# Modeling Intersemiotic Translation: Notes towards a Peircean Account

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#### Abstract

The phenomenon of intersemiotic translation represents a special creative domain of language procedures because involves a radical change in habits interpretation and new forms of sign manipulation. The phenomenon was firstly defined by Roman Jakobson as transmutation of signs – «an interpretation of verbal signs by means of signs of non verbal sign systems». Despite its theoretic relevance, and in spite of the frequency in which it is practiced, the phenomenon remains virtually unexplored in general explanatory levels (conceptual modeling), as well as from the point of view of the logic of the semiotic processes involved in it. Here we propose an approach based on Charles S. Peirce's pragmatic philosophy of sign and Stanley Salthe's hierarchical structuralism, and suggest a preliminary division in classes and modalities of translations with examples involving literature and contemporary dance. We defend a perspective according to which translations involve iconic relationships (analogical mappings) between multi-structured semiotic systems.

Short Description: Our aim is to propose a conceptual model of intersemiotic translation based on C.S.Peirce's pragmatic philosophy and S.Salthe's hierarquical structuralism.

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Intersemiotic translation was defined by Roman Jakobson (1971 [1959]: 261) as 'transmutation of signs' — 'an interpretation of verbal signs by means of signs of non verbal sign systems'. Despite its theoretical relevance, and in spite of the frequence in which it is practiced, the phenomenon remains virtually unexplored in terms of conceptual modeling. The main methodological difficulty is related to the comparison between semiotic systems radically differents. As we know, a translation is not committed only to the 'semantic' (see Campos, 1972), to which 'meaningful dimensions' of semiotic processes are usually attributed. It seems theoretically natural to describe an interlinguistic translation by establishing correlations between comparable semiotic layers of organization — morphological-morphological, phonetic-phonetic, rhythmic-rhythmic (see Jakobson & Pomorska, 1985). However, an intersemiotic translation does not exhibit the same principle of corresponding levels. Here we propose an approach based on Charles S. Peirce's model of sign process, to provide a preliminary conceptual framework to the phenomena, emphasizing hierarchical properties and aspects.

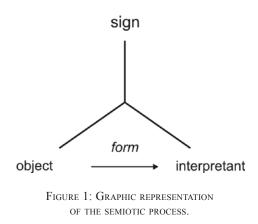
## INTERSEMIOTIC TRANSLATION MODEL

Our approach is based on two premisses: (i) intersemiotic translation is fundamentally a semiotic operation process (semiosis) (Hodgson, 2007; Petrilli, 2003; Stecconi, 1999; Plaza 1987); (ii) semiosis is a multi-layered process (Queiroz & El-Hani, 2006, 2004).

### 1. Translation as semiosis or the 'action of sign'

Peirce defined semiosis as an irreducible triadic relation between a Sign, its Object and its Interpretant (CP 2.171, CP 2.274).<sup>[1]</sup> Any description of semiosis involves a relation constituted by three irreducibly connected terms, which are its minimal constitutive elements (MS 318:81; CP 2.242). In his words:

A Sign may be defined as a Medium for the communication of a Form. [...] As a medium, the Sign is essentially in a triadic relation, to its Object which determines it, and to its Interpretant which it determines. [...] That which is communicated from the Object through the Sign to the Interpretant is a Form; that is to say, it is nothing like an existent, but is a power, is the fact that something would happen under certain conditions (MS 793:1-3; EP2, p. 544, n. 22). (Figure 1).



[1] We shall follow the practice of citing from the Collected Papers of Charles Sanders Peirce (Peirce, 1931-35, 1958) by volume number and paragraph number, preceded by 'CP'; the Essential Peirce by volume number and page number, preceded by 'EP'. References to the micro¬film edition of Peirce's papers (Harvard University) will be indicated by 'MS', followed by the manuscript number. Peirce is emphatic when he observes that *form* is nothing like a thing (see De Tienne 2003). It is something that is incorporated into the Object (EP 2.544, n. 22) as a habit, an 'action rule' (CP 5.397, CP 2.643), or a 'disposition' (CP 5.495, CP 2.170).

There are some important consequences from Peirce's theory. This model of semiotic operation describes a phenomenon or process as essentially triadic, dynamic, interpreter-dependent, and materially extended (embodied) (see Queiroz & Merrell, 2009, 2006).

## 2. Translation as a multi-layered process

Another presupposition is related to what we call 'layer of organization or description level': if semiotic processes are multi-layered (*multi-level systems*) (see Queiroz & El-Hani, 2006, 2004), an intersemiotic translation (IT) can be described as a multi-hierarchical process of relation between semi-independent layers of descriptions. Basically the layers are coordinated in terms of mutual constraints. In this sense, although we can describe the 'scenic dance space', for instance, without reference to 'movement dynamic morphology', in fact they are mutually constraining each other in a dance work.

Categorically, intersemiotic translation operates on different layers, selecting relevant aspects from the source and recreating them into the target. For example, from literature to dance, linguistic layers (rhythmic, prosodic, syntactic, or psychological ambience) are translated into dynamic of movement, organization of space, light design, costumes, scenography, etc. Notably, a 'mapping' cannot be easily established between layers of different nature (different semiotic systems) (Figure 2):

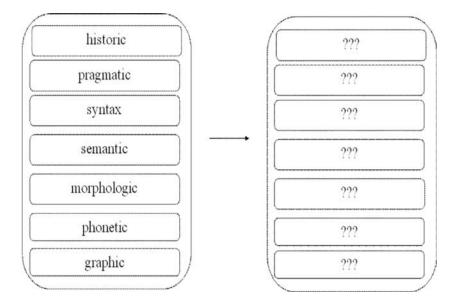


FIGURE 2: MAPPING BETWEEN LAYERS OF DIFFERENT NATURE.

If a translation from a literary work into a dance choreography results in very different materials and structures, how is it possible to compare 'semiotics source and target'? Possibilities of conceptual mapping between different systems and levels should be provided (Figure 3).

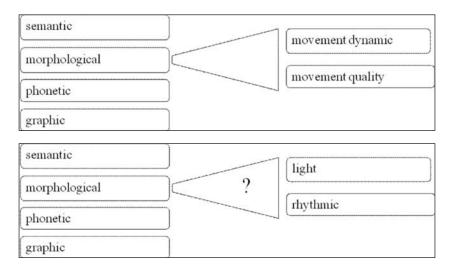


FIGURE 3: TWO POSSIBILITIES OF CONCEPTUAL MAPPING BETWEEN DIFFERENT LEVELS

## **3. Triadic Translation Model**

An important consequence related to our premises indicates that a translation is a triadicdependent relation.

There are two competing analytical possibilities:

1. The sign is the semiotic source (translated work). The object of the translated sign is the object of the semiotic-source and the interpretant (produced effect) is the translator sign (semiotic target). (Figure 4).

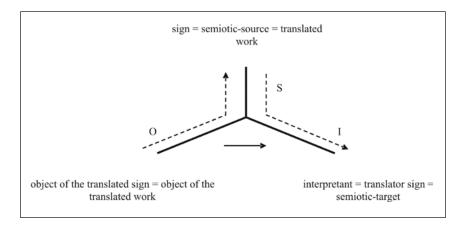


Figure 4: Triadic relation in which the sign is the translated work, the object of the sign is the object of the work, and the interpretant is the translator sign.

2. The sign is the semiotic-target. The object of the sign is the translated work and the interpretant is the effect produced on the interpreter (interpretant). (Figure 5).

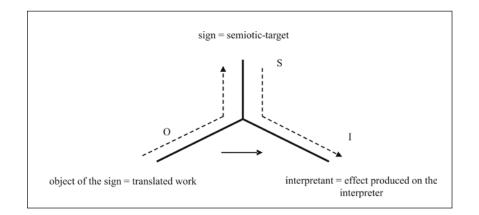


FIGURE 5: TRIADIC RELATION IN WHICH THE SIGN IS THE TARGET, THE OBJECT OF THE SIGN IS THE TRANSLATED WORK, AND THE INTERPRETANT IS THE INTERPRETER.

According to the process described above, the 'form' communicated from the object to the interpretant, produced by means of the sign, is different in each version. How can these differences help us? We can speculate about how the (analytical) alternatives provide the best insights about the phenomenon examined.

Here we insert the hierarchical relations schema to the triadic process according to the first analytical alternative. The interpretant (translated work) is determined by the object, through the sign (semiotic-source). The translated work (I) is the effect produced by the object (O) (the semiotic-source's object) of the sign (S) (the semiotic source) in a relation mediated by it.

The second analytical version provides us another perspective of the phenomenon, with focus on the reader. Including the hierarchical relations schema to this version, we will have the interpretant (the effect on the interpreter) determined by the object (semiotic-source), through the sign (semiotic-target).

#### CONCLUSION

IT represents a domain of new language processes because it tends to produce different habits of sign manipulation and interpretation. Nevertheless, there are small amounts of theoretical works systematically produced about the phenomenon. Indeed, the phenomenon is difficult to characterize and compare with analogous phenomena (e.g. inter-linguistic translation). As it involves systems of rather distinct nature, its analysis creates additional difficulties in any theoretical approach compromised with the logic of semiotic processes. One of the consequences of our approach is the importance ascribed to the materiality and dynamic involved in IT, prioritizing the semiotic properties of hierarchical relations between the source and the target signs. The partial results exhibited constitute a preliminary attempt toward modeling IT.

#### REFERENCES

Bressane, Julio (1996): Alguns. Rio de Janeiro: Imago.

- Campos, Haroldo (1972): A arte no horizonte do provável. São Paulo: Perspectiva.
- Campos, Augusto (1986): e.e. cummings, 40 poemas. São Paulo: Editora Brasiliense.
- De Tienne, Andre (2003): «Learning qua semiosis.» S.E.E.D. 3: 37-53.
- Dusi, Nicola, and Siri Nergaard (eds) (2000): Sulla traduzione intersemiotica. Versus 85/87.
- Eco, Umberto (2007): Quase a Mesma Coisa. Rio de Janeiro: Record.
- Farias, Priscila and João Queiroz (2006): «Images, diagrams, and metaphors: hypoicons in the context of Peirce's sixty-six fold classification of signs.» *Semiotica* 162 (1/4) 287-308.
- Gorlée, Dinda L (1994): Semiotics and the Problem of Translation, With Special Reference to the Semiotics of Charles S. Peirce. Amsterdam/Atlanta: Rodopi.
- (1997): «Intercode translation: Words and music in opera.» *Target* 9 (2) 235-270.
- (2005): «Singing on the breath of God.» In: Song and Significance: Virtues and Vices of Vocal Translation, ed. Dinda L. Gorlée. Amsterdam/New York: Rodopi.
- (2007): «Bending back and breaking.» *Symploke* 15 (1-2). 341-352.

Hodgson, Robert (2007): «Semiotics and Bible translation.» Semiotica 163 (1/4) 37-53.

- Jakobson, Roman. (2000 [1959]): «On linguistic aspects of translation.» In: *The Translation Studies Reader*, ed. Lawrence Venuti. London/New York: Routledge.
- Jakobson, Roman, and Kristina Pomorska (1985): Diálogos. São Paulo: Cultrix.
- Peirce, Charles S. *The Essential Peirce, Selected Philosophical Writings*. (Vol. 1 ed. by N. Houser & C. Kloesel; Vol 2 ed. by the Peirce Edition Project). Bloomington and Indianapolis: Indiana University Press, EP1 1992, EP2 1998. (Quoted as EP).
- The Collected Papers of Charles Sanders Peirce. Electronic edition reproducing Vols. I-VI [C. Hartshorne & P. Weiss (eds.), Cambridge: Harvard University Press, 1931-1935]; Vols. VII-VIII [A. W. Burks (ed.), same publisher, 1958]. Charlottesville: Intelex Corporation, 1931-1935. (Quoted as CP).
- Annotated Catalogue the Papers of Charles S. Peirce. (ed.) R.S. Robin. Massachusetts: The University of Massachusetts Press, 1967. (Quoted as MS).
- Petrilli, Susan (2003): «Translation and Semisis.» In Translation Translation, ed. Susan Petrilli. Amsterdam/ New York: Rodopi.
- Plaza, Julio (1987): Tradução Intersemiótica. São Paulo: Perspectiva.
- Queiroz, João, and Charbel El-Hani (2004): «Towards a multi-level approach to the emergence of semiosis.» Technical Report DCA-FEEC 04 (07) 1-21.
- (2006): «Semiosis as an emergent process.» Transaction of C.S.Peirce Society 42 (1) 78-116.
- Queiroz, João, and Floyd Merrell (2006): «Semiosis and pragmatism: toward a dynamic concept of meaning.» Sign System Studies 34 (1) 37-66.
- Queiroz, João, and Floyd Merrell (2009): «On Peirce's pragmatic notion of semiosis a contribution for the design of meaning machines.» *Minds & Machines* 19, 129-143.
- Salthe, Stanley N (1985): *Evolving Hierarchical Systems, Their Structure and Representation*. New York: Columbia University Press.

- Stecconi, Ubaldo (1999): «Peirce's semiotics for translation.» In *Fidelity and Translation: Communicating the Bible in New Media*, ed. Paul A. Soukup and Robert Hodgson. New York/Franklin: American Bible Society/Sheed and Ward.
- Stjernfelt, Frederik (2007): Diagrammatology, An Investigation on the Borderlines of Phenomenology, Ontology and Semiotics. Dordrecht: Springer.
- Torop, Peeter (2002): «Translation as translating as culture.» Sign System Studies 30 (2) 593-605.
- (2007): «Methodological remarks on the study of translation and translating.» Semiotica 163 (1/4) 347-364.