arrow shows the conventional relation while the orange one shows the iconic relation):



My diagram is derived from Liu's Table 2 by simply moving the signifier of a verbal word from Table 1 to Table 2 and locating it under the heading of signified of a Chinese character together with the signified of a verbal word.

It is important to consider that pictorial-phonetic compounds combine conventionality and iconicity rather than phonography and morphography. Linguists are right when they say that Chinese writing is syllabic since the phonetic components of pictorial-phonetic compounds do work as conventional signs just like the symbols in a syllabic writing system. Yet pictorial-phonetic compounds describe the meaning and pronunciation of a Chinese word and meaning description employs forms of iconicity rather than morphography, as recently held by Liang

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Ting in his criticism of the Saussurean framework (cf. TING, 2022). Phonography is just a kind of conventionality and the concept of morphography is substituted by iconicity in the semiotic typology of writing and writing itself is a phenomenon ranging from representation (in Perri's terms, signaling) to metalinguistic description. I think that Jullien's Derridean reading of Vandermeersch is too linguistic since it focuses on the divergence between writing and orality, while Chinese scholars suggest the relevance of the pictorial element as a third possibility: "Chinese characters transit and switch among language, writing, and pictures" (MENG and GONG, 2020, p. 81). Indeed, the way Chinese characters are used nowadays in Chinese and Korean advertisements provides evidence for an active interplay between conventionality and iconicity (cf. SHIM, 2021), so the hypothesis of a tendency towards logography after the simplification of characters loses plausibility since traditional iconicity is still an active cognitive factor in the Chinese cultural area or *Sinosphere*8.

## 3. Metasemiotic and Iconicity: The Existential Graphs

By generalizing the interplay of language, writing, and painting in Chinese characters, Hua Meng and Xuemei Gong claim that "all writings and paintings bestowed with the features of both a picture and writing belong to a neutral similar-sinogram and similar-writing" (MENG and GONG, 2020, p. 82). Rather than isolating the Chinese characters in terms of a strange coincidence between a writing system and a linguistic system, the semiotic approach tends to see the affinity of sinograms with other semiotic phenomena<sup>9</sup>. I am avoiding a comparison here since Peirce's existential graphs are a system of logic rather than a linguistic system, yet they are a writing system and a "moving picture of thought" (PERICE, 1998, p. xxxvii). I claim that

<sup>&</sup>lt;sup>8</sup> Hyounjoo Shim's results challenge Steven Bonta's underestimation of conventionality in Chinese characters (cf. BONTA, 2020, p. 54) and his speaking of Chinese in terms of logography (cf. BONTA, 2020, p. 51). I think that Bonta's reference to logography is even at variance with his claims about iconicity in the characters: "Chinese writing is the nearest writing system in the world today to pictographic writing—that is, most simple characters are highly iconic, even having acquired a veneer of stylization with the passage of millenia" (BONTA, 2020, p. 52). The quotation implies a continuum view of writing systems partially like Perri's one.

<sup>&</sup>lt;sup>9</sup> Thus, we might say that all artistic phenomena and poetry are similar-sinograms since they all share a dialectical "tendency to [...] synthesis and mutual influence" (LOTMAN, 1975, p. 337) of iconicity and conventionality (cf. LOTMAN, 1976). Sergei Eisenstein already claimed the affinity between cinema and Chinese characters and its relevance for artistic and poetic phenomena (cf. EISENSTEIN, 1949 and NAKAMURA, 1989).

their *écart* from Western logic tradition implicitly builds an *entre* with the traditional Chinese script, this *entre* gives the occasion for thinking what was unthinkable in logic tradition.

Examining the traditional reading methods and the existing transformation rules for E[xistential] G[raphs] led us to conclude that EG has been understood and used as if it were a symbolic system. Why is this so? Three related facts are responsible for this somewhat surprising discovery. One is the general prejudice for symbolic systems, which forces us to understand and evaluate a non-symbolic system in terms of the criteria for symbolic systems rather than recognizing the non-symbolic system's own strength. [...] Making a convincing connection between Peirce's theory of signs and his own product probably requires a strong interest in heterogeneous systems, which has taken place in various areas only recently (SHIN, 2002, p. 172).

The prejudice that favors conventional rather than iconic systems in logic was so strong that even Peirce scholars and, to a certain extent, Peirce himself underestimated the iconic strength of existential graphs<sup>10</sup>. These logical graphs are a way of combining conventionality and iconicity – here is what is meant by "heterogeneous systems" in the above quotation – in describing an object semiotic i.e., a "semiotic that enters a plane into a semiotic" (HJELMSELV, 1969, p. 138). The *écart* separating and putting into tension the existential graphs and the Chinese script is the one between logic and language, their *entre* is nonlinearity. Chinese characters "should not be confined to the 'acoustic' and 'chronological' features of the signifier proposed by Saussure" (TING, 2022, p. 121). According to Carlo Sini, logic comes from the implicit logic of alphabetic writing as a practice: "The process of linearization and transcription of the voice occurs in the practice of alphabetic writing as well as in the practice of logical definition" (SINI, 2009, p. 59). *Logical mind* arose from the alphabetized mind:

The alphabet is [...] an active principle of classification that organizes an ideal totality (language) in its differential elements as constitutive and recurring parts identical with the totality. From this moment, our current experience of the voice and *logos* changes too and acquires a new, "logical" meaning (SINI, 2009, p. 61).

<sup>&</sup>lt;sup>10</sup> "However, an interesting twist to the story is that Peirce's distinction between logical system and calculus is only valid for symbolic languages but not for graphical languages. The inventor of one of the most impressive heterogeneous systems applied to graphical languages what is true only of symbolic languages" (SHIN, 2002, p. 172).

The influence of the alphabet on logic claimed by Sini is corroborated by the fact that

even Peirce himself had trouble overcoming the preference for conventionality in logic when

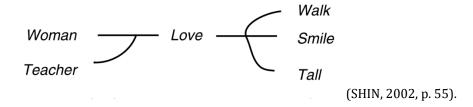
the aim of a system is calculus rather than analysis (cf. SHIN, 2002, p. 172). Nonetheless, while

keeping alphabetic writing in reporting predicates from natural language or symbolizing

atomic propositions with a letter, existential graphs use nonlinear diagrams and graphic

metaphors to represent logical relations:

- Negation is metaphorically represented by cutting off a proposition from the rest of the sheet<sup>11</sup>: P
- Disjunction is just a combination of cuts; P Q
- Implication is graphically a combination of cuts too so that the graph representing the disjunction "P or Q" also represents the implications "if not P then Q" and "if not Q then P" (in the following example, "if P then Q" corresponds to "it is false that P and not Q")<sup>12</sup>;
- Conjunction is diagrammatically expressed by contiguity in the sheet; P Q
- Identity is diagrammatically shown by a continuous line so that identical individuals are
  part of the same continuum just like the extremes of the line that represent them are
  part of the same line (in the following example, a female teacher and someone who
  walks, smiles, and is tall are in love);



 Universal and existential quantifiers are distinguished diagrammatically respectively by an odd and an even number of cuts (negations) containing the outermost part of a line

<sup>&</sup>lt;sup>11</sup> If we restrict iconicity to diagrammatic features, we find only "three iconic components in E[xistential]G[raphs], all of which are involved in representing quantified information" (SHIN, 2002, p. 53). Yet graphical metaphors are involved in the representation of all the other logical relations and Peirce himself included metaphors in his account of iconicity.

<sup>&</sup>lt;sup>12</sup> According to Peirce, the logically prior operator is the implication, so negation is an implication and disjunction is a combination of two implications (cf. BELLUCCI, MOKTEFI and & PIETARINEN, 2017, p. 11). This does not change the level of iconicity of the graphs since the relation between the antecedent and the consequent is metaphorically represented by the antecedent cut containing the consequent cut.

of identity, so one can see whether the proposition is universal or not<sup>13</sup>. In the following example, the existential quantifier has zero (even number) cuts in the outermost part of the identity line while the universal quantifier has one (odd number) cut.



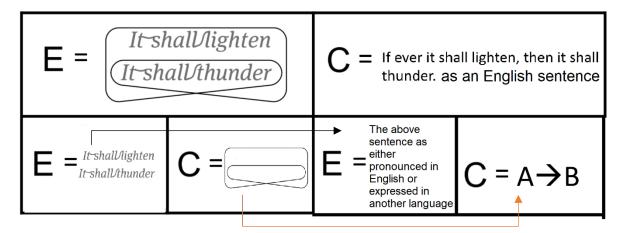
The nonlinearity of the graphs is particularly evident in the examples where the line of identity features: for instance, to say that a female teacher and someone who walks, smiles, and is tall are in love in symbolic logic requires to write " $\exists x \exists y [Tall(y) \land Love(x, y) \land Walk(y) \land Tall(y) \land Tall($ Teacher(x)  $\land$  Smile(y)  $\land$  Woman(x)]" (SHIN, 2002, p. 55). It is evident that, in existential graphs, "clarity in representing identity is more easily obtained [...] than in symbolic languages, thanks to this iconic representation with lines of identity" (SHIN, 2002, p. 55). Nonlinearity gives us a synthetic and holistic gaze on identity and relations as if we were looking at the logical structure of the situation directly by looking at the graph: "For a pure icon does not draw any distinction between itself and its object" (PEIRCE, 1998, p. 163). Yet it is the use of the background to express conjunction through contiguity the most proximate visual feature to Chinese script. Just like in semantic-syntactic symmetry, the part of the sheet where graphs are contiguously scribed or read becomes "that part to which attention is directed at the moment" (PEIRCE, 2021, p. 155). By observing part of the sheet, we observe a state of affairs as much as the lines of a traditional Chinese poem show us a landscape. To represent the lines by Du Fu previously quoted in the language of the graphs only two steps are needed: removing punctation (absent in the traditional text<sup>14</sup>) and inserting the lines of identity (in the second line the character that

<sup>&</sup>lt;sup>13</sup> The scope of quantifiers is metaphorized "by appealing to a visual feature about where the outermost part of a line is written: The less enclosed the outermost part of a line is, the larger the scope that the line gets" (SHIN, 2002, p. 58).

<sup>&</sup>lt;sup>14</sup> In traditional China, poetry was printed without punctuation (cf. ABBIATI, 2017, p. 112). The lines were disposed in columns rather than in rows and this feature could be maintained in a transcription into existential graphs since, according to graphs' conventions, there is no need to write from left to right. On the other hand, standard symbolic logic inherited the orientation of Western alphabetic writings.

expresses the being of the fortress amid a mountain valley is located inside of the line of identity to represent the relation of being amid).

The example shows that semantic-syntactic symmetry operates only above the level of predication in the graphs (at the level of sentence and period conjunction) while it is active also under the sentence level in Chinese<sup>15</sup>, yet the extremes of the lines of identity correspond exactly with the elements joining in the symmetry. Thus, the proximity in the way of nonlinear articulation of the expressive and semantic space makes the translation possible. Considering this possibility, I can schematize the semiotic structure of existential graphs in the same way I represented the Chinese script as endowed with an object-semiotic (remember that the black arrow shows conventionality while the orange one shows iconicity).



The proximity thus shown is not identity since the script is a connotative metalanguage while the graphs are a metasemiotic. Given that metasemiotic is opposed to connotative semiotic as scientific is opposed to non-scientific, the *écart* between logic and language remains. Indeed, Peirce's graphs respond to the principle of simplicity by reducing all logical operators

<sup>&</sup>lt;sup>15</sup> The sentence itself is held together by contiguity (cf. BONTA, 2020, p. 50).

to negation and conjunction (the latter has no symbol since it is expressed by mere contiguity)

and quantifiers to the disposition of negations around and across the line of identity (cf.

BELLUCCI, MOKTEFI, and PIETARINEN 2017). Chinese characters stylize rather than simplify,

act as – I am borrowing terms from Ernst Cassirer – a symbolic form other than science and are

much closer to language and myth.

**Conclusive Remarks** 

Despite the need to move from linguistics to semiotics and overcome the orality-writing

duality, Jullien was right to suggest the importance of Vandermeersch's findings. In my paper, I

emphasized the semantic-syntactic symmetry more than the characters as a fully-fledged

graphic language. By breaking the linearity of the alphabet and of standard symbolic logic, both

graphs and characters relate to a *leaf-world* i.e., the world as portrayed on the sheet of scribing,

other than the world of individuals intended by the alphabetic mind (cf. SINI, 2009, p. 25 on the

Greek analogy between letters and atoms). Peirce's world is populated by continuities and

progressively ruled by Reason, while the myriad things 萬物 of traditional Chinese culture are

harmonized by the graphic rather than logical course i.e., the Dao 道. Peirce's graphs are a

fascinating borderland between Western idolatry of Truth and the Chinese dispute of the Way,

something between Being and Living i.e., a moving picture. Existential graphs do not iconize the

Chinese mind, yet their semiotic structure is that of a *proximate-sinogram*<sup>16</sup>.

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<sup>16</sup> This is the way I adapt Meng's and Gong's terminology to Peirce's graphs as a peculiar form of similar-writing.

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