

**Comparatismi II 2017**

ISSN 2531-7547

<http://dx.doi.org/10.14672/20171233>

## **On Jakobson's Intersemiotic Translations in Asterix Comics**

Adriano Clayton da Silva

**Abstract** • The original idea of intersemiotic translation created by Roman Jakobson, which implies the translation of one sign system to another, has been specially associated with book-to-film translation and vice-versa, amongst many other possibilities. Within this conception, it has been commonly considered the whole text as well as the fully translated version into another system. However, there is a text type in which several sign systems are constantly interplaying, where the translation into another language or culture would require the consideration of all intersemiotic possibilities so as to “better convey” its meanings to the target readers: we are referring to comics. This work aims to reflect upon the kind of intersemiotic translation that occurs in a comic album that is translated from one language into another, i.e., as understood by Jakobson's classification as interlingual translation. To develop this idea, some pairs of frames (from French into Brazilian Portuguese) from comic books of the French character Asterix were analysed, seeking to show how the translator handled the comics' several possible communication modes (words, typography, object images, human expressions and gestures, layouts). From this analysis it was observed that the translator can use one mode (here the multimodality concept is evoked) to translate another, thus surpassing barriers usually established to keep comics images from being altered (due to copyright or any other reasons). In fact, the translator uses different modes of translation, often “retrieving” meanings from other modes—although not always successfully—, but showing great creativity most of the time. Going back to Jakobson's idea, this work also intends to show that intersemiotic translation is embedded in the other two types of translations suggested by this renowned linguist. Consequently, such classification (intralingual, interlingual, intersemiotic) can be subject to questioning and further development.

**Keywords** • Roman Jakobson; Intersemiotic Translation; Multimodality; Comics; Asterix

# On Jakobson's Intersemiotic Translations in Asterix Comics

Adriano Clayton da Silva

## I. Roman Jakobson's Theory

Roman Jakobson was one of the greatest linguistics theorists of all times. His contributions ranged from the inauguration of and participation into the circle of Russian formalists in the early twentieth century, which contributed considerably to the creation of a poetic and literary language theory, through the reformulation of the foundations of phonetics and phonology, to the presentation of his Theory of Communication, with the idea of the functions of language, in the late 1950s and early 1960s. Always interested in what was happening not only in the universe of language but in several other sciences of his time (Honenstein 21), the Russian author often brought innovations in his texts and conferences, which inevitably affected and influenced people and fields of study that had access to such materials.

Amongst his theoretical formulations, Jakobson thought of translation in a linguistic view. Through his famous text, "Linguistic Aspects of Translation," he sought to explain how the translation mechanism would function. Jakobson classified translations into three possible types: intralingual, interlingual, and intersemiotic.

- The Intralingual Translation, or rewording, is defined by Jakobson as "an interpretation of verbal signs by means of other signs of the same language" (233). This type of translation encompasses dictionaries, reformulations of sentences, paraphrases, etc.;
- The Interlingual Translation, or proper translation, is defined as "an interpretation of verbal signs by means of some other language" (233). In this category falls the type of translation most usually thought of (translation between languages), but bilingual and trilingual dictionaries can also be included;
- The third kind is the Intersemiotic Translation (IT), or transmutation, which is "an interpretation of verbal signs by means of signs of nonverbal sign system" (233). This category includes all kinds of translations of any particular work (a book, a movie, a video game) to another form of textuality or media platform, which can be a movie translated into a book, a book translated into comics, a video game translated into TV series, among several other possibilities and their respective "vice-versa."

Of course, when the author thought of the types of translations above, he associated them with his communication scheme, which was formally presented a year later in "Linguistics and Poetics." This scheme states that an addresser sends a message to an addressee, within a context, through a contact (or channel), using a code (fig. 1). But each element of this scheme involves a kind of language function, respectively: emotive, poetic, conative, referential, phatic, and metalingual.<sup>1</sup> Each function appears more or less prominently in any type of communicative act and, according to Jakobson, there is no act composed by only one type of function. What happens is that they always follow a hierarchy, with one of them standing out above the others. According to the author ("Linguistics and Poetics" 34), each function would stand out as follows:

<sup>1</sup> We must remember that Jakobson thought this scheme firstly in relation to spoken language, but quickly it turned to be applied to many cases of written communication.

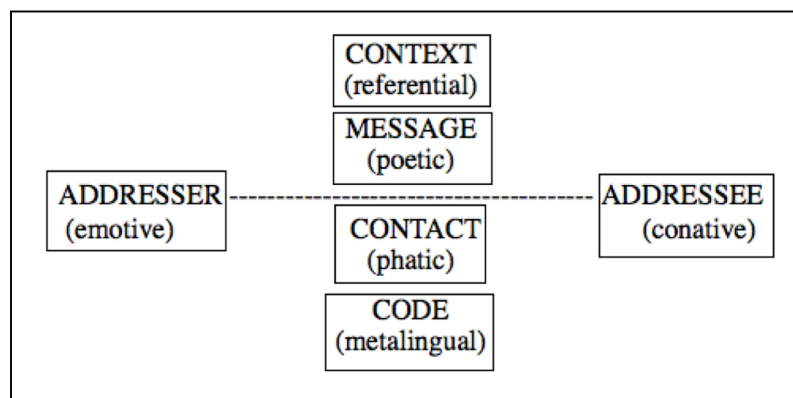


Fig. 1 – Jakobson's communicative model

- emotive: the communication emphasizes feelings and emotions of the addresser, and there may be uses of interjections and other signs that indicate some emotion;
- poetic: centred on the message itself, it is common in poetic texts and even in advertisement, where it draws attention to the structure, rhythm, and sonority of the message;
- conative: usually emphasized in order to reach the addressee or even force him/her to do something, such as imposing orders and other imperative expressions; it includes some forms of advertisement;
- referential: The emphasis is on the subject, privileging the objectivity. Very common in scientific and journalistic texts;
- phatic: seeks to establish, prolong or interrupt communication, such as greetings and farewells;
- metalingual: the code itself is emphasized, through explanations and/or descriptions. Dictionaries and grammars are good examples.

Returning to Jakobson's classification of translations, the intralingual translation would oblige the modification of the message, but the other elements would remain the same. At the level of functions, the referential and the poetic would certainly change, with more emphasis on the referential, but the other functions could also be modified. An example that the Russian author himself brings is the possibility of saying that someone is not married instead of saying that he or she is single, depending on the recipient (a lover aspirant or a relative) and the context (a party or a family event). If we think of an adult reading a story to a child, the intralingual translation would oblige the adult to explain certain passages or words, thus emphasizing the metalingual function of the message and changing the child's perception of the story.

The interlingual translation would involve changing the code, and with that the message would also be modified, since there is hardly any literal translation (word-for-word) between any pair of human languages. Once the code and message are modified, the poetic and metalingual functions would also be re-hierarchized, but the conative and referential functions could also suffer. Using another example from Jakobson, saying *I hired a worker* in English does not oblige one to say the sex of the worker, even if the action was completed. However, if translated into Russian, this sentence would force the presence of both pieces of information.

For IT, changes happen in virtually every element: context, message, code, contact, and addressee. It is inevitable that the communicative functions are also reorganized, but at a radical level. That is why people who read a book often criticize the translation of a work

into a movie, saying that something was missing, or that there were radical changes, or simply that “the book was better.” Such readers were accustomed to the impressions and emotions conveyed by the communicative acts of the book, and by recalling the passages and excerpts now turned into a film, in doing so, they fail to redo the earlier associations. But it must be remembered that, when such work is translated, it is done precisely to stalk other audiences who probably would not be ready, or would not be interested, in reading. Thinking of Umberto Eco’s book *The Name of the Rose*, for many people it is more interesting, or convenient, to watch the movie, which is just over a hundred and twenty minutes long (and with the actor Sean Connery), than reading the book, which comprises more than five hundred pages.

Jakobson still thought about how the process of human thoughts was connected to language, presenting such ideas in his other famous text “Two Aspects of Language and Two Types of Aphasic Disturbances”: speaking implies the selection of linguistic entities and their combination with others of bigger complexity. Thus, one would articulate his or her thoughts and language through metaphors—selecting and replacing elements within a catalogue available in his or her idiolect—and metonymies—combining and contextualizing such elements.

A person’s ability to perform certain types of translation is directly related to his or her perfect cognitive condition, so either of the two aphasic disturbances conceived by Jakobson would affect such ability: the Similarity Disorder would affect one’s ability to think through metaphors and would prevent him or her from thinking in synonyms and translating into other languages. In this case, intra- and interlingual translations would be seriously compromised, but the person would still be able to think of other signs (images, sounds, etc.) related to the words presented to him or to her. The Contiguity Disorder, on the other hand, would affect the ability to think through metonymies, which would not interfere that much with intra- and interlingual translations. Thinking about an image from a word, however, would be tricky.

## 2. The (Lack of) Theory of Jakobson About IT

Despite the fact that his text is one of the most cited in scholarly works related to IT, Jakobson did little to theoretically work out this phenomenon. He did not even give examples of what this translation would be,<sup>2</sup> and even in later works he did not return to the issue. This apparent neglect by Jakobson induces the vast majority of scholars who mention his text to do so only to discard it afterwards, using other texts and theories to think of IT.

Most of these other texts are obviously very recent. This is certainly due to some market trends of the last decades, when several books and comics have become movies and video games, comics and movies have won written versions and TV series and plays have been created from books and TV series, among many other possibilities. The entertainment industry has been investing heavily in the production of different versions of already existing works for the most diverse audiences. This is also reflected in the academic world, where several thinkers already see IT as something diverse from translation, which would be better called *adaptation*.<sup>3</sup>

<sup>2</sup> There is a reference to creative transposition (Jakobson does not call it *translation*) of the poetic form into music, dance, movie or paint, but no case or example is proposed.

<sup>3</sup> And we will not even talk here about transmediality and transmedial intermediality, two terms that are also used nowadays by researchers who study the adaptations of texts, movies, video games, etc., to other platforms not originally thought for them.

Among these thinkers we can cite Linda Hutcheon, who analyses the ways in which narrative structures and strategies are verted throughout different medias (such as movies that become video games). Lauro Amorim presents his reflections on the translations and adaptations of two English masterpieces to the Brazilian public. It is also worth mentioning the work of Julio Plaza, who thought deeply about IT related to poetry, visual arts and transcription.<sup>4</sup> This author focused mostly on the transmutation idea from the perspective of the Peircean sign, which will be explored later on in this work.

But the works of the three authors mentioned above, as well as almost all academic works related to the same theme, have in common the fact that they consider the translation or adaptation of a work as a whole, i.e., what is analysed is how a book became a movie or vice-versa. However, it is not possible to say that this is exactly what Jakobson meant when he thought of the term IT, since, as mentioned above, he did not present any example of it in his text. There is also the fact that the Peircean sign, the basis of Jakobson's entire communicative scheme, allows other re-elaborations about its interpretative possibilities. Thus, the proposal of this work is to rethink Jakobson's idea of IT, showing that it can mean more than the simple transmutation of a book into a film. With this in mind, we hope to contribute to the studies of IT and enable a better understanding of Jakobson's concept.

### 3. The Peircean Theory and the Multimodality Behind Jakobson's Theory

The first step to achieve the proposed objectives was given in section 1 of this work: the development of communicative acts and cognitive process ideas in relation to IT. The second step is to show how the idea of transmutation can occur not only at the macro level, as in the case of the book transformed into a film, but also at the micro level, between words and other smaller units of texts.<sup>5</sup> Let us now review the relation between Jakobson's ideas and the Peircean sign.

When the famous linguist thought of his communication model, he did not do so using the Saussurean sign. As already mentioned, the Russian author always sought knowledge from other fields of science and came to discover the phenomenology of Charles Sanders Peirce, an American semiologist who effectively developed a sign idea much more complete and applicable to any phenomenon involving transmission and reception of meaning by any sentient being.

According to Peirce,

A sign, or *representamen*, is something which stands to somebody for something in some respect or capacity. It addresses somebody, that is, creates in the mind of that person an equivalent sign, or perhaps a more developed sign. That sign which it creates I call the *interpretant* of the first sign. The sign stands for something, its *object*. It stands for that object, not in all respects, but in reference to a sort of idea, which I sometimes called the *ground* of the representing. (2.228)

We can deduce three things from this classic passage of Peirce's text: 1) the Peircean sign is composed of three parts: representamen, object, and interpretant; 2) the object mentioned by Peirce can be an object of the world, but it can also be another inner sign of one's

<sup>4</sup> Julio Plaza was disciple of the great Brazilian poet Humberto de Campos, who also explored IT in many ways in the writing of poetry.

<sup>5</sup> Of course the idea of text we have here is much more broaden, encompassing phenomena as movies, TV series, and comics, as Jakobson himself admitted to be possible.

thoughts; 3) the sign represents something to someone always in relation to some aspect or ground.

In another part of his extensive work, Peirce (5.594) speaks of thoughts through signs and writes that the ultimate goal of this process is the full expression of an idea, which would happen through a sign that was the more complete development of another sign, in a long chain of sign translations into others. Jakobson explicitly quoted this passage from Peirce on page 233 of his 1959 text.

We also find in Peirce's work that the sign has communicative potentialities related to the level at which it operates: at first, the sign evokes nothing more than a sensation, an instinct in the receiver. This is the firstness of the sign. In a second moment, the sign conflicts with other signs already existing in the thought of the being and evokes traces of other more developed signs. That is the secondness. At the third moment, the sign is then interpreted by the addressee and incorporated into its cognitive and mental processes. That is the thirdness of the sign.

Imagine a red spot on the floor. At first, it would evoke in a human being, living in a contemporary Western society, nothing more than a sensation (operation of firstness), but that would be quickly overtaken by the attempt to understand the spot in that place (secondness): it could be an inkblot spilled by a sloppy painter, or an indication that someone was injured there. Finally, after contextualizing the location of the blot in time and space, it would evoke senses related to such context (thirdness): the blot could be inside a museum, which could indicate that it is a work of art.

Some authors have developed IT through Peirce's semiotic theory: Julio Plaza, whom we mentioned earlier, is one of them. But we also appreciate the works of Julio Jeha and Daniella Aguiar and João Queiroz.

Jeha considers that experience must be taken into account in IT: "an individual experiences a sign (a text) that stands for, or refers to, a phenomenon in the world and that creates some sense (the interpretant) in his mind" (84). But the representation arising from this experience starts a long sequence of other signs, that may culminate into a text, a paraphrase or a film. In order for the chain to occur, it is necessary to remember that IT happens in other dimensions beyond the linguistic, and it comes from the human ability to abstract a sign through the perception of certain aspects of it, and through associations with other signs, for example by imagining a movie scene by reading a certain passage of a book. This makes perfect sense when we consider that thoughts are made of signs, as Peirce himself pointed out.

Aguiar and Queiroz propose to conceive translation as a layered process: IT "can be described as a multi-hierarchical process of relation between semi-independent layers of descriptions. The layers of organization do not act independently but they are autonomous in functional and descriptive terms" (205). Returning to the idea that signs represent something to someone always in a certain light, we can infer that a single sign can translate itself into several others, depending on the form or on the sign relations that are used to interpret it. But the hierarchy of meanings in a sourced text will not necessarily be reproduced in a target text: "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 sources and targets'?" (205).

The idea of layers of meanings in a text, which may now be a single sign, is already the object of study in another field: multimodality. There is even a new field of studies: the multimodal studies, which investigate human communication through its various, possible modes and semiotic systems. The notion of multimodality was born as a counterpart to the growth of the studies on systemic-functional linguistics. The latter sought to demonstrate

how the texts expressed their meanings within contexts and using all the potentialities of language. Such studies, however, deal almost invariably with spoken and written language, leaving aside other communicative possibilities that can be found within any society, such as gestures and colours. With this in mind, other thinkers have come to consider the communicative possibilities of nonverbal elements. So, each of the communicative elements of a text equals to one mode, and the interaction between the various modes is multimodality. One of the icons of this investigative strand is Gunther Kress. For the author, the mode can be summarized as “the socially shaped and culturally given resource, for making meaning” (54). But more than that, thinking about multimodality forces one to think of all the possible ways in which a person, a text or anything can convey any meaning. Gestures, colours and even smells can be modes, each one evoking in the addressee/reader some knowledge of the socially acquired world, so that he or she can grasp what those modes mean.<sup>6</sup>

If one can imagine a scene—only one—of a movie by reading a passage—and only one—of a book, then we can believe that IT must occur at lower levels, between statements, speeches and lexical units within a movie or text. And such units do not necessarily have to strictly correspond to each other. A form of perceiving, or feeling, a word can be translated into another possible mode, but related to that word in another way, like a colour, an image or even a smell. Let us now explore this possibility.

#### 4. Comics and Their (Micro) Translation Possibilities

There is a type of text in which various modes of conveying meanings are manifested and intertwined all the time, and it is because of this interweaving that such texts become so interesting: comics. In a comic book, we can find, in a single frame, words, images of objects, human images, and certain signs that we can call exclusive comic elements (ECE) jointly acting to transmit a narrative to the reader. Classic examples of comic books are the albums of the French character Asterix, from the great authors René Goscinny and Albert Uderzo. Each album of the intrepid Gaul is filled with dense linguistic and sociocultural content. It comprises references to places, peoples, and situations, both from Europe in the 1960s and 1970s, the time of creation of the great majority of the albums, and of other World History times and moments, all of which are transported to the time in which the adventures take place: year 50 BC. The incredible intertextuality of Asterix is certainly a considerable challenge for any translator who decides to translate this work into another language.

Let's now show two examples from two selected albums, in which there were micro-textual IT. The analysis will be done by comparing the French original and the Brazilian Portuguese translation. We will consider as possible modes of transmission of meanings those mentioned in the previous paragraph: words—any form of verbal manifestation that appears in the frame; ECE—the signs that belong to the comic universe and characterize it, such as balloons, movement lines, onomatopoeias, etc.; images of objects—all images that refer to objects of reality; human images—all images that refer to human bodies and their communicative possibilities (gestures, body language, and facial expressions).

We must also consider that in Brazil, traditionally, comic images (or what is considered as being a comic image) are not translated. There are specific copyright laws for words and images and modifying images is more expensive, since, in addition to copyright issues, it

<sup>6</sup> For a more complete work on the issue of multimodality and how it can be used in IT analysis, see da Silva.



Fig. 2 – An image translated into word (Goscinnny and Uderzo, *Chaudron, Caldeirão*)

requires the hiring of a graphic artist. On the other hand, many readers buy the comics precisely because of their images, which are considered works of art.

The first pair of frames analysed (fig. 2) comes from the albums *Asterix et le Chaudron* and *Asterix e o Caldeirão*. We see the character Obelix, Asterix's inseparable companion, running and gesturing, looking nervous and complaining that they let Asterix go on a mission alone.

In terms of modes, or semiotic systems, we have: *words mode*: the addition of the phrase “Mas vocês ficaram malucos?,” which does not have a corresponding term in French; *ECE mode*: the onomatopoeia “Toc! Toc! Toc!,” *human image mode*: the gesture of hitting the head with the index finger; *images of objects mode*: nothing relevant, this time.

What draws our attention here is the word *malucos*, which in English means something like “crazy” or “nuts.” The mention of madness appears, however, only in Portuguese. There is no equivalent of it in the original French version. On the other hand, the gesture of Obelix is easily recognizable by any French citizen, but not by an ordinary Brazilian citizen: it means calling someone crazy. Thus, a gesture was translated into a word. One mode, one semiotic system, was transmuted into another. If we recall the three types of translation defined by Jakobson, we have the interlingual translation occurring between the contents of each balloon, but we also have an intersemiotic translation occurring between a gesture and a word. The reasons that led the translator to make this choice are not relevant, but he certainly had to deal with the immutability of the image, being the translation restricted to the space within the balloons and in a few spaces of “freedom” given to the translator.

The second pair of frames (fig. 3) comes from the albums *Asterix chez les Bretons* and *Asterix entre os bretões*. We see the Briton characters Jolitorax and Relax very irritated by something the Romans have just done to them, and showing this anger in their British way, with Asterix astonished while watching that kind of manifestation.

Looking at the modes, we have: *word mode*: almost literal translations between source text and target text; *ECE mode*: three balloons with noticeable blanks inside them; *human image mode*: the characterization of Britons (upright posture, severe features); *images of objects mode*: nothing relevant this time.

To understand how translation happens in this case, we must evoke another concept: the concept of stereotype. All the people encountered by Asterix and Obelix in their adventures corresponded to stereotypical ideas of the French people in the 1960s and 1970s (Vila Barbosa). In this case, the stereotype of the British, represented by the Britons, was the one



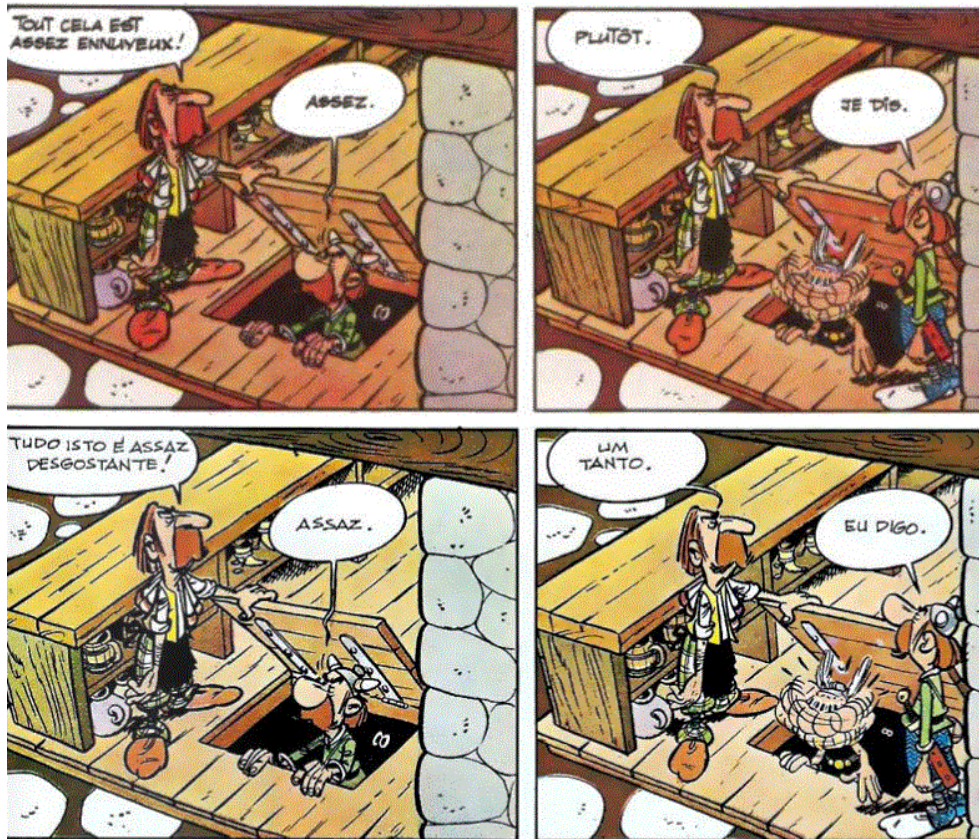


Fig. 3 – Stereotype translation (Gosciny and Uderzo, *Bretons, Bretões*)

held by the French at that time, and that was very much based on literary works, like Pelham Grenville Wodehouse's narratives,<sup>7</sup> and some television programs.

Following the above remark, let us continue with the analysis. The British stereotype is brilliantly represented by the creators of Asterix by means of three modes: in human images, showing erect and austere characters; in words, with very short and stinging phrases; and in the ECE, with balloons highlighting the few words and reinforcing the phlegmatic characteristics. At the level of interlingual translation, the translator kept the few words and their "stingingness." But if we consider the stereotype as a semiotic system, a sign that represents people, there was also an intralingual translation, since the French idea of what could be a British is very well transmitted to the Brazilian public. Thus, an intralingual (that can adopt another name, as it will be explored later) and an interlingual translation have occurred simultaneously.

Examples could be multiplied, to show that more than one type of translation occurs at a given time, but we believe that the two we considered are sufficient to prove the idea now defended.

<sup>7</sup> Two famous characters created by the English writer are Bertie and Jeeves, who represent and parody all the idiosyncrasies of the British (see for example *Thank you, Jeeves and Jeeves in the offing*).

## 5. Some Discussion

We don't know the real reason why Roman Jakobson did not dwell on IT. As mentioned at the beginning of this work, he thought of several other aspects of human language conveyed through speech and writing—perhaps this is possibly the reason that left him with little time and interest to think of communication through gestures, images and other semi-otic forms. We also must remember that Jakobson developed most of his work between the 1920s and 1960s. At that time, the use of images for human communication, in the way we understand currently, was still limited.

Although we understand that it is possible to think of IT without necessarily evoking Jakobson's work, using only the Peircean semiotics, we believe that the "Peircean way" is too broad and focused on any beings' perception, which derives from all their experiences and senses. Jakobson's work, instead, is much more focused on the linguistic, sociocultural, and cognitive relations arising from these perceptions, and was specifically designed for the relations between humans.

Looking now at Jakobson's classification, we may think that intralingual translation could actually be called *intrasemiotic translation*, since it is possible to think of translating objects with a certain utility or representation in a culture into objects with the same utility or representation in another culture.<sup>8</sup> But this translation could also be a fourth type, maintaining the intralingual translation within the linguistic sphere.

In any case, we believe that Jakobson's classification has gained a new interpretation, which is effectively applicable and concurrent with other theories and thinkers of the translation studies, including here, the intersemiotic.

## Acknowledgments

This work was supported by the development agency CNPq-Brasil. I also want to thank the professors of the Department of Applied Linguistics of de State University of Campinas-Brasil, for the essencial critics and suggestions, Elaine Lobo, for the overall review, and the anonymous reviewers of *Comparatismi*, for the welcomed suggestions in the final text.

## Works Cited

- Aguiar, Daniella, and João Queiroz. "Towards a Model of Intersemiotic Translation." *The International Journal of the Arts in Society*, vol. 4, no. 4, 2009, pp. 203-10. Accessed 9 July 2017.
- Amorim, Lauro. *Tradução e Adaptação: Encruzilhadas da Textualidade em Alice no País das Maravilhas de Lewis Carrol, e Kim, de Rudyard Kipling*. Editora UNESP, 2005.
- Gosciny, René, and Albert Uderzo. *Asterix entre os bretões*. Translated by Jorge Faure Pontual, Record, 1985.
- . *Asterix e o caldeirão*. Translated by Cláudio Varga, Record, 1986.
- . *Astérix chez les Bretons*. 1966. 7th ed., Hachette, 2008.
- . *Astérix et le chaudron*. 1969, 7th ed., Hachette, 2010.
- Holenstein, Elmar. *Jakobson: o Estruturalismo Fenomenológico*. Editorial Vega, 1975.

<sup>8</sup> This has indeed occurred in the translation of Japanese anime *Doraemon* into American culture: there is a scene in which the *hashis* held by the characters during a meal are replaced by forks in the translated version. Another scene replaces Japanese money notes for dollars. For more details, see <http://www.deculture.es/2014/05/13/doraemon-absurda-censura-occidentalizacion-estados-unidos/>.

- Hutcheon, Linda. *A theory of adaptation*. Routledge, 2006.
- Kress, Gunther. "What is mode?" *The Routledge Handbook of Multimodal Analysis*, edited by Carey Jewet, Routledge, 2009, pp. 54-66.
- Jakobson, Roman. "On Linguistic Aspects of Translation." *On Translation*, edited by Reuben Brower, Harvard UP, 1959, pp. 232-39.
- . "Linguistics and Poetics." *Style in Language*, edited by Thomas Sebeok, MIT Press, 1960, pp. 350-77.
- Jakobson, Roman, and Morris Halle. "Two Aspects of Language and Two Types of Aphasie Disturbances." *Fundamentals of Language*, Mouton, 1956, pp. 67-96.
- Jeha, Júlio. "Intersemiotic translation: the Peircean basis." *Anais da Semana de Estudos Germânicos* 11, UFMG, 1996, pp. 81-87.
- Peirce, Charles S. *Collected Papers of Charles Sanders Peirce*, edited by Charles Hartshorne et al., Belknap Press, 1931-66.
- Plaza, Julio. *Tradução Intersemiótica*. Perspectiva, 2003.
- Silva, Adriano da. "Metodologia de análise em traduções de histórias em quadrinhos: uma possibilidade para geração de dados." *In-Traduções*, vol. 6, n. 10, 2014, pp. 124-41. Accessed 9 July 2017.
- Vila Barbosa, Maria. "Delirant isti translators! Análise dalgúns elementos de difícil traduzadapación en Astérix." *Herméneus*, vol. 16, 2014, pp. 291-327. Accessed 9 July 2017.