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## **ATINER's Conference Paper Proceedings Series**

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# Methodological Strategies to Analyze Movement Images: Reflections from Deleuze's and Peirce's Ideas

#### **ABSTRACT**

This paper presents results of a research funded by the Research Support Foundation of the State of São Paulo (FAPESP), which addresses the relation between thought and cinematographic images, developed by Gilles Deleuze at the confluence with Charles Sanders Peirce's theories, mainly the taxonomy of signs and phenomenological categories. The two books: The movement image – Cinema 1 and The time image – Cinema 2 make up the *corpus* of this research. The goals are to determine the contribution of Deleuze to the understanding of the relation between thought and image, and to explicit methodological strategies to analyze movement images. This research is important because it brings contributions to both the Visual Communication and Education, since it addresses the understanding of communication processes involving movement images.

**Keywords:** Deleuze/Peirce. Movement image. Time image. Thought. Perception.

#### Introduction

This paper presents results of an undergoing research, whose theme is the relation between thought and cinematographic images, from Deleuze's theories, in the books The Movement Image – Cinema 1 and The Time Image – Cinema 2, at the confluence with Peirce's theories, notably the taxonomy of signs and the phenomenological categories. Deleuze's cited books make up the corpus of this research, whose main goal is to understand how the philosopher relates the phenomenological categories: firstness, secondness and thirdness and sets out from the taxonomy of signs to the concepts of movement image and time image. Therefrom, one proposes to list the contributions of Deleuze's theories to understand the relation between thought and image, and to explicit methodological strategies to analyze movement images as well.

Concerning Peirce's theories, Deleuze justifies his reference to Peirce because "he (Peirce) has established a general classification to images and signs that is undoubtedly the most complete and varied of all. It is like one of Lineu's classification at natural history or, more than that, like one of Mendeleiev's chemistry table." (DELEUZE, 2009, p. 11). In addition, he states that cinema requires "new perspectives about this problem". (DELEUZE, 2009, p. 11).

Within this context, it is pertinent to examine the "new perspectives" mentioned by Deleuze, notably the ones related to the classification of images and signs in cinema. Therefore, it is worth analyzing minutely the concepts of movement image and time image, as well as expliciting and analyzing Deleuze's denominations to the three components of the movement image: perception image, action image and affection image. He also comments that some of the great authors of cinema, architects, musicians and painters usually think with movement images and time images. Therefrom, one question: Wouldn't Peirce also thought with movement images and time images?

The possible results related to the understanding of thought, as action of signs, as well as the possibility that such reflections may bring in methodological strategies to analyze movement images are theoretical and methodological advancements that this research yields.

Therefore, as it relates results of the mentioned research, this paper addresses both the approximations between the perception theory and the phenomenological categories, under Peirce's perspective, and the perception image, a component of the movement image, a Deleuze's proposed concept. Thereto, one presents reflections on the concept of movement image, aspects of Peirce's perception theory and philosophical architecture phenomenology; finally, one analyzes such concepts and sets out addressing Deleuze's classification of the perception image, which is guided by the taxonomy of signs under Peirce's perspective.

## **About the Movement Image**

In this part, one presents the divisions of the movement image. Thereto, it is suggestive to begin with the conception of perception presented Deleuze's The movement image: Cinema 1, from Bergson's theories, which appear in the work Matter and Memory. With the theories presented by this philosopher therein, according to Deleuze (2009, p. 11), it was no longer possible to oppose the "movement as a physical reality in the external world to the image as a psychic reality in the consciousness". So such theories have shown the identity between image and movement and, more specifically, between movement image and matter.

According to Bergson's theory, on the one hand, the movement "is what occurs between objects and parts; on the other hand, it is what expresses the duration or the whole." (DELEUZE, 2009, p. 27). The objects or parts of a set are denominated movable clips and the "movement is established between these clips and it relates the objects or parts to the duration of a changing totality, therefore, it expresses the changing of the whole, in relation to the objects and it is itself a movable clip of the duration". (DELEUZE, 2009. P. 27). There are not only instant images, or movable clips of the movement, but movement images that are movable clips of duration, though.

The plane is the movement image, that is, it is a movable clip of duration, because it refers the movement to a changing totality. It is proper to the cinematographic movement image "to extract the movement, its common substance, from vehicles or movable bodies, or to extract mobility from movement, as its essence." (DELEUZE, 2009. p. 44).

What is the role of perception in the constitution of the movement image? There are "three types of images into which the movement images are divided: (...) perception images; action images and affection images."(DELEUZE, 2009, p. 107). Such division, according to Deleuze (2009, p. 98), comes from conceiving that perception and language distinguish bodies, qualities and actions. The body "substitutes the movement for the idea of a subject who would perform it or of an object that would experience it, of a vehicle that would transport it". The quality, for its turn, "substitutes the movement for the idea of a state that persists while another one does not succeed it" and, finally, the actions "substitute the movement for the idea of a provisory place where to it proceeds or of a result that it obtains". According to Deleuze (2009, p. 98), the images, in their materiality, are not things to be conceived as bodies; but as qualities or actions, instead.

Bergson's double system of image reference clearly shows the difference between a certain thing and the perception of it. According to Deleuze (2009, p. 103), "one thing and the perception of it are an only and same element, a unique and same image, though it is referred either to one or the other system of reference". "The thing is the image such as it is, as it refers to all the other images from which it entirely suffers action and over which it immediately reacts." (DELEUZE, 2009, p. 103). So, the thing constitutes an image referred to the first system, that is, according to Deleuze (2009, p. 102), "a system in

which each image varies to itself and in which all the images act and react in relation to one another, in all their faces and all their parts". The perception of the thing, for its turn, according to Deleuze (2009, p. 103-4), "is the same image referred to another special image that conforms it and that retains from it only a partial action, and only reacts to it immediately. This image refers to the system "in which all of them vary chiefly to only one, which receives the action from other images in one of its faces and reacts to it on the other face." (DELEUZE, 2009, p. 102).

About the mediated nature of the perception of the thing, Deleuze (2009, p. 104) explains:

We perceive the thing except what does not interest us in relation to our necessities. By necessity or interest one should understand the lines and points that we retain of the thing in relation to our receptor face and the actions that we select in relation of the retarded actions we are able to perform. This is a way to define the first material moment of the subjectivity: it is subtracting, it subtracts what is not interesting from the thing. But, conversely, in this case, it is necessary that the thing presents itself as a perception, and as a complete, immediate, diffuse perception. The thing is image and, to this designation, it perceives both itself and all the others as it suffers their action and reacts to it in all its parts.

But, the perception is not constituted only with the subtraction. There is also the action, an unpredictable response, which is only possible because as it perceives the thing, one face has received a privileged excitation and the other ones have been eliminated, which is "equivalent to say that, above all things, the perception is motor sensorial." (DELEUZE, 2009, p. 105).

The perception image gives place to the action image, we pass from one to the other, insensitively. The action image, according to Deleuze (2009, p. 106), is the "second material aspect of the subjectivity. Thus, as the perception refers the movement to "bodies" (nouns), that is, to rigid objects that will serve as movable or moved ones, the action refers the movement to "acts" (verbs) that will be the design of a supposed term or result.

So far, one admits that the movement image is constituted along with perception image, which corresponds to the first material aspect of the subjectivity, the subtraction, and with the action image, the second material aspect of the subjectivity, which corresponds to the virtual action of the things over us and our possible action over things. But, there is also the third material aspect of the subjectivity, the affection image.

The affection is what occupies the interval, what occupies it without filling it up or plugging it. It appears in the center of the indetermination, that is, in the subject, between one perception about certain disturbing aspects and a hesitant action. It is a coincidence of the subject and the object, or the manner how the subject perceives itself, or rather, how it makes its own experience or feels itself "from inside" (third material aspect of the

subjectivity). It refers the movement to a "quality" as a lived state (adjective). (DELEUZE, 2009, p. 106).

The affection retakes the parts that the subtraction does not encompass. The perception not only retains or reflects what interests us, but also does not allow passing what, in a first moment, seemed indifferent to us. Deleuze emphasizes the importance of it.

There is necessarily one part of external movements that we "absorb", we refract, and which do not turn, neither to perception objects nor into the subject's acts; instead, they will mark the coincidence of the subject and the objective in a pure quality. This is the last avatar of the movement image: the affection image. It would be an error to regard it a failure of the perception action system. On the contrary, it is an absolutely necessary third datum. (DELEUZE, 2009, p. 106-7).

After exposing the three types of movement image, Deleuze seeks for the signs corresponding to it, in Peirce's semiotics or logic. He also associates each of the three types of movement image to Peirce's instituted phenomenological categories. In the ambit of this article, we are going to analyze the perception image. Thereto, it is pertinent to address the perception, under Peirce's theories, and, generally speaking, the phenomenological categories: firstness, secondness and thirdness, and the types of consciousness, as well, in order to clear the passage from perception to action.

## Aspects of Perception and Phenomenology from Peirce's Perspective

Phenomenology is a quasi-science that "amass and studies the types of elements presented in the phenomenon" (CP 1.186). The phenomenological categories instituted by Peirce are founded in the logic of the relative. They also emerged in accordance to the three modes by which the experience is constituted, namely: "by means of quality (monadic relation), of otherness (dyadic relation) and of mediation (triadic relation), these are modes of appearing that constitute the denominated categories: firstness, secondness and thirdness, respectively." (CP 1.346-347).

As firstness, a category that corresponds to the monadic relation, one has a first mode of appearing, which is given by the qualities of the phenomenon. It is something that does not react, it presents itself as an object that does not resist; it is a pure possibility. The qualities of color, sound, smell, pleasure are presented in the phenomena that are themselves complete and that constitute free possibilities of experiencing. The redness, for example, exists without being imagined or perceived by anyone in a realization, that is, it exists independently from a confrontation or an idea that the human mind may construct by involving it.

Another mode for the phenomenon to appear is otherness, resistance, which corresponds to the dyadic relation. It is something that opposes the will, the expectancy. The brute facts always affront and deceive our expectancies. "We expected one thing, or passively took it fro granted, and had the image of it in our minds, but experience forces that idea into the background, and compels us to think quite differently." CP 1.324). "I must explain that I mean mutual action between two things regardless of any sort of third or medium, and in particular regardless of any law of action." (CP 1.322). The secondness firms itself through this objectivistic mode of appearing. The thirdness is not reduced to qualities, either linked to the mode that firstness forms itself or to the conflicts of secondness. It is the category of the triadic relations, "is the idea of that which is such as it is as being a Third, or Medium, between a Second and its First. That is to say, it is Representation as an element of the Phenomenon." (CP 5.66). Therefore, Thirdness is mediation.

While phenomenology shows us the world as an appearance, the perception theory explains how we grasp the things of the world. Perception, under Peirce's theories, involves chiefly the concepts of percept, *percupuum* and perceptual judgment.

According to Peirce (CP 7.621), the percept neither explains nor apologizes nor defends itself for being away from the percipient. It is something strong that, silently, forces itself over it. The percept "is very insistent, for all its silence." (CP 7.620). Its presence is disturbing and one cannot get rid of it, unless by means of some physical effort. According to Peirce (CP 7.643), the percipient does not know anything about the percept, except what comes with judgment or perceptual judgment. But, it both feels the strike, the reaction of the percept, and sees its content in an object, in its entireness, whereas the "perceived" comes with the perceptual judgment.

"The percept is not the only thing that we ordinarily say we "perceive"; and when I professed to believe only what I perceive, of course I did not mean percepts, since percepts are not subjects of belief or disbelief. I mean perceptual judgments."(CP 7.626. The perceptual judgment cannot be considered a perception yield, as in the relation with the unknown and belief, it is just like the percept. In such a way, that Peirce (CP 7.629) proposes the term *percipuum*, which includes both the percept and the perceptual judgment "propose to consider the percept as it is immediately interpreted in the perceptual judgment, under the name of the 'percipuum'." (CP 7.643). This last one imposes itself for recognition, without any motive.

According to Peirce (CP 7.625), the percept is composed by two kinds of elements: the ones of firstness and the ones of secondness. "There are the qualities of feeling or sensation, each of which is something positive and sui generis, being such as it is quite regardless of how or what anything else is. On account of this self-sufficiency, it is convenient to call these the elements of 'Firstness'", which are connected to forms. "The vividness with which a percept stands out is an element of secondness; because the percept is vivid in proportion to the intensity of its effect upon the perceiver." (CP 7.625). These

elements of secondness are the very warrantors to the peculiar singularity of the percept.

According to Peirce (CP 5.181), the perceptual judgment is the starting point of the whole critical and controlled thought, that is, the meaning of any representation, of any type of cognition, lies upon it. Thus, what enters the synthetic consciousness, a synonym to thirdness, comes from perceptual judgments, which are, in an ample sense, abducting inferences, considering that abduction must be understood as the temporary adoption of an explicative hypothesis.

The immediate object of every thought is, ultimately, according to Peirce (CP 2.539 – 540), the percept. He also explains that psychologists, in general – evidently, that refers to studies produced until the time when Peirce has written such ideas – understood that perception consisted of an array of images to the mind, as if one were strolling inside a gallery of paintings. But that is not the case, because the perceptual judgment which, along with the percept and the *percipuum* compose the perception, and whose nature is of a conclusion, with general elements, constitutes the starting point or first premise of every critical or self-controlled thought.

Following, one presents the reflections involving the concept of perception image that we proposed for this paper.

#### Reflections at the Confluence of Ideas

Deleuze distinguishes the thing from the perceived thing. The thing, which "is the image such as it is in itself" would correspond to the percept, in the perceptual process in the light of Peirce's ideas; the perceived thing, or perception image, would correspond to the pair *percipuum*/perceptual judgment. The yield of the perception, following the perception image, is the action image, whose starting point, under Peirce's perspective, would be the perceptual judgment. By proposing the affection image as the third component of the movement image, Deleuze somewhat shows that the movement image is also composed by qualitative aspects. The affection image retrieves some unperceived aspects, either in the subtraction or constitution of the perception image.

Deleuze says that "one passes insensitively from perception to action", which leads us to infer that the action image needs to be seen as something that occurs in the sphere of secondness. According to Deleuze, as the affection image is "between two", then, the movement image is in the secondness.

Following, Deleuze's classification to the perception image, which follows Peirce's taxonomy of signs. Referring to the perception image, Deleuze (2009, p. 122) explains that applying one of Peirce's terms, one could call it dicisign", or, as we have mentioned, a dicent indexical sinsign. According to Peirce (CP 2.251):

A Dicent Sign is a Sign, which, for its Interpretant, is a Sign of actual existence. It cannot, therefore, be an Icon, which affords no ground for an interpretation of it as referring to actual existence. A Dicisign necessarily involves, as a part of it, a Rheme, to describe the fact, which it is interpreted as indicating. But this is a peculiar kind of Rheme: and while it is essential to the Dicisign, it by no means constitutes it.

But, after classifying the perception image, as a dicisign, Deleuze envisages the possibility of preponderance of the rheme, by giving as an example, the cinematographic images of the french school, which constructed "a consciousness in act that amplified the movement and directed it to the matter" (DELEUZE, 2009, p.123). Deleuze explains this movement. In his words:

The perception image was not supposed to reflect itself on a formal consciousness, it was supposed to split up into two states; a molecular one and a molar one; a liquid one and a solid one; one of them dragging and erasing the other. Therefore, such a perception sign would not be a dicisign; it would be a rheme, though. Whereas the dicisign set a frame that isolated and solidified the image, the rheme addressed an image that became liquid and passed either through or under the frame. The chamber-consciousness became a rheme, because it updated itself in a fluent perception and thus it attained a material determination, a flux-matter. (DELEUZE, 2009, p. 127-8).

Therefore, the perception image can also be classified as a rhematic indexical sinsign, remembering that a rheme "is a Sign which, for its Interpretant, is a Sign of qualitative Possibility, that is, is understood as representing such and such a kind of possible Object. Any Rheme, perhaps, will afford some information; but it is not interpreted as doing so". (CP 2.250). Thus, in the light of Peirce's ideas, the perception image, according to Deleuze, can be classified either as a dicent indexical sinsign or as a rhematic indexical sinsign.

Retaking Peirce. By addressing the differences between percept and perceptual judgment, he explains that the percipient, before a yellow chair, emits the following perceptual judgment: "That chair appears yellow". The yellow color, in this case, is a predicate. "This predicate is not the sensation involved in the percept, because it is general. It does not even refer particularly to this percept but to a sort of composite photograph of all the yellows that have been seen." (CP 7.634). This quality of feeling, linked to the yellow color, which one could name affection image, can also guide the action, contributing for the updating of the first level of consciousness. Here, the iconic aspect of the percept preponderates.

According to Peirce (CP 7.628), "the perceptual judgment does'n lie upon a premise, since the percept is neither a proposition nor is it similar to the percept, in its appearance". Thus, the foundation that authorizes it to represent

the percept – therefore, not logically – is a real connection, like an index. But, at the perceptual level there is a relation between iconicity and indexicality.

Therefrom the two possibilities of classification that have been given. However, we consider that these two classifications refer to the action image and not to the perception image. Thus, the perception image gives place to the action image: a rhematic indexical sinsign or a dicent indexical sinsign. The perception image would be restricted to the image that constitutes itself with the triad percept/*percipuum*/perceptual judgment.

When Deleuze seeks to name the perception image, following Peirce's classification, as well as to understand it in the ambit of phenomenology, one perceives certain vagueness. Perhaps the levels of consciousness proposed by Peirce may contribute to add explanations to such a passage. The levels of consciousness proposed by Peirce, as he emphasizes, occur in the movement of signs/interpretants, or in the semiosis.

There are three levels of consciousness (Fig. 1). According to Peirce (CP 1.377), in correspondence to the phenomenological categories, such levels are:

It seems, then, that the true categories of consciousness are: first, feeling, the consciousness which can be included with an instant of time, passive consciousness of quality, without recognition of analysis; second, consciousness of an interruption into the field of consciousness, sense of resistance, of an external fact, of another something; third, synthetic consciousness, binding time together, sense of learning, thought.

Peirce (CP 1.387) explains that the synthetic consciousness includes: the sense of similarity; of real connection and the sense of learning.

The conception of quality, which is absolutely simple in itself and yet viewed in its relations is seen to be full of variety, would arise whenever feeling or the singular consciousness becomes prominent. The conception of relation comes from the dual consciousness or sense of action and reaction. The conception of mediation springs out of the plural consciousness or sense of learning. (CP 1.378).

Peirce (CP 1.383) takes the idea of compulsion to explicit the three types of synthetic consciousness (Fig. 1) and mentions that the highest level of synthesis occurs neither for the attraction of feeling or representations of it, nor because of necessity; instead, it is due to interest in intelligibility, which he names intuitive connection. Thus, the compulsion that accompanies perception and inserts it into the sphere of secondness, which involves the percept, the *percipuum* and the perceptual judgment, according to Peirce; or the perception image in Deleuze, may contribute to attain one of the synthetic consciousness levels. Since the perceptual judgment is – a quasi-sign – or an index, in relation to what it barely represents, how would it be possible?

Quality consciousness

Dual consciousness

Internal compulsion (association for resemblance or similarity)

External compulsion (connection

Synthetic consciousness

to the real)

intelligibility)

Intuitive connection (interest in

Figure 1. Diagram to the Levels of Synthetic Consciousness

Source: Elaborated by the authoress following CP 1.377 and 1.378.

Peirce (CP 1.311) explains that every mind operation, even a complex one, has an absolutely simple feeling, the emotion of the totality. It is a secondary feeling or a sensation provoked inside the mind. The action of the sign occurs in a *continuum* of feeling. The relation indexicality/iconicity set by the perception image becomes indispensable for the third level of synthetic consciousness to firm itself, since it can construct a qualitative ground to permeate future semioses.

Thus, the perception image gives place to the action image; a rhematic indexical sinsign or a dicent indexical sinsign, and the level of consciousness either shifts to the first one, a quality consciousness, or remains in the second, a dual consciousness. Therefore, Deleuze's classification of perception image is adequate to the action image, but it considers only two possibilities.

However, if the level of indexicality involved in the passage perception image/action image is degenerated, which soothes the conflict, the strong connection to existents and gives vent to the power of allusion, of suggestion, with potentiality to update the first level of consciousness, the quality consciousness, then, the semiosis can be triggered. That is because, in this qualitative ground, lain upon the perceptual judgment, other aspects of the percept (now composing the immediate object of the sign) can be retaken. If the resemblance or similarity preponderates in this retaking, that is, if with the qualities, one intensifies the power of suggestion in relation to the perceived object, then, the action image becomes a rhematic iconic legisign and the interpretants will be the emotional dynamic. If the connection to the existent preponderates, that is, if the marks of the object invade the action image, then, it becomes a rhematic indexical legisign or dicent, and the interpretants will be the emotional or energetic dynamic, respectively.

If the interest in intelligibility preponderates, then, the aspects of law, rules or conventions impregnate the movement of thought, the images become symbolic legisigns, which, in the relation to the interpretant, can be rhemes, dicents, or arguments, whose interpretants can be denominated, respectively,

emotional, energetic or logical. When the last ones preponderate, they either elicit reflection or put the signs in movement, in action... it is the turn of the time images. The concepts involved in the presented reflections are depicted in Table 1.

**Table 1**. Classifications according to Deleuze and Peirce

Deleuze/	Deleuze	Peirce	Deleuze/	New classification
Bergson			Peirce	
Thing/	Perceptio	Percept/	Dicisign	
Perceived	n image	percipuum/		
thing		Perceptual		
		judgment		
	Action	effect from		Dicent indexical sinsign
	image	the		Rhematic indexical sinsign
	and	perceptual		Rhematic iconic legisign
	Affection	judgment		Rhematic indexical legisign
	image	as an index		Dicent indexical legisign
				Dicent indexical legisign
				Rhematic symbolic legisign
				Dicent symbolic legisign,
				Argumentative symbolic
				legisign

Source: Elaborated by the authoress, from the reflections presented in this item of the paper.

This classification takes into account only the first ten classes of signs established by Peirce. But, what is more relevant to the ambit of this paper are the minimal differences in the movement of perception to cognition which, somehow, contribute to understand the movement of thought with images, in a first moment within the sphere of secondness and, following, remaining in it or entering thirdness.

### **Final Statements**

Let us retake the contributions that come from the reflections presented here. Firstly, from this initial view of Deleuze's concepts, related to Peirce's, one infers that it would not be pertinent such a classification to the perception image. This would be adequate to the action image, as a possible effect of the perception image. Secondly, one realizes the importance of having the categories as a guide to elaborate methodological strategies to analyze movement images.

Let us see how it is possible. "A film is never made up by a unique type of images" (DELEUZE, 2009, p. 113). However, considering that Deleuze (2009, p. 113-4), following an Eisenstein's indication, explains that:

each one of these movement images is a standing point over the whole film, one way to capture such a whole, which becomes affective, in the great plan, active in the middle plan and perceptual in the setting plan, each one of these quit being spatial to become itself a 'reading' of the whole film...

This affirmation leads us to realize the importance of the phenomenological categories in the analysis of the movement image.

Thus, by means of a record of plans with their specificities, one can list their possible effects, which corresponds to evaluating the user's preponderant level of consciousness and, in the very end, the phenomenological category likely to prevail (reign). Such a classification, which will be further addressed, has been developed by Deleuze and contributed, somewhat, to trace a history of cinema, although it had not been his intent, as he clearly stated in the beginning of his work.

#### References

Deleuze, G. 2009. A imagem-movimento. Cinema 1. Lisboa: Assírio & Alvim, 2009.

Drigo, M. O. 2007. Comunicação e cognição: semiose na mente humana. Porto Alegre: Sulina.

Drigo, M. O.; Souza, L. C. P. de. *Aulas de semiótica peirceana*. São Paulo: Annablume.

Hartshorne, C.; Weiss, P. 1994 [1959]. *The collected papers of Charles Sanders Peirce*. Cambridge, Harvard University Press. [CD-ROM].

Mostafa, S. P., Cruz, D. V. Da N. (2011). *Deleuze vai ao cinema*. São Paulo: Alínea. Parente, A. 2013. *Cinema/Deleuze*. Campinas: Papirus, 2013.

Peirce, C. S. 1998. *Antologia Filosófica*. Tradução: António Machuco Rosa. Portugal/Imprensa Nacional: Casa Da Moeda.

Silva, A. da R., Araújo, A. C. da S. *Semioses do movimento e do tempo no cinema1*. Intercom – Sociedade Brasileira de Estudos Interdisciplinares da Comunicação XXXIV Congresso Brasileiro de Ciências da Comunicação – Recife, PE – 2 a 6 de setembro de 2011. Disponível em: <a href="http://www.intercom.org.br/papers/nacionais/2011/resumos/R6-1357-1.pdf">http://www.intercom.org.br/papers/nacionais/2011/resumos/R6-1357-1.pdf</a>>. Acesso em: 10 jan. 2015.