# ATTENTION AND LANGUAGE[*]
# PRELIMINARY REMARKS
# ON A PHILOSOPHICALLY IMPORTANT CONNECTION

## ATENÇÃO E LINGUAGEM -
## OBSERVAÇÕES PRELIMINARES SOBRE
## UMA CONEXÃO FILOSOFICAMENTE IMPORTANTE

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**ABSTRACT:** Attention is often regarded as a process belonging to the sphere of perception. The relationship between attention and language is rarely addressed in philosophy. I argue that there is a circular process of attention informing language and language informing attention in experience. Attention is the prerequisite for demonstrative reference and the grasp of general concepts. Attentional modifications of experience take place in a context of pre-understanding that is always already shaped by language in form of our prejudices and previous judgments about objects in a certain object domain. As a social medium, language also shapes our attentional behaviour by way of instruction and the learning of social norms and manners.

**KEY WORDS:** Reference. Horizontality. Pre-understanding. Instruction. Phenomenology.

**RESUMO:** Atenção é freqüentemente considerada como um processo que pertence à esfera da percepção. A relação entre atenção e linguagem é pouco abordada em filosofia. Defendo que haja um processo circular da atenção informando a linguagem e da linguagem informando a atenção na experiência. Atenção é pré-requisito para referência demonstrativa e para a compreensão dos conceitos gerais. Modificações de experiências referentes à atenção inserem-se no contexto de uma pré-compreensão que é sempre já conformada pela linguagem, na forma dos nossos preconceitos e julgamentos anteriores sobre objetos em um determinado domínio do objeto. Como um meio social, a linguagem também molda o nosso comportamento no que se refere à atenção através do ensino e da aprendizagem das normas sociais e das boas maneiras.

**PALAVRAS-CHAVE:** Referência. Horizontalidade. Pre-compreensão. Instrução. Fenomenologia.

Attention is often regarded as a process belonging to the sphere of perception. By means of attending to certain parts of the visual, auditory or other sensory field, we extract information and select objects to become the thematic foci of our perception. Here, attention has the function of delivering information for further processing by selection.[1] It is a capacity of the subject to willfully turn towards some things rather than others. But as the phenomenology of experience shows, attention is a bipolar phenomenon. Attention is also passively drawn to objects or appearances that have a strong affective power. A loud bang or an intensive smell will hardly be overheard or "oversmelled". Attention is involuntarily drawn to such appearances. As will be discussed later, language in the form of instruction is crucial for the learning of social behaviour that regulates which affective impulses we let our attention be drawn towards and from which impulses we withdraw our attention. In any philosophical account of attention, this bipolar structure of activity and passivity will have to be considered. And for the question of the relationship between language and attention, this structure has to be kept in mind too. Drawing on some basic insights from phenomenology and hermeneutics, the proposal I would like to put forth in this preliminary and exploratory paper is that there is a strong connection between attention and language consisting in a number of aspects.

Firstly, attention seems to be a necessary prerequisite for indexical or demonstrative reference to present objects and thus for saying something about such objects. That which is the object of a demonstrative reference must be the theme (or focus) of attention for the time being. Secondly, the dynamics of attention, i.e. the ways in which we direct and redirect our attention to various aspects of the experienced world, is on the other hand informed and shaped by language. This seems to be so, because the horizon of pre-understanding on the basis of which selection of perceptual information for further processing is performed can be said to be constituted by prejudices and previous judgments. Furthermore, what is important in the domain of intersubjectivity is that language plays a central role in the establishment of attentional schemata, the habitualisation of certain types of attentional behaviour, by means of instruction and learning. How we look at certain things, particularly in the public sphere

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1  I take the general idea of attention as "selection for further processing" from Campbell (1997). Further processing can amount to various aspects of the intentional life of the subject. It can mean looking at a selected object in more detail, inferring something from the selected information by deduction, explicating or narrating about the object. The range of cognitive processes that can be directed to the attentional theme is thus wide and it also includes action. For a detailed account, see Campbell (2002).

where our attentional behaviour is the object of other people's attention, is regulated by social and cultural norms and conventions that are acquired in the process of socialisation.

**Attention as precondition for language: Reference and sequentiality of processing**

In the philosophy of mind there is a well-established distinction between perception and language in terms of a difference between perceptual and linguistic content of experience, for the visual sense in particular between imagistic and propositional content respectively. According to John Campbell, it is not the case here that we have "two independent levels of content, with an attentional link between them. The attentional link is partly constitutive of the propositional level, the attentional link is part of what makes the propositions the propositions they are." [2] This is so, because demonstrative identification of an object as 'that house', for instance, is only possible if one is able to pick out particular information about that house in order to be able to verify propositions about it. This constitutive link between attention and language also holds for general concepts. "What makes it the case that you are grasping a colour concept, for example, is that you are able to select perceptual information about the colours of perceived objects in verifying or acting upon propositions involving the concept." [3]

The foundational relationship of attention and language, where attentional focus to an object is the basis of linguistic operations with respect to this object, can also be illustrated by the fact that both attention and language serve to fix meanings. Attention can be regarded as an object-constituting function: Only the attentional object stands there before us as itself and as such, therefore attention sequentially transforms the flux of experience into more or less closed perceptual episodes with an identifiable theme and a corresponding context. It seperates the background of what is perceptually pregiven from the given focus in the manner of a Gestalt-Grund-configuration. [4] In comparison with perception, which is a highly parallel process, the seriality of attention is one of its most important psychological and phenomenological features. Language also, in its own way, transforms what is transitorily

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2 CAMPBELL, J. (1997). "Sense, Reference and Selective Attention", *Proceedings of the Aristotelian Society*, Supplementary Volume, 71. p.57.
3 CAMPBELL, J. (1997). "Sense, Reference and Selective Attention", *Proceedings of the Aristotelian Society*, Supplementary Volume, 71. p.57.

given in the stream of consciousness or the flux of experience into more or less consistent meanings by way of naming and conceptual thought. The important link between conceptual thought and attention seems to be that in order to have a grasp of a perceptual demonstrative as well as a general concept, one must be able to select the appropriate perceptual information.

With respect to the sequentiality of language I am thinking of the *parole* rather than the *langue*, in Saussurean terms[5]. For language as an abstract system of signs (langue), the meaning of the individual signs is constituted by their structural differences to other signs within the system. For language as a process unfolding in time by way of utterance (parole), we need to be able to follow the words constituting the utterance in order to grasp its meaning. The meaning of the linguistic elements is in turn co-determined by the meaning of the whole utterance, since words have different meanings in different contexts. The complex interplay of language as sign system and as speech cannot be described here in detail. What is important for the purposes of this exposition is that there is a sequentiality of language as utterance that accounts for the meaning of the linguistic elements in use. In contrast to the structural differences between the elements within the langue, this sequentiality amounts to the temporal differences between the elements of a parole.

On the basis of this consideration it seems quite natural to think of the sequentiality of language just described as presupposing the sequentiality of attention, the shifting of focus from one object to another, thus constituting a thematic thread in consciousness. If we were not able to shift our attention sequentially from one of the words unfolding in a narrative we listen to, for instance, to the other, we would not be able to grasp the full meaning of this narrative. One could argue that at least in cases where we are already familiar with the content of a story we have heard before, this kind of attention is not required. When we are confronted with novel information, however, the serial movement of attentional focus must be in place. Of course, his does not mean that we have to fix our attention on each of the words within an utterance and single them out from the context (this was described above as the object-constituting function of attention in general). Rather, we shift our attention from one sense

4 This phenomenological characteristic has been worked out in detail by Aron Gurwitsch, a disciple of Husserl's, in his dissertation (Gurwitsch 1929). For a recent discussion of Gurwitsch's theory of attention and its relevance for the cognitive sciences, see Arvidson (2006).

5 Cf. SAUSSURE, F. *Course in General Linguistics.* Translated by R. Harris. Chicago, IL: Open Court.

unit, such as a small phrase, to the other, thus constituting sequentially the meaning of the whole utterance.

**Language informs attention: Horizontality, pre-understanding, and instruction**

As briefly pointed out at the beginning, the phenomenological structure of "attentionality"[6] is a twofold structure consisting of two poles and two corresponding modes of attentional processing. *Primary attention* refers to the affective disposition of being able to notice something at all. In this passive mode the subject is not the initiator of the attentional movement, rather it is involuntarily drawn to a stimulus that has a certain affective force. The factors that are relevant for the contrast of something standing out from a background or having a spike in an "affective relief"[7] can be divided into categories like intensity, contrast, size, semantic depth, etc. *Secondary attention* is the willful activity of the ego in inspecting something that is already given in the field of consciousness, but only becomes a thematic object by means of a certain interest with which attention is endowed[8]. The interdependency and interrelation of the active and passive modes of attention can be analysed according to gradual modifications. Attention appears as always incorporating both aspects, i.e. there is never pure activity and willful attending on the part of the ego, nor is there pure passivity. If I decide to shift my attention actively from one object of my perceptual field to another, this other object must already be constituted and passively given in order for me to pick it out as the target of my gaze. In the other case of some stimulus suddenly popping out in my experience (e.g. a flash of lightning) and exercising an affective draw to which I passively give in, there still remains the fact that it is me, as subject, ego, or self, who follows the draw. Without the ego following it, the stimulus would be a mere datum in a physical reality and would have no experiential meaning for consciousness.

If we ask how language fits into this phenomenological picture, it is helpful to consider the notion of interest with respect to the horizontality of consciousness. The concept of interest figures prominently in Husserl's analyses of attention, from his early work (see

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6 This fundamental structure of experience is spelled out in detail in my dissertation (Breyer 2010).

7 HUSSERL, E. (2001b) *Analyses Concerning Passive and Active Synthesis. Lectures on Transcendental Logic.*Translated by A. J. Steinbock. Dordrecht/Boston/London: Kluwer. p.212.

especially the research and lecture manuscripts collected in Husserl 2004) until his late *Experience and Judgment*[9]. First and foremost, attention is defined as interest to mark an intrinsic tendency of perception towards adequate givenness of its object. Perception, in this view, is a teleological process that aims at originary intuition of what is perceived. In the *Logical Investigations*[10], this phenomenon is investigated epistemologically in relation to evidence and truth. What the analysis shows is that the ideal of complete givennes of the object, i.e. an experience of evidence, can never be achieved in external perception, because the external object is always given in a manifold of adumbrations, so that there will always remain sides and aspects of the object that do not fall into the current perception. However the structure of intention and fulfilment is best determined for the other modes of intentionality (inner perception, remembering, empathy, etc.), what is essential to all of them is that the presented or represented intentional object is always embedded in a horizon of appresentation or co-givenness. There is a "horizon structure belonging to every intentionality"[11] and this "living horizon"[12] amounts to the openness of what is co-given in the field of experience together with the theme of consciousness, thus co-constituting it, and what can potentially become a new object of attention. Complementary to this "outer horizon" of co-givennes, there is an "inner horizon" consisting of aspects of the object of current perception that have not become conscious for themselves[13]. Within this inner horizon, attention can be moved around to give us a more detailed view of the object we are currently directed to. And from the object itself attention can be directed into the outer horizon, thus shifting to a new object.

Both modes of attentional modifications, the "zooming in" into the inner horizon of an object as well as the "zooming out" into the outer horizon, bringing new aspects of an already presentet object or a new object into focus, happen as active or passive shifts of attention. This means that we can willfully investigate an object and look for certain features of it if we are interested in them. We can also willfully turn away from an object and focus on another

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8 Cf. HUSSERLl, E. (2004) *Wahrnehmung und Aufmerksamkeit. Texte aus dem Nachlass (1893-1912).* Husserliana XXXVIII. Edited by T. Vongehr and R. Giuliani. Dordrecht/Boston/London: Springer.
9 HUSSERL, E. (1973). *Experience and Judgment. Investigations in a Genealogy of Logic.* Translated by J. S. Churchill and K. Ameriks. London: Routledge.
10  HUSSERL, E. (2001a). *Logical Investigations. Vol. 2.* Translated by J. Findlay. London: Routledge.
11 HUSSERL, E. (1960). *Cartesian Meditations. An Introduction to Phenomenology.* Translated by D. Cairns. The Hague/Boston/London: Martinus Nijhoff. p.48.
12 HUSSERL, E. (1954). *Die Krisis der europäischen Wissenschaften und die transzendentale Phänomenologie.* Husserliana VI. Edited by W. Biemel. The Hague: Martinus Nijhoff. p.152.
13 HUSSERL, E. (2001b) *Analyses Concerning Passive and Active Synthesis. Lectures on Transcendental Logic.* Translated by A. J. Steinbock. Dordrecht/Boston/London: Kluwer. p.43.

one if we are not interested in it anymore. For the passive mode of attention, it means that a feature of a given object as well as another object can attract our attention due to sensational qualities, so that we involuntarily move our focus away from the current object to either this particular feature or to the new object. But how, in the case of active attention, do we know what to look for when we want to examine the inner horizon of an object for a particular feature? And how do we select a new target of our attention within the outer horizon if we look for a specific object? If the direction of attention is not to be arbitrary or purely exploratory, there must be some attentional guidelines here. In other words, we must have a certain kind of pre-understanding about the object domain in which we move our attention, giving rise to certain anticipations and expectations about how the horizons will change if attention shifts. In line with Gadamer[14], the horizon of understanding within which every experience unfolds can be seen as consisting of prejudices and previous judgments.[15] They make up the basic kind of pre-understanding that is employed in every act of shifting attention by means of a certain interest. And even if they are not made explicit, but rather function tacitly and habitually, as it is typical for prejudices, they are constituted through language and can in principle be explicated – such making conscious and explicating is of course a central goal in the practice of hermeneutics.

Interest is always informed by our pre-understanding about certain parts of reality and the world we live in as a whole. In our being in the world, as Heidegger tells us, things never appear to us in isolation, but always within a "referential context"[16]. There always exist indexial relations between the objects in our field of experience. The connectedness of the objects in a referential context makes them first meaningful to me who perceives them and acts upon them. Now in order to have a grasp of the referential context, the objects constituting my field of experience, being either in the mode of "handiness"[17] or "objectively present"[18], and to act in a meaningful manner within it, I have to be able to follow the indexical links between the objects. This is precisely what attention accomplishes by way of

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14 Cf. GADAMER, H.-G. (2004). *Truth and Method*. Translated by J. Weinsheimer and D. G. Marshall. London/New York: Continuum.

15 I owe the suggestion to consider the link between language in the hermeneutical conception of pre-understanding and the horizon of attention to Friederike Rese.

16 HEIDEGGER, M. (1996). *Being and Time*. Translated by J. Stambaugh. Albany, NY: State University of New York Press. p.70.

17 HEIDEGGER, M. (1996). *Being and Time*. Translated by J. Stambaugh. Albany, NY: State University of New York Press.p.69.

18 HEIDEGGER, M. (1996). *Being and Time*. Translated by J. Stambaugh. Albany, NY: State University of New York Press.p.70.

shifting from one thing being embedded in a meaningful configuration, to other things that are co-constituting its meaning. For Heidegger, all this is already disclosed to Dasein in a primordial way. This is in some sense right, since we do not need to employ attention in the way just described to understand everyday contexts in which we normally act. Saying that attention gives a grasp of the referential context is not to say, for example, that I have to sequentially run through all the elements on my desk in order to conceive my workspace as a meaningful unity and to start working. The meaning of this context is already disclosed to me. However, if I enter into an unknown context, I will have to focus on every element constituting it in order to make any sense whatsoever of it. Heidegger himself gives a famous example for the situation where one cannot make sense of the referential context and the objects in it when he describes how a black forest farmer and a Senegalese view a lectern and try to make sense of it according to their different pre-understandings[19]. What Heidegger emphasises is the dependence of the possibility of certain indexical references on the prior knowledge we have, a nowledge that is historically and culturally determined. My point here would be that in the process of acquiring such knowledge it is necessary to associate things appearing together in a referential context with each other in order to recognise the structure in further encounters. For such an association, which does not have to be consciously reactivated in every concrete encounter with a configuration of objects such as the lectern and the other objects in the lecture hall, but rather functions unconsciously, we need to employ selective attention.[20]

So far, I have been trying to indicate that there is a circular process of attention informing language and language informing attention. But where does the circle start? From the viewpoint of psychology and genetic epistemology one would argue for the primacy of attention, since the ability of linguistic expression comes in rather late in development, at a point where there has already been going on a lot between child and caretaker on the level of joint attention[21]. From the viewpoint of philosophy and the a priori description of the

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19 HEIDEGGER, M. (1987). *Zur Bestimmung der Philosophie*. Gesamtausgabe 56/57. Edited by B. Heimbüchel. Frankfurt, M.: Klostermann. p.71ff.

20 To put this in Husserlian terms again, we have here an example of a twofold process of *Urstiftung* and sedimentation, the first meaning an original positing of a certain meaning, the second indicating the process of habitualisation of this meaning (cf. Husserl 1960, §38). In psychological terms one could also speak of an original employment of active attention and the process of automatisation.

21 Cf. BALDWIN, D. A. (1995). "Understanding the Link between Joint Attention and Language", in C. Moore & P. J. Dunbar (eds.), *Joint Attention: Its Origins and Role in Development.* Hillsdale, NJ: Erlbaum, 131-158.

structures of experience one could also argue like this[22]. However, if there is really a circular process of attention and language and the subject enters the circle through attention, there still remains the necessity to describe in experiential terms the second phase of the circle (the informing of perceptual behaviour through attentional moves by language), which has rarely been inquired philosophically.

Arguably, language co-determines the ways we attend to things. This already implies joint attention,[23] since we are told by others in episodes of joint attention how to guide our attention to particular things or away from them. How we attentionally engage with the things that appear in our perceptual field is partly shaped by social norms and conventions. These are conveyed to us and elaborated linguistically and are meant to balance out the affective forces that immediately draw our attention to certain things. Kant describes neatly the draw that flaws in another person's appearance, for instance, exercise on us: "our power of attention is guilty of particular bad manners if it immediately fastens, even involuntarily, on others' shortcomings: to direct our eyes to a button missing from the coat of someone we are face to face with, or a gap between his teeth, or to fasten our attention on a habitual speech defect not only disconcerts him but also spoils our own chances of social success. – If a man is essentially good, it is not only fair but also prudent *to shut our eyes* to his misfortune and even to our own good fortune. But this power of abstracting is a strength of mind that we acquire only by practice."[24] What Kant makes us aware of with his distinction between *attentio* (turning towards something) and *absractio* (turning away from something) is that how we perceive the world and others is modified depending on the situational context and the learned practices of paying and withdrawing attention. If one is not aware of the impact of ones attentional behaviour on the social situation and the intentional states of the other, this can have negative effects. Not only is it comforting for the other not to be made aware of his shortcomings overtly, but it is also beneficial for oneself, since one does not draw any attention to one's own attentional "bad manners". For this reason, children are told not to stare at people, to direct their attention to the needs of others, etc. All these instructions are

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22 Cf. DAVIDSON, D. (2001). "The Emergence of Thought", in *Subjective, Intersubjective, Objective. Philosophical Essays, Vol. 3*. Oxford: Oxford University Press, 123-134.
23 For instructive philosophical assessments of the epistemological problems of joint attention, see Campbell (2005) and Peacocke (2005).
24 KANT, I. (1974). *Anthropology From a Pragmatic Point of View*. Translated by M. J. Gregor. The Hague: Martinus Nijhoff. p.13

supposed to guarantee a well-functioning social life within the framework of an inherited tradition of social and cultural conventions.[25]

Another way in which language shapes attention and thus the way we consciously perceive is through sensory training. As an illustration we can take the training and refinement of the taste of a becoming wine expert. In the course of becoming a wine expert, one is instructed verbally and thus trained to attend to particular aspects of one's sensory experience while tasting. So through propositionally encoded instruction we learn to direct our attention away from that which first catches it (e.g. a shortcoming of the other as in Kant's example) as well as to direct our attention to aspects of experience that would not otherwise become noticeable (e.g. certain sensory qualities as in the case of the wine taster). Such instruction is a way of our active attention to gain control over our passive attention.[26] Another case in point is meditation or other forms of deep concentration that are to be considered as highly specialised cultural practices. Here, the major technique is to train attention in such a way that it is not drawn involuntarily to thoughts, images or other elements popping up in consciousness.

For the acquisition of many skills (such as playing the piano or driving a car) it is necessary to receive detailed instructions. The knowledge conveyed by the instructions is coded in propositional format and constitutes the declarative knowledge of someone who has undergone the appropriate training. Normally however, the more training one receives and the more knowledge one habitualises in bodily or cognitive routines, the less one is able to explicate in propositional or declarative terms what one is doing when one is playing a certain piece on the piano or driving a car. The knowledge previously acquired in the format of explicit instruction becomes part of one's procedural knowledge, a type of knowledge that is retrieved automatically when required and that does not need conscious attention in order to be enacted. In the beginning of a learning phase, attention has to be directed to each and every step of a procedure that makes up a certain skill. The more routine one gets in exercising the

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25 For a description of socially "forced attention" in terms of a phenomenology of the life-world, see Schütz & Luckmann (2003, 258ff.).

26 In the context of empirical psychology, instruction shows to have a great effect on the attentional behaviour of subjects. Instruction generally activates a pre-understanding or tacit knowledge as to where to look for the appropriate information. Therefore, there are large differences for example in the patterns of eye movements in experiments on visual attention depending on the instruction; see the classic studies by Yarbus (1967); see also Breyer (2007, 49ff.) for a discussion of the relationship between the hermeneutical concept of pre-understanding and psychological theories of memory.

skill, the less attention is needed to follow the steps. This means that more attentional resources are available for other cognitions or actions.[27]

## Outlook: Perceptual and conceptual content

In the philosophy of mind there is a large debate over the relation between the perceptual and the conceptual and the issue of how much conceptuality is already in perception[28]. As an outlook on the basis of what I have outlined above in the most basic terms I think it would be worthwile to consider attention as a possible link or mediation between both levels, since attention is somewhat more than perception and somewhat less than language. It selects objects from the manifold of what is perceptually given and allows for propositional thought about and linguistic description of the selected objects. The other way around, as I have tried to show, our perceptual life is shaped by language in such a way that our attention behaviour is guided by linguistically conveyed norms and conventions. The horizons of perception and of language converge in the concrete attentional modifications of experience.

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27 In psychology, the role of attention in automatisation has been studied intensively; see the important contributions by Shiffrin & Schneider (1977) and Logan (1985) among many others.

28 Cf., e.g., MACDOWELL, J. (1996). *Mind and World.* Cambridge, MA: Harvard University Press.

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