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### The case of Athens

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# A COGNITIVE SEMIOTICS APPROACH TO THE ANALYSIS OF STREET ART. THE CASE OF ATHENS

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## **Abstract**

This paper is part of my ongoing doctoral research centered on “Street Art and Cognitive Semiotics” at the division of Cognitive Semiotics at Lund University. More concretely, in this article, a fresh approach, based on a constructive (verbo-) pictorial argument, is taken to attending the relationship between a cognitive semiotics approach and street art signs in a programmatic way. This study is based on fieldwork research that was carried out during several periods in central Athens between 2014 and 2017, including photo documentation and semi-structured ethnographic interviews with street artists. In the following, my intention is first to outline a cognitive semiotic conceptual toolbox for street art understanding furnished mainly by Sonesson (2008, 2013, 2014). Second, three concrete examples indicative of these attempts are examined and analyzed semiotically.

## **1. Introduction**

Cognitive semiotics consists in the integration of methods, models, and theories from three research fields: linguistics, cognitive science, and semiotics as apprehended from the point of view of the sociocultural lifeworld, the world of our experiences (Sonesson 2014; Zlatev et al 2015).<sup>1</sup> More concretely, in the specific case of picture understanding, several attempts have been made by thinkers such as the psychologist James Gibson (1986), the philosopher Edmund Husserl (1939), the French structuralist semiotician Jean-Marie Floch (1990), and the group consisting of Belgian semioticians known as Groupe  $\mu$  (1992). Gibson was a leading psychologist who wrote about picture perception from the perspective of perceptual psychology, Husserl was a phenomenologist, and the French and Belgians were semioticians who contributed profoundly

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<sup>1</sup> Lifeworld is the English translation of the German term *Lebenswelt*, which was first introduced by the phenomenologist Husserl.

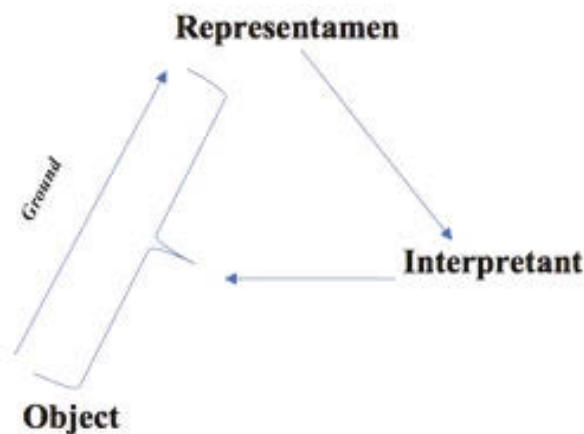
to the specific field of pictorial semiotics and rhetoric, respectively. The analysis in this paper builds on the theory for the analysis of pictorial signs proposed by Sonesson (2008, 2013, 2014), which is inspired by the work of Floch (1990), Gibson (1986), Groupe  $\mu$  (1992), Husserl (1939), and Peircean semiotic theory (1931-35).

## 2. Theoretical framework

The cognitive semiotics of the picture sign, though concerned with an object of a very different nature, can provide all these general rules, methods, guidelines and expertise to study pictures, the same way as linguistics does for language (Sonesson 2014). This further points to the general purpose of this study: a fresh approach, which is to be taken on street art research from a cognitive semiotic strand, which functions as a potential frame for detailed experimental and empirical research in the field of rhetorical figures, permitting me to provide thorough justifications (at least to some extent) for meaning construal. The cognitive semiotic conceptual toolbox, which I am going to describe here, includes the following “tools”: 1) the distinction between grounds and signs, 2) the significance of iconicity and indexicality in terms of the distinction between expression and content, primary and secondary iconicity, iconic and plastic orders, and abductive and performative indices, and 3) the model of rhetorical operations.

### 2.1. Grounds and signs

In the Peircean sense, the concept of semiosis (σημείωσις in Greek, ‘semiosis’), which is perceived as a long-standing process, involves a three-part relationship between the representamen, its object, and its interpretant. Based on this definition, and as commented also by Iliopoulos (2016: 249), “a sign is meaningful if and only if its relation to what it stands for is interpreted”. What interests me here is the relation between the representamen and its object. According to Peirce, the representamen is something, which “stands for that object not in all respects, but in reference to a sort of idea, which I sometimes called the ground of the representamen” (Peirce CP 2:228).



**Figure 1.** The relations between the Representamen, its Object, and its Interpretant. The semiotic “grounds” as dynamic forces for building up sign functions (adapted from Iliopoulos 2016)

In this case, three fundamental relations can occur between the representamen and its object, namely iconicity, indexicality, and symbolicity, and which may be taken as the “ground” (Figure 2).<sup>2</sup> If the representamen corresponds to expression and object corresponds to content, then

2 It is important to clarify that “ground” is still not a sign. “Ground” is a dynamic function that pre-exists to the sign function.

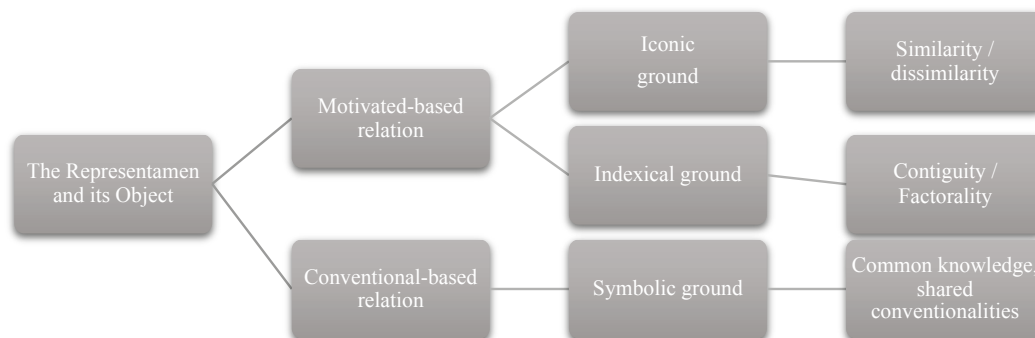
the first property of iconicity is based on distinct relevant elements between the representamen and its object. An example could be the property of “being Greek” shared between two elements from the point of view of their Greek origin. This corresponds simply to an observation, or in different words to the property of iconicity. When the comparison between both properties (iconicities) takes place, then, the iconic relation of “Greekness”, which corresponds to the iconic ground, is established as a similarity based comparison, thus being a relation, which in Peircean terms, is already a kind of Secondness. They become iconic signs if and only if one can stand for the other due to their in-between similarity based extension.

On the other hand, indexicality (δείξις in Greek, ‘pointing’) by definition exists as a relation to something else from the beginning of its presence corresponding to the indexical relation (or indexical ground), which does not necessarily depend on the sign function. This means that indexicality is conceived as an indexical ground, which is still not a sign, unless it becomes part of any sign relation. Having introduced iconicity and indexicality, it becomes clearer that iconicity has some kind of being as a single property, such as “being Greek” for example, but literally, it does not exist, if no comparison between the representamen and its object takes place, whereas, indexically is always there pointing to the indexical relation, in terms of the indexical ground, being independent from the sign relation. Lastly, in the case of symbolicity, there is only the symbolic (conventional) ground between the representamen and its object, which gives birth to the symbolic sign. Table 1 below displays schematically the different kinds of semiotic grounds and how these semiotic grounds could be elevated to the three sign functions (relations), namely iconic sign (icon), indexical sign (index), and symbolic sign (symbol).

	Firstness = Iconicity	Secondness = Indexicality	Thirdness = Symbolicity
Firstness = property	Iconicity	—	—
Secondness = ground	Iconic ground	Indexicality = Indexical ground	Symbolic ground
Thirdness = sign	Iconic sign = icon	Indexical sign = index	Symbolic sign = symbol

**Table 1.** Grounds and signs (adapted from Sonesson 2015)

At the level of “ground”, the first two cases of iconic and indexical grounds are considered motivated, and thus the representamen is related to its object either via similarity in the case of the iconic ground, or via contiguity (spatiotemporal relation) or part/whole relation (henceforth factorality) in the case of indexical ground, respectively (see Devylder 2016; Sonesson 2008 for reviews). On the other hand, the case of the symbolic ground is conventional, and thus the representamen is associated to its object via common knowledge shared by the sign users (Figure 2). Examples of conventional symbolic signs could be the euro sign (€) or the dollar sign (\$).



**Figure 2.** The representamen and its object. Motivated-based and conventional-based relations

Our research questions can now be made more explicit:

1. How and to what extent can these motivated (iconic and indexical) and conventional (symbolic) based relations between the representamen (expression) and its object (content) be applied to street art signs?
2. What are the meanings of a given street art sign and how do these meanings manifest themselves within the rhetorical structure of the picture sign?
3. How are these meanings affected by the sociocultural context?

At this point, it is crucial to mention the criteria that would need to be fulfilled in order for something to be a sign (Sonesson 2013: 316), as exemplified by the case of street art:

1. In the process of experiencing street art signification [semiotic process] there is always a **subject** involved.
2. The street art sign, which is going to be signified, must contain at least two parts: **representamen (expression)** and **object (content)** – (expression could stand for a street art work and content could stand for the depicted thing).
3. They are **differentiated** by the subject – (the street art work is here and now, whereas the depicted thing is spatiotemporally extended).
4. They are **asymmetrical** in relation to each other:
  - a. **Representamen (expression)** → is **directly experienced** (the street art work is directly experienced).
  - b. **Object (content)** → is **in focus** from the subject's perspective (the depicted thing is in focus, not the street art work itself).

## 2.2. Expression and two layers of content: primary and secondary content

As I argued above representamen could stand for the expression and object could stand for the content, respectively. In this case, starting out from the street artworks found in my collection, I think that we should make a distinction between two corresponding layers of content: one (henceforth *primary content*) that even if it is not directly experienced, nevertheless can be interpreted by the subject without previous sociocultural and/or historical knowledge of the lifeworld, and a second one (henceforth *secondary content*) at a higher level, which is in focus, and thus being crucial for the subject to have distinct sociocultural and/or historical knowledge of his particular lifeworld, at least for a certain period of time. This is explained in detail in Section 3.

## 2.3. Primary and secondary iconicity

Two cases of iconicity are important to distinguish: primary and secondary iconicity (see Sonesson 2013, 2014). In the case of primary iconic signs, the expression can easily be understood in terms of the content (without being confused with it) without external sociocultural knowledge (no conventions needed). On the other hand, the case of secondary iconicity is a bit more complicated since the similarity between the expression and content is not clear enough. Then, either an explanatory (often verbal) label or extrinsic sociocultural knowledge is needed in order to specify the similarity between two parts (expression and content). The case of secondary iconicity could be related to the secondary content, which I introduced in the subsection 2.2. It is crucial to have the sociocultural knowledge about how EU currency and Greek flag look like, for example, in order to grasp the idea of EU and Greece.

## 2.4. Iconic (pictorial) and plastic order

Another relevant characterization involves the two orders of the picture sign (Groupe  $\mu$  1992; Sonesson 2008, 2014). The iconic (or better pictorial) order corresponds to the depicted thing that is associated to something that can be perceived in experience (the depicted object of the Lifeworld experience), and the plastic order corresponds to the multitude operations of colours, forms, shapes, textures, materialities and so on negotiated through pictures (the visual treatment in other words) of the picture itself (Sonesson 2014: 31).

## 2.5. Abductive and performative indexicality

Another crucial distinction that exists between two different types of indexical configurations could be well applied to the case of street art: the case of abduction and the case of performativity (Sonesson 2014). First, accepting the fact that indexicality (indexical ground) is found even before the indexical sign being independent of it, the indexical (contiguous) relation between the representamen and its object presupposes an earlier connection based on earlier experiences. This is the case of abductive indexical signs. Second, the indexical (contiguous) relation is created when the street artist, in our case, puts together different elements to build up the representamen (expression), causing a connection. This is the case with the performative indexical signs. Both types of indexical significations, as has been stressed by both Sonesson (2008) and Iliopoulos (2016) can co-exist, also in the case of the street art sign.

## 2.6. Rhetorical operations

A philosophical model of pictorial rhetoric, which is inspired and indebted to Groupe  $\mu$  model, and is dissociated into four categories (rhetorical dimensions), namely *the dimension of indexicality*, *the dimension of iconicity*, *the dimension of symbolicity*, and *the dimension of socio-cultural categorization* has been elaborated by Sonesson (2008).<sup>3</sup>

All these four categories are based on the fundamental axes of cognitive, perceptual, and ontological understanding of the lifeworld (Sonesson 2008). The first category, *the dimension of indexicality*, is related to the indexical grounds of contiguity and factorality; contiguity in the sense of (conceptual) proximity and factorality in the sense of part/whole relations, admitting the hypothesis that we expect to experience the lifeworld in terms of parts and totalities (Sonesson 2008: 19). The second category, *the dimension of iconicity*, is the rhetorical operation, which is related to what we perceive in terms of too much or too little resemblance, always in relation to the sociocultural lifeworld. The third, *dimension of symbolicity*, refers to shared conventionalities, and the last one *the dimension of socio-cultural categorization*, is related to three pictorial subcategories (pictorial kinds), which are quite relevant to street art: the rules of construction of the picture relating expression and content (*constructional*, production), the socially intended effects (*functional*, reception), and the social channels of circulation. The analysis, I am going to do next, traces the ways in which these semiotical categories could be related to street art, at least to some extent (see below Tables 2, 3).

## 3. A cognitive semiotic interpretation of street art signs: 3 exemplary cases from Athens

I now consider the case of street art, in order to illustrate how the cognitive semiotic conceptual toolbox as outlined in Section 2 in a strictly “Sonessonean” sense could be applied to some indicative examples of street artworks.

<sup>3</sup> These categorical dimensions have been built up on both the Peircean trichotomies of Iconicity, Indexicality, and Symbolicity, as they have been discussed in Subsection 2.1, and the Groupe  $\mu$  rhetorical model. I would say that Sonesson’s main contribution here is both the integration of Peirce’s semiotic theory and Groupe’s  $\mu$  rhetoric, as well as the elaboration of the fourth dimension of socio-cultural categorization, which may indeed be quite relevant to street art.

As such, it is worth noting that the sociocultural and historical contextual boundaries, the linguistic barriers, and the high level of creativity and redefining of symbols render street art quite unique in opening up new ways of research. I further discuss in what ways street artworks, which constitute (verbo-) pictorial compositions, do bear some degrees of rhetorical figurativity and significance regarding the meaning construal.

The criterion on which I selected these three examples is that they are exemplary cases of (verbo-) pictorial signs (namely street artworks) photographically documented during the period between 2014 and 2017 in central Athens (Stampoulidis 2016), and they share the following characteristics: a) (verbo-) pictorial synergy and figurative potential, b) the verbal intertext (if any) in English, and c) the contextual information being crucial for their interpretation.<sup>4</sup> The following three street artworks are used as the exemplary cases in this article.

### 3.1. Politician blended with a dog



**Figure 3.** Politician blended with a dog. Creator: Lotek, Political Stencil. Photography Georgios Stampoulidis © in December 2016

Let me now have a closer look at the first dimension of indexicality and in particular by taking into account the notion of factorality. More concretely, Figure 3 illustrates: either an unexpected presence of an animal body and an unexpected presence of a human head, or an unexpected absence of a human body and an unexpected absence of animal head (due to combination). This example with the Dutch politician blended with an animal body is a stencil artwork, which corresponds to the representamen (expression).<sup>5</sup> Its socio-political intended effects correspond to the object (content). Nevertheless, the content of Figure 3, for instance, could be disassociated into two corresponding layers of content, as discussed in Subsection 2.2: 1) the primary content of dog-man at a universal cross-cultural level (the subject does not need any particular sociocul-

<sup>4</sup> I have decided to include only examples with verbal intertext in English in this study for the sake of unity and clarity.

<sup>5</sup> Figure 3 portrays the Dutch politician Jeroen Dijsselbloem.

tural and/or historical knowledge to interpret the sign relation), and 2) the secondary content at a higher historical/conventional level that may be that of political corruption, which is perceived as the aforementioned socio-political intended effects (the subject needs to carry some, at least, previous sociocultural and/or historical knowledge to interpret the sign relation). To this extent, representamen (expression) and object (content) entertain a doubly asymmetrical relation also in the specific case of street art. This means that even if the materialities of street artworks come first to one's perception directly, what it actually matters at the end, being in focus, is their intended effects (secondary content), which are being only indirectly present. Here, it is indispensable to have some background knowledge about politics to understand that the human head stands iconically (due to similarity based extension) and indexically (due to contiguous and part/whole relation) for a politician who is associated to a dog. This knowledge is abductive, but their combination is performative, since this contiguity and factorality do not exist outside the sign relation but are created by it.

### 3.2. Policeman blended with a pig



**Figure 4.** Policeman blended with a pig. Creator: Unknown. Photography Georgios Stampoulidis © in May 2015.

Figure 4 illustrates: either an unexpected presence of human body and an unexpected absence of human head, or an unexpected absence of animal body, and an unexpected presence of animal head (due to combination as well). As shown, in both examples until now (Figures 3, 4), parts of several (at least two different) totalities or entities (the totality of human body and the totality of animal body) are blended masterfully into one unexpected unity triggering rhetorical effects. The second example with the police man blended with a pig is an artwork made with spray-paints and paintbrush. The human body with an unexpected animal head corresponds to the representamen (expression). Its socio-political intended effects correspond to the object (content). Here, there is a need to grasp the idea about police men being pigs current not only in a wide range of street slogans but in much recent popular culture. This is the abduction, which, in this case, justified by performativity, being created the time that the sign relation itself is constructed.



### 3.3. Human body parts blended with mechanical gears



**Figure 5.** Human body parts blended with mechanical gears. Creator: N\_Grams. Photography Georgios Stampoulidis © in January 2017.

Figure 5 is the case, where unexpected parts (in this case *gears* instead of *human heads*) are added to a certain entity (in this case *human body*) creating an unexpected factor, triggering rhetorical effects as well, in terms of the lifeworld ecology. This street artwork is a paste-up artwork made by means of a coloured piece of paper (acrylics on newspaper) and pasted on the wall. The human bodies with unexpected gears as human heads correspond to the representamen (expression). Their socio-political intended effects correspond to the object (content). In this case, it is crucial to have some previous socio-political knowledge involving the crisis context in Greece, the part played by EU in Greek politics recently, thus resulting in high taxation, and generally in Greece's present debt problem. So far, the abduction, as knowledge, which is based on earlier experiences, is specified by the performative combination of human body parts and mechanical gears, which may be taken to suggest the bureaucratic nature of the EU.

### 3.4. Discussion

As I have shown indexicality with the notions of contiguity and factorality is very much relevant to street art at least from the perspective of assuming a general knowledge about the human biology incorporated within the human lifeworld. All three examples are characteristic pictures for the unexpected combination of two different entities (based on the way that is expected to be experienced in the lifeworld), in which an unexpected presence as well as an unexpected absence of factorality is found.

The next case is the dimension of iconicity, in which as noted above the presence of either too much or too little similarity is compared to what we actually see in the picture and how this is perceived within the lifeworld. All three cases of street artworks, which are exemplified here (Figures 3, 4, 5), indicate less similarity (resemblance) than expected, always in terms of the lifeworld ecology. As a matter of fact, this logical opposition in terms of “anthropological universals” (Sonesson 2008) as seen in these three examples produces rhetorical effect:<sup>6</sup> 1) human head of a Dutch politician is blended with an animal body of a dog, 2) the animal head of a pig is blended with a human body of a police man, and 3) human bodies have gears for head instead of human heads.




The last category of the dimension of socio-cultural categorization approaches pictures as “social objects” (Sonesson 2014: 33). In all three cases, the viewer is invited to consider three operational subcategories that matter depending on their use. The construction category consists of the plastic order (visual treatment in other words) of the picture itself, which encompasses different colour usages, drawing styles, shapes of textual captions, textures, and other materialities, as well as the iconic (pictorial) order. All three examples have mainly socio-political intended effects based on humor, political satire, and sarcasm. They are circulated in public space, mainly on walls (or on any other public surface).

In addition, since I am interested in the rhetorical structure of pictorial signs, and more specifically, in how meaning is construed in street art signs, what should be examined here is if in these three exemplary cases, the signs, in the strict sense of the term, satisfy Sonesson’s criteria (section 2.1).

To begin with, the (verbo-) pictorial representations depicted in the Figures 3, 4, 5 consist of at least two distinct parts: the representamen (expression) and its object (content). Nevertheless, the representamen (expression) and the object (content) would not overlap in spatiotemporal settings. This means that the different kinds of constructing qualities of those pictures (colour patterns, shapes, size, textures etc.) are detected only during the time the subject perceives the (verbo-) pictorial representations, while their socio-political intended effects are spatiotemporally extended. This reveals the different kind of nature of the representamen (expression) and the object (content): the representamen (expression), which is always material, is perceived as the specific methods of stencil, spray-paint, brush paint, and paste-up in the case of street art, whereas the object (especially the secondary one) is perceived as the socio-political intended effects.

Before I conclude this section, I would like to point out the typology of abductive and performative indexicality, which is present in these three examples (Figures 3, 4, 5). If, in all these cases, this contextual information would be missing, it would not be possible for potential recipients to construe any meaningful considerations. Interestingly, what is shown, at least in the last two examples (Figures 4, 5), apart from reinforcing the (verbo-) pictorial integrity, is the presence of verbal abductive indices as well (e.g. in Figure 4 the verbal intertext *A.C.A.B.*, which is very much symbolic, is an anti-police acronym, which generally means that “All Cops (police men) Are Bastards” (<https://en.wikipedia.org/wiki/A.C.A.B>, accessed 16 October 2017) - and in Figure 5 the EU sign, which is associated to European Union, or the question mark, which is associated to the uncertainty of new Greek generation’s future, presumably).

<sup>6</sup> Sonesson (2008: 33) claims that “anthropological universals may be the case in which the contrary terms are subsumed under universals known to every human culture, such as the opposition of the features female + child and male + adult [...] in fact, there may be an even stronger case, in which abstract contrary terms which are anthropological universals appear directly in the picture”. In our case, all three examples bear some kind of sedimented universal contradiction: human body parts + animal body parts as depicted in Figures 3, 4 or human body parts + mechanical gears as depicted in Figure 5.

<b>Iconicity</b> (more or less similarity / dissimilarity than expected) logical oppositions		
<b>Symbolicity</b> (applied to common knowledge and shared conventionalities)		
<b>Indexicality</b> (applied to abductive and performative indices) contiguity and factorality		
Applied to factorality		
Unexpected presence, unexpected absence, or combination		
Unexpected combination of different wholes triggering rhetorical effects	Unexpected parts of a whole triggering rhetorical effects	
		
(Figure 3)	(Figure 4)	(Figure 5)

**Table 2.** Iconicity, Indexicality, and Symbolicity applied to street art (adapted from Sonesson’s integrated model of rhetorical operations 2008, 2014).

Categories	Figure 3	Figure 4	Figure 5
Mode of construction (stencil, spray-paint, brush, marker pen, paste-up, sticker)	stencil	spray-paint, paintbrush	acrylics on newspaper, paste-up
Function (socio-political, aesthetic)	socio-political intended effects based on humor, political satire, and sarcasm		
Channels of circulation (public walls, façades of state buildings and / or university buildings, cultural historical monuments)	public walls, façades		

**Table 3.** Pictorial kinds applied to street art (adapted from Sonesson 2008, 2014).

#### 4. Conclusions

The cognitive semiotic conceptual toolbox outlined in this article (Section 2) is a theoretical framework to investigate the meaning-makings in the specific case of the street art genre. To briefly recapitulate, what has been proposed in this work is that the distinction between the grounds and signs, the Peircean notions of iconicity (Firstness), indexicality (Secondness), and symbolicity (Thirdness), as well as Sonesson’s integrated model of rhetorical operations could be adequately applied to street art signs.

As I hope to have demonstrated in this article, the application of the particular cognitive semiotic conceptual toolbox based on the analysis of pictorial signs as proposed by Sonesson (2008, 2013, 2014), inspired by the work of other thinkers and applied to the case of street art, could meaningfully justify the appearance of rhetorical figures, as divergences to our expectations, which are grounded in our lifeworld perception. As I have shown, street artists often make use of iconic, indexical, and symbolic configurations, namely in terms of unexpected absences

and presences, in order to create the aforementioned rhetorical effects. Ultimately, the issues that have been raised in this study concerning the “expected interrelation” between the outlined skeleton of the cognitive semiotic conceptual toolbox (Section 2) and street art semiotic interventions are workable and many aspects remain to be further investigated in order to enable a more integrated analysis of the phenomenon.

## References

- DEVYLLDER, Simon. 2016. *The PART-WHOLE schema we live through: A cognitive linguistic analysis of part- whole expressions of the self*. PhD Thesis, University Jean Moulin, France.
- FLOCH, Jean-Marie. 1990. *Sémiotique, marketing et communication. Sous les signes, les stratégies*. Paris: PUF.
- GIBSON, James J. 1986. *The Ecological Approach to Visual Perception*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- GROUPE  $\mu$ . 1992. *Traité du Signe visuel: Pour une rhétorique de l'image*, Paris.
- HUSSERL, Edmund. 1939. *Erfahrung und Urteil*. Prag: Academia Verlagsbuchhandlung.
- ILIOPOULOS, Antonis. 2016. The Evolution of Material Signification: Tracing the Origins of Symbolic Body Ornamentation through a Pragmatic and Enactive Theory of Cognitive Semiotics. *Signs and Society*, 4(2), 244-277.
- PEIRCE, Charles Sanders. 1931-35. The Collected Papers of Charles Sanders Peirce. In Charles HARTSHORNE, Paul WEISS, & A. W. BURKS (eds.), 8 vols., Cambridge, MA: Harvard University Press [cited as CP].
- SONESSON, Göran. 2008. Rhetoric from the standpoint of the Lifeworld. *Nouveaux Actes Sémiotiques. Actes de colloques, Le Groupe  $\mu$ . Quarante ans de rhétorique - Trente trois ans de sémiotique visuelle*.
- SONESSON, Göran. 2013. The Natural History of Branching: Approaches to the Phenomenology of Firstness, Secondness, and Thirdness. *Signs and Society*, 1(2): 297-325.
- SONESSON, Göran. 2014. The cognitive semiotics of the picture sign. In David MACHIN (eds.), *Visual Communication (Handbooks of Communication Science 4)*, 23-50, Berlin & Boston; Walter de Gruyter GmbH.
- STAMPOULIDIS, Georgios. 2016. Rethinking Athens as text: The Linguistic context of Athenian graffiti during the Crisis. *Journal of Language Works - Sprogvidenskabeligt Studenter-tidsskrift*, 1, 10-23.
- ZLATEV, Jordan, Göran SONESSON and Piotr KONDERAK (eds.). 2016. Introduction: Cognitive semiotics comes of age. *Meaning, Mind and Communication*. Frankfurt am Main: Peter Lang, 9-28.