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Design as translation activity: a semiotic overview

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Abstract: The paper originates from the following question: can the design activity, intended as an inventive and project-making activity, also be viewed as a form of translation? To answer such a question we are compelled to overcome a paradox, because design does not involve a transfer from a source text from which it translates. Design generally acts like a translator and interpreter of social needs that previously existed as unstructured, non-textual, open-ended entities, thus exposed to uncertainty and incoherence and striving through design to acquire a proper structure, i.e., a textual form. From the extensive literature on the subject in semiotics and linguistics, here we will select and outline only the fundamental semiotic models that could help us overcome the paradox, at least from a theoretical viewpoint, and provide a plausible answer to our opening question.

Keywords: semiotics, interpretation, design, translation studies

1. Introduction

Discussing the subject of translation applied to design requires, on the one hand, considering language in a wider sense, since design concerns phenomena that are not strictly linguistic; on the other hand, it needs some principles to be established in order to avoid using the concept of translation as a generic metaphor. As we shall see later on, although translation – or rather the *translation activity* – is a fundamental aspect of every interpretation process, not all interpretation processes can be defined as translation (see Eco, 2001, p. 67-71).

If we conceive design merely as the activity of producing aesthetically relevant artefacts, similarly to art, then we should have no reason for studying it as a process functioning by means of translation. The designer's creativity (or his inventiveness¹) would only be of interest to the semiotics of interpretation without any need to take translation into account. But when the design's aim is not the artefact's form itself but its ability – even through its form – to “be an interpreter” of social needs or to provide answers to questions, then the translation model is very applicable to the field.

¹ On the relationship between semiotics, inventiveness and design, see Zingale (2012).



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However, the theory of semiotics encounters a paradox here: While translation involves a shift from a *source text* (ST) to a *target text* (TT), i.e., a passage between two structured entities, design instead has no source text *from which* to translate, but rather a certain range of social needs of which it has to become interpreter (meant strictly as “translator”). The source text of design is then usually an unstructured entity whose lines are blurred, open, exposed to uncertainty and incoherence and which tries to attain a closed structure precisely through design. Such an unstructured, *fuzzy* entity may be for example a company’s search for a visual identity, or the cultural tone a certain publication would like to convey, or a set of statistical data to be displayed. In each of these cases, it can be noted that the *object to be translated* lacks the structure of a text, but still the search for an artefact that interprets it successfully is totally comparable to a translation process.

For what reason, though, in the above cases as in many others, is the interpretative design activity *also* a translative one? Furthermore, if there is no real shift from one text to another, in what way can the translation process proper to design be defined and described?

The thesis of this essay is twofold: (i) the designer *acts like* a translator since he conceives his activity as an interpretation process where he is able to infer a question from another question, a sign from another sign, until he constructs an artefact-text translating the entire process and is able to answer all the questions; (ii) in order to act effectively as a translation, the design’s interpretation process requires a first interpretative step: the textualisation of the unstructured entity from which the process originates.

To support such a thesis we have to review, albeit briefly, some of the main topics in the semiotics of translation.

2. Semiotics and translation

2.1 *Inside and outside language*

The theme of translation has always been present in semiotics. Some of the most relevant studies dedicated to the subject range from the grounding ones by Roman Jakobson (1959) and Georges Mounin (1963) to the extensive one by Umberto Eco (2001). Further research focuses more on literary critics, such as *Lezioni sulla Traduzione* (Lessons on Translation) by Franco Fortini (2011) or the numerous works in the field of translation studies, extensively outlined in Susan Bassnett (1980).

The issue of the periodical *Athanos* conceived and edited by Susan Petrilli (1999–2000) endeavoured to collect and compare different approaches to translation. In this work, in particular, two different ways to approach translation as a semiotic topic emerge: On the one hand, translation is investigated *within the language*, internal to historically settled human languages both as a social necessity (translation as an act of linguistic/cultural exchange) and as a literary issue (translation as reinvention). But translation, and everything it involves as a semiotic model, lies not only within the

conventional human verbal languages. The so-called intersemiotic translation (Jakobson, 1963), as we shall see, assumes that not only a text can be expressed through different formal and expressive means, but whole sign systems may also be conceived as connected through translation. Moreover, Petrilli's (1999-2000) collection suggests that the concept of translation can be also applied to the field of biological interactions or to the study of today's technological development. Here the "transfer of information" is not just a mechanical process but rather a phenomenon pertaining to the entire biosphere, as Augusto Ponzio underlines in the preface to Petrilli's volume. Some examples are the transfer of genetic material determining life; or the case of *transduction* in molecular biology, i.e., the ability of a cell to convert an external input into a specific cellular response; or the process of transduction in microbiology, through which genetic information is transmitted from one bacterium to another.

All these diverse approaches may induce us to think that the theory of translation will spread so much in all fields of research that it will lose its scientific value. This risk is real, that is why we shall specify better the purpose of this essay by distinguishing three ways to look at translation semiotically. Two of them have already been mentioned, the third is the one we will adopt here.

The first way is when translation is a technical issue: it is generally a linguistic or, consequently, a semantic question. A second way – and here the above-mentioned risk emerges more clearly – is the idea of considering as "translation" the many processes that only *resemble* translation but that pertain other forms of "semiotic transformation," such as processes of understanding or transtextuality. In this case, the term translation is used in a figurative acceptance. A passage by Umberto Eco where he reflects upon one of his texts can better clarify what we mean here:

In explaining Jakobson's position [...] I wrote: 'Jakobson demonstrates that to interpret a semiotic item means "to translate" it into another item (maybe an entire discourse) and that this translation is always creative enriching the first item'" (Eco, 1977, p. 53). As you can see, I put "to translate" between inverted commas, to indicate that this was a figurative expression. ... I would like to point out that I submitted my essay to Jakobson before publishing On that occasion, no objections were made to my inverted commas. If Jakobson had thought them misleading ..., he would have pointed out to me that he had intended to use "to translate" in a technical sense (Eco, 2001, p. 71).

So the third way, the way of both releasing the concept of translation from its strictly linguistic acceptance and at the same time not having to renounce the fruitful outcomes of using translation in its metaphorical meaning, is to intend it as a semiotic process. Better said, as a *semiosis*² process, which is deeper and more general. As Susan Petrilli observes, "between the meaning and translation there is an indissoluble relationship of interdependence" (Petrilli, 2014, p. 96).

² As we will see, the terms *semiosis* and *semiotic* refer to a process that leads to the production of meaning through signs, whereas *semiotic* means "pertaining to semiotics", i.e., the discipline that studies semiosis.

This interdependence exists because every signification and every form of communication require necessarily a given path to be followed in order to *gain effect*. This path, or *interpretative route*, never leaves things as they are: it transforms and reinvents them. Hence, the next step highlighted by every study on translation: translation is a (theoretical and practical) form of interpretation. Precisely because of this structural connection, translation is one of the forms through which *semiosis* happens, i.e., the sign-activity starting a process of sense production. As Susan Petrilli observes, “semiosis is itself a process of translation” (Petrilli, 2014, p. 96). But as already noted above, the problem is that even though translation is a constitutive part of semiosis, not every process of interpretation takes the form and model of translation.

2.2. Translation activity in Peirce’s model

The reference to one of the two founders of modern semiotics is inevitable. In Peirce’s model, often represented as a triangle (Figure 1), semiosis is not conceived as a reference from Signifier to Signified, but rather as a transfer from the Object to the Sign, and from the Sign to the Interpretant.³ It is a kind of process in which the first element determines the second and the second the third.⁴ Thus the Interpretant is determined in the last instance by both Object and Sign.

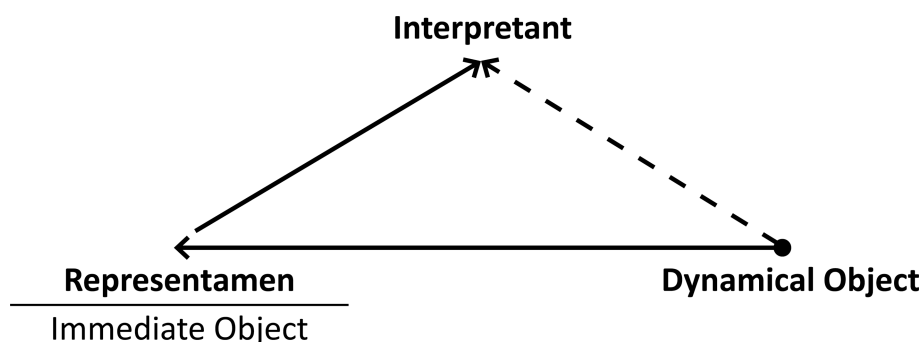


Figure 1 Peirce’s semiotic model.

This transit from Object to Sign to Interpretant, and from the Interpretant again to others Objects and Signs, is what leads to the notion of unlimited semiosis: an idea that should be intended as a recursion of sense, which fulfils and develops itself only in the continuous passage through the complex net of semiosis and signification.

It is the concept of interpretant then (obviously deriving from the verb *to interpret*) that highlights the translative character of semiosis, as Peirce explains:

every comparison requires, besides the related thing, the ground, and the correlate, also a mediating representation which represents the relate to be a

³ We will capitalise words from the semiotic lexicon when they are explicitly intended as such.

⁴ “I define a *Sign* as anything which on the one hand is so determined by an Object and on the other hand so determines an idea in a person’s mind, that this latter determination, which I term the *Interpretant* of the sign, is thereby mediately determined by that Object” (Peirce, 1931-1958, *Collected Papers*, 8.343).

representation of the same correlate which this mediating representation itself represents. Such a mediating representation may be termed an interpretant, because it fulfils the office of an interpreter, who says that a foreigner says the same thing which he himself says (Peirce, 1931-1958, *Collected Papers*, 1.553).

Two verbs are important in this discourse: *to determine*, meant as implying and producing, doing and being; and *to mediate*, meant as to be in-between, to enable becoming. The relationships of determination and mediation must be intended as translative, because every Sign translates in its features the Object determining them. But to be able to signify a given Object fully, the Sign needs to be translated in turn by an Interpretant. The Interpretant translates what the Sign says about the Object, since the Sign is determined by the Object. This implies that the meaning expresses itself fully in the Interpretant, which in turn translates the previous semiotic act of the Sign, and that the meaning of every sign-expression can be neither expressed exhaustively nor understood without a translative transfer.

An example from art history could be of help here, i.e., the case arising from John Constable's painting *Wivenhoe Park* (1816; see Gombrich, 1960). From Constable's perspective, painting had to be an analytical study of reality, a scientific exercise in rationality, and for this reason he invented a new technique based on colour contrasts with the aim of rendering the landscape's light (the Object to be represented) more realistic to our perception. Once presented to the public, however, his work (painting as Sign) was interpreted in the opposite way, as totally unrealistic, because his contemporaries looked at that painting through their perceptive habits (the Interpretants). In other words, they did not possess the cognitive instruments to translate from the real landscape into the painted landscape correctly: they felt estranged from Constable's new "figurative language." They lacked any mediating representation.

2.3. Jakobson's three kinds of translation

When Umberto Eco (2001) confesses that he had consulted with Roman Jakobson on the possibility of using "translate" between inverted commas, he meant to reassure his readers he had asked an authority in the field. Indeed, in 1959 Jakobson had published his essay *On linguistic aspects of translation* (in Brower, 1959), republished later in *Essais de linguistique générale* (1963). In this essay, he establishes the three forms in which translation can occur. It must not be overlooked that Jakobson (1963) was prompted properly by Peirce's model summarised above. He specifies that:

For us, both as linguists and as ordinary word-users, the meaning of any linguistic sign is its translation into some further, alternative sign, especially a sign "in which it is more fully developed", as Peirce, the deepest inquirer into the essence of signs, insistently stated. (Jakobson, 1963, p. 114).

Here are the three forms of translation:

1. Intralingual translation or *rewording* is an interpretation of verbal signs by means of other signs of the same language.
2. Interlingual translation or *translation proper* is an interpretation of verbal signs by means of some other language.
3. Intersemiotic translation or *transmutation* is an interpretation of verbal signs by means of signs of nonverbal sign systems (Jakobson, 1963).

Although this scheme is the ground upon which any later study on translation has been based, we can here retrieve some aspects that need further reflection and clarification.

A first general reflection is that many cases belong to the first category (rewording): practically any case in which you use different or more analytical/synthetic words to express the same concept within a given language. This leads us to think that, in this way, translation is only a subtype of interpretation – as in Eco (2001, p. 68). However, as we observed before, this risk can be avoided if we consider translation *also* as a constitutional process of semiosis, not only as a strictly linguistic matter.

Secondly, if one looks for translation processes inside design, another terminological clarification is needed: whereas Jakobson (1963) generally talks about “language,” we would rather talk today of “sign system.” Translative processes of rewording occur for example also within sign systems such as music and painting: To some extent, the Wassily chair by Marcel Breuer is a reformulation – at least as far as the bending of materials is concerned – of Thonet’s chairs. Similarly, in the history of the typographic design, the fonts Baskerville and Times can be seen as reformulations of Garamond. However, while variations in typography strive to achieve new visual identities or new practical applications, rewording in painting is a proper genre. For example, Pablo Picasso’s 1957 cycle of 58 paintings accomplished moving from Velasquez’s *Las Meninas* (1656). There are many examples in music too, where “variations” on the same theme and “transcriptions” propose again previous musical forms with big or small modifications. Many new genres too are just the rewording of previous genres.

It is thus important to release the idea of translation from its traditional bond with linguistics and to stop considering translation as a literary issue only. We have to start seeing it as an endemic part of semiosis and as a cognitive practice enabling *transfer processes* of other kinds, such as design and inventive ones.

2.4 Translation activity in Hjelmslev’s model

However, the paradox remains: While every inventive design process is an act of transformation, not every transformation process is necessarily a translation. While translating means moving from one text to another, design has no real source text, but rather semiotic needs of different kinds. So the questions are: what is the object of transformation of design? Where does the inventive process of design start from?

In order to answer such questions and therefore solve the paradox, we must take into account the semiotic model by Louis Hjelmslev (Figure 2), who identifies two planes

in every signification system (Expression Plane and Content Plane), each one divided in turn into Form and Substance (Hjelmslev, 1943). The two planes must be intended as mutually defining terms and as parts of the same sign function: One plane does not exist without the other, but each one exists by virtue of the other.

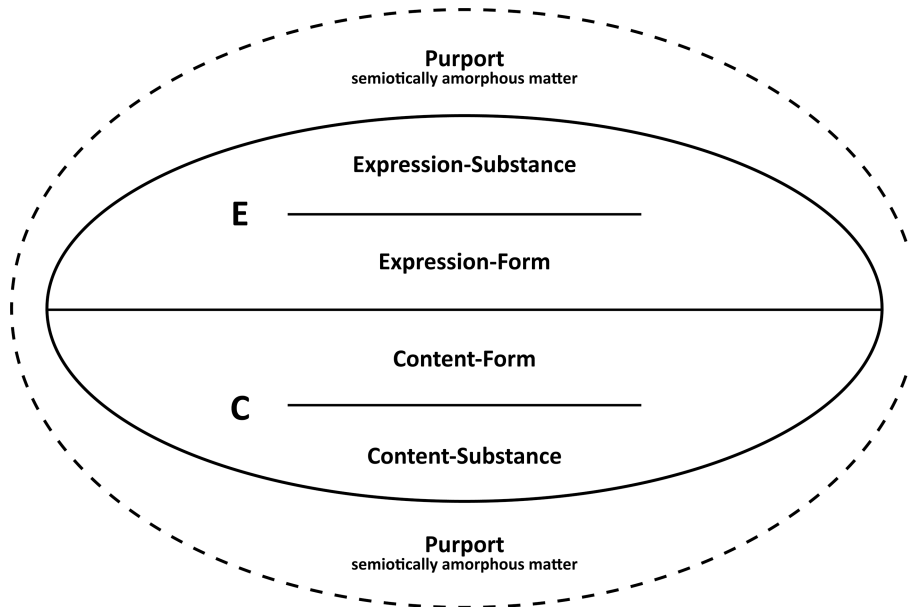


Figure 2 Hjelmslev's semiotic model.

We shall observe meanwhile that, inside the interlinguistic and intersemiotic translation, the transformation happens at the level of the Expression Plane, or is a transformation of the Expression Plane, especially of its Substance (in poetry: sound and rhythm). The Content Plane poses different questions, because it is not actually a direct object of translation, but it influences every translation. The Content Plane makes the interpreting character of translation explicit. The Content Plane is indeed the place where the semantic and pragmatic effects of translation are measured, where we can see the fails and the risks of misunderstanding as well as the cognitive breaches, intercultural influences and every other semantically enriching possibility of translation. Therefore, if at a "technical level" translation regards the relation between the expressive planes of two languages, at a "cultural" level it pertains to their relative content planes.

Friedrich Schleiermacher brightly comments on this in 1817: "Either the translator leaves the author in peace, as much as possible, and moves the reader towards him: or he leaves the reader in peace, as much as possible, and moves the author towards him" (Schleiermacher, 1817). The second option is preferable: The translator grasps the meaning of every sentence and tries to give the form it would have had if it had been written in the target language and culture. This means putting two

semantic worlds in communication and allowing them to *inform*⁵ each other mutually. A good translator, Franco Fortini observes, is the one who “pulls” the readers out of their linguistic habits, passing this way from an age of appropriation to an age of collision of texts and languages (Fortini, 2011, p. 56). A good translator, Massimo Bonfantini (2007) would add, is the one who is able to produce a translated text which is the reinterpretation of the semiotic meaning of a given communicative act into another semiotic act in another communicative game. Therefore, we are in front of a good translation when two planes of content penetrate and widen each other.

In Hjelmslev’s semiotic terms, this means that: 1. Translation guides the reader to a journey into the semantic world of the source text; 2. Such ‘journey’ is accomplished through a continuous confrontation, comparison, association, differentiation – Fortini’s *collision* – between the semiotic systems at stake.

2.5 Before the text, the Purport

There is an element in Hjelmslev’s model that is particularly interesting to us here. It is what he sets before the two planes: the *Purport*. Understanding the term and translating it is not a simple task. The Danish scholar uses the word *mening*; in Italian this translates as “Materia” (matter), although others (see Marrone, 2001) split this into two terms: *thought* and *sense*. The Purport is what *exists, is thought or felt*, before the existence of a language that can express it. It is everything “common” in the minds and feelings of the majority, but which still needs to be translated into signs to be actually shared.

The term Purport is a matter pertaining to both the Content Plane, which Hjelmslev defines as a “shapeless mass of thought” (Hjelmslev, 1943), and the Expression Plane, like for example the phonic chain. In both cases, such matter has no “semiotic form.” In Hjelmslev’s famous image: the Purport is like a handful of sand that can gradually take different forms.

After all, Ferdinand de Saussure had already talked about what precedes signification (the *langue*) in his *Course in General Linguistics*: “Psychologically our thought ... is only a shapeless and indistinct mass. ... Without language thought is a vague uncharted nebula. ... nothing is distinct before the appearance of language” (Saussure, 1974/1916, p. 112).

The sand and the cloud are useful metaphors used by the two linguists here to identify everything that precedes formation through languages and semiotic systems, but we can also add here everything that precedes the formation of *texts*.

As Cosimo Caputo observes, Hjelmslev’s introduction of the concepts of Purport or Matter into the science of signs shifts the theoretical attention from the logic problem of the language to the phenomenological problem of the sense (Caputo, 2010, p. 177). Moreover, the Purport has a non-scientific, non-semiological form, which

⁵ Also in the sense of *to instruct*.

means that it is a scientifically shapeless substrate and at the same time the place of every possible marking (Caputo, 2010, p. 181).

Caputo (2010) underlines two interesting aspects for our discourse: (i) what we call “sense” constitutes a phenomenological problem, before logic; (ii) the Purport is the “place of every possible marking” and therefore, the starting point of every semiotic process, among which is also translation.

3. Starting from the Purport: design as translation

The notion of Purport as a phenomenological topic, instead of semiotic, mental and physical at the same time, ready for semiosis and in search for a form, seems to be the way out from the paradox with which we started this essay. We will not go deeper into the study of the transfer processes from matter to form, which are of various nature and change according to the area of applicability. However, we may say that in design, it being an inventive activity, translating means *giving shape*. It is no accident that one of the possible German translations of the word design is *Formgebung*. Design’s translation activity does not aim to be understood “in another language,” but to turn into a new expression, after various steps of visual or sensible invention, what originally lacked a form or a fixed textual structure. In design, the translating act is above all an action giving shape to what still has no shape but only a purport, i.e., it exists as common sense but is destructured and therefore not sharable.

Thus, to abandon the linguistic model, we have to think of translation as a process containing all the elements of the semiotic models previously summarised. Hence, it can be pointed out that in design, translation moves from Hjelm’s Purport as well as from Peirce’s dynamic Object.

3.1 Two phases and two transfers

With the help of a graph (Figure 3), the translation process of design can be illustrated in a model consisting of two phases:

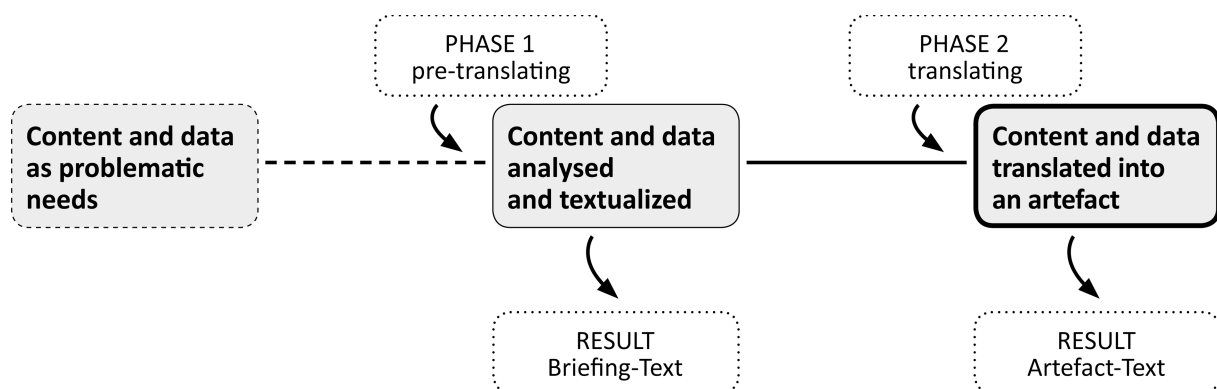


Figure 3 The translation process of design.

The first phase is pre-translating and consists in moving from the elements that in every model and semiotic act are defined as initial. This means conceiving the “problematic objectuality” from which a design process starts, which corresponds to Peirce’s dynamic Object (Zingale, 2012). In this case, it means recognising and thus studying a certain problem, such as a social need, even when the problem constitutes no “shared conscience” yet, i.e., there is no defined social discourse explaining it. It must be noted that the “problem” is not only an obstacle, but also what we feel as a lack of something whose existence can be imagined.

Understanding a problem, however, is not always enough. It is also important to identify the way in which the problem is felt and, albeit indistinctly, expressed. This means one needs to collect the *common thinking* – Hjelmslev’s *Purport* – and reorganise it according to a coherent principle, selecting its applicability and letting emerge those traits that can build a hierarchy of the objectives of sense. And much more.

This first phase aims at *textualising* the social problematic needs, i.e., to turn them into a common discourse and shared object of analysis.

We shall call the obtained text *briefing-text*, i.e., an articulated and structured text possessing its own Form of Expression but still unsuitable for communication: In other words a text with the task of preparing for full signification and communicative effectiveness. The briefing-text, indeed, has a value because it defines only the Form of Content of the design needs, while the Form of Expression is still virtual rather than actual.

The second phase is the explicitly translating phase and involves passage from the briefing-text to the *artefact-text*. It may seem that this study could end at this point, but it does not. A entire part of our study could be devoted to explaining the passage from briefing-text to artefact-text, especially to how “raw” materials contained in the briefing-text turn into “refined” items in the artefact-text, since the briefing-text only prescribes what the final item must contain but does not tell us what the most appropriate form to express those contents is.

This second phase would require an extensive case-study analysis also incorporating techniques such as reverse engineering and appropriate experimentation, with the aim of observing how different possible routes lead to different texts. Such a study obviously cannot be conducted here, but we can trace the basic principles that answer our opening question: why can an artefact also be seen as a text resulting from a translation process?

3.2 Because design is a translation

Design presents itself as a translation, not in a figurative sense, for at least three reasons linked to one another:

Firstly because the type of *semiotic* or *performative act* of design is common to translation: design stands as an element of *mediation* and *access* between a set of

contents and a user/reader. Translation happens because someone needs to gain access to a semantic area that would otherwise be inaccessible to them, because of a language barrier or because the area cannot be clearly 'seen' for various reasons.

Secondly, because being an act of mediation and access means being based upon the logic of the mathematical function: the artefact-text, or target text (TT), is a dependent variable of the source text (ST), the independent variable:

$$TT = f(ST)$$

Thirdly and as a consequence of the first two reasons, design can be defined as an act of translation because the Form of Expression of the artefact-text is *one of the many possible* that can be generated from the briefing-text. This is one of the demarcation lines between design and every other artistic activity. Despite the pervasive use of the buzzword creativity, designers are not asked to "create" anything at all, they have to *translate into an artefact* a need that is expressed and communicated in other ways or that even lacks appropriate expression. The results of such translation are potentially endless, as in the endless ways in which a poem can be translated into a given language.

4. Conclusions

As said above, a complete semiotic view of design as translation would require a study that is yet to be developed, especially as far as the passage from the first to the second phase is concerned. At the same time, the development of that attention would also require an appropriate test phase helped by commutation and reverse engineering techniques. The aim would be to observe the various transformations the same content in the briefing-text could undergo during the process of translation into an artefact-text, and to detect how the variables at stake influence certain aspects of the Form of Expression the designer chooses, among which is the reformulation or rethinking of the briefing-text. Translation, especially in design, is Play, both intended as a game with rules to be followed and as a performance, but above all as a place for the free movement and mutual influence of the elements at stake (in the sense of clearance). The space for this play is what Peirce called *Commens*, the *common mind* that enables understanding and communication (Peirce, 1991-1998, EP, 2: 478). The Commens is a cognitive and empirical place at the same time, and for this reason, we think it should be studied through experimentation and observation in design and in social communication science.

At the moment, our conclusion is limited to highlighting three modes of conceiving the translating activity of design.

Firstly, the translating activity in design is the ability to *say explicitly* something that had not had the possibility of being expressed before, but which is nonetheless present in the common conscience as content looking for a Form of Expression: In this case, the designer invents and elaborates the proper Form of Expression that was lacking or inadequate before.

Secondly, the translating activity in design presents itself as the ability to *say clearly* what was obscure and would have no other possibility of being comprehended: In this case, the designer is an interpreter of semiosically undefined contents and invents or elaborates a Form of Expression that makes those contents more accessible.

Lastly, design is an act of translation because it tries to *say differently* something already said but that is semiotically awakened by the changing cultural contexts (or by historical, ethnical, geographical ones), but which could gain more strength if renewed and reformulated through techniques and instruments enhancing its expressive effectiveness.

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