VISUAL COMMUNICATION - A TRANSCENDENTAL -EMPIRICAL PERSPECTIVE

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ABSTRACT

The recent pictorial turn, succeeded by a visual turn, led to a new appreciation of visual communication in human culture. Communication is normally associated with subjectsubject relations. The qualification "visual" entails an important demarcation and restriction for it mainly concerns (lingual and non-lingual) signs, sketches, tables, typographical designs, and so on. What is taken for granted are the spoken and the (electronically or non-electronically) written word. Attention is given to the remarkable differences between animals and human beings regarding their visual capacities within the visible world. It appears that animals select only a limited section from what is available to them within their visible world. Yet, there are animals that can register supersonic waves, see ultraviolet rays as light, fish can sense electrical fields, and birds use the magnetic poles of the earth as navigating devices – all senses lacking in a human being. Within the human visual field human beings are capable of perceiving many more things than what they are actually noticing. This coheres with the absence of inborn activating mechanisms in humans. Given the mysterious complexity of the eye, the important difference between animals and human perception is found in the distinctively human capacity to discern, to locate, to be attentive to something within a person's visual field. This ability to be attentive is indeed decisive for visual communication. It is argued that the difference between oral and visual communication actually may serve to provide a criterion to distinguish between the science of ethnology and the science of history.

* D.F.M. Strauss is Professor in the Dean's office, Faculty of the Humanities at the University of the Free State.

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ORIENTATION

Normally visual communication intends to enhance and mediate communication aided by diverse visual means. Amongst others, this implies that it is crucially dependent upon the possibilities and limitations of human vision and the typical nature of human communication. On the basis of spoken language visual communication eventually benefited from employing as medium different kinds of signs organised and shaped in the form of lingual *texts*. But it also expanded its scope by exploring multiple other twodimensional images¹ that can communicate messages or information. Contemplate the possibilities of sketches, tables, typographical designs, and all sorts of other conventional signs. Already since the rise of semiotics as a discipline,² it was clear that what may be designated as the *sign mode* of reality cannot be restricted to written or spoken language. Yet at the same time the scope of visual communication in principle does not exceed those conditions underlying the nature of linguistic signs (such as alphabet letters and their combination in words, sentences, paragraphs, and books).

It should be kept in mind that although communication explores visual means, the wellknown distinction of Saussure between the signifier and the signified (Rose 2007:79-80) accounts for an "invisible" element, namely the intended *linguistic meaning* of the signifying person.³

However, what is normally not found in the literature on visual communication is an account of the underlying conditions making possible the ability of human beings to understand and interpret (the meaning of) signs – an ability also embracing visual communication. Whereas an analysis of the actual manifestations of visual communication belongs to the specialists in the field, it is the task of a philosophical reflection to contemplate the distinctness and conditions involved in visual communication. This amounts to a transcendental-*empirical* method of analysis. Its aim is to observe our experience of visual communication in its rich variety of forms and shapes and to ask what underlying (transcendental) conditions make this experience possible. An additional concern is given to the question whether visual communication in human life is not also found in animal life.

The growing importance of the *picture* caused Mitchell to speak of the "pictorial" turn (cf. Mitchell 1986; Mitchell 1994: 13) and soon after that, owing to widespread interest in issues of vision, Jay, in two articles in the new *Journal on Visual Culture*, discerned a "visual turn" (cf. Jay 2000; Jay 2002a). Dikovitskaya accepts Mitchell's thesis that visual studies was "born to the marriage of art history … and cultural studies" (Dikovitskaya 2006: 47). In general she discerns "two research paradigms: one that organizes the study of society on the model of natural sciences, and another whose approach belongs to the interpretative and hermeneutic tradition that emphasizes human subjectivity and contextual meaning" (Dikovitskaya 2006: 47-48).⁴

UNDERLYING CONDITIONS

The main focus of our account of the expression "visual communication" will be to show that it instantiates our capacity as human beings to function actively, that is, as

subjects, within the *sign mode* of reality.⁵ Although there are similarities between *animal* and *human communication* one way of characterising the difference between them will be to argue that the subject-subject relations and subject-object relations involved in audible animal communication do not fall within the domain of visual communication. We shall argue that the latter, namely visual communication, actually highlights an important difference between animals and human beings, intimately cohering with the *ambiguities* inherent in human language and communication.

This article will reflect on the complex web of interconnections in which visual communication is embedded. In its comparison of animal and human communication it will also pay attention to some differences between animal and human *perception*. Of course the complexity of the *eye* occupies a central place in any account of visual communication and the way in which the visual element is embedded within domains exceeding human sensitivity, particularly in the ability of human beings to interpret visual communication within different contexts. Moreover, acknowledging the ambiguity of the term *communication* will enhance a philosophical analysis of the scope, meaning and limitations of visual communication – in a transcendental-empirical perspective.

THE VISUAL WORLD OF ANIMALS AND HUMAN BEINGS

It is known that the magnetism of one piece of iron can be transferred to another (nonmagnetic) piece. In such an instance the initial magnetism is shared by the two pieces of iron. It can also be said that the magnetism of the first piece has been *communicated* to the second piece. This is an instance of *physical* communication. Likewise, when the genetic code shares information from one generation to the next we meet an instance of *biotic communication.*⁶ Sentient creatures, namely animals and human beings, may be able to share what they observe within a specific sensory field. For example, when someone knocks at a door both you and your dog see the "same" person. Nonetheless, we will have to pay attention to the striking differences between animal and human sensing.

Animals are extremely selective when it comes to what they actually *see*. It appears that their sense organs select only a limited section from what is available to them within their bio-milieu (*Umwelt*). Yet at the same time certain animals are capable of observing things that by far exceed the visual abilities of human beings. There are animals that can register supersonic waves. Bees can see ultraviolet rays as light and can discern the difference between polarised and non-polarised light. There exist fish that use an electrical orientation on the basis of a self-produced electrical field (Eibl-Eibesfeldt 2004: 139). There are birds using the magnetic poles of the earth as navigating devices. All these abilities are absent in human beings (cf. Portmann 1970: 200 ff.). In spite of their poor eyesight, bats hear ultra sound inaudible to us. They form a copy of their environment through the echo of their own call (Eibl-Eibesfeldt 2004: 139).

Human beings are capable of perceiving many more things within their field of vision than what they are actually *noticing*. Moreover, whatever is noticed deepens and

enriches the visual field, because the visually noticed things are grasped in *conceptual representations*. Genuine concept-formation, however, is absent in animals. For that reason one may distinguish between sensitive intelligence and rational intelligence. Perceiving multiple objects, delimiting particular perceptual objects or events in a sensitive way (capable of exerting a controlling influence on behaviour in later situations – such as avoiding fire), due to the continuity provided by the associative perceptive abilities of animals – all of this is enclosed within the domain of *sensitively qualified beings*. Portmann captures these limitations when he characterises animals as *Umweltgebunden* (constrained by environment) and *Instinktgesichert* (protected by instinct) (Portmann 1990: 79). Overhage stresses that the practical intelligence of animals never exceeds the *sensory-perceptive domain* (Overhage 1977: 117).

Empirical research shows that animals are bound to specific perceived forms. On the basis of their sensitive intelligence, animals are capable of seeing similarities and differences. In the case of the signs taught to the chimpanzees Sarah, Washoe, Moja and Lana it is clear that the way in which they use them is always found in sensory sound-like and image-like modes of locating the relevant similarities. (Eibl-Eibesfeldt summarises the research done by R.A. and B.T. Gardner regarding the use of signs by chimpanzees – see Eibl-Eibesfeldt 2004: 216 ff.) Certainly human beings share this perceptive dimension with animals – but humans are not confined to or qualified by this sensitive way of dealing with similarities and differences.

When certain stimuli (or a combination of them) are present, they may set into action an animal behavioural pattern that precedes any prior experience. It appears to be an *inborn* behavioural pattern independent of and prior to experience.

The migrating songbird, known as the American robin (*Turdus migratorius*, or North American robin), provides an example of how a fake or dummy can still trigger an *inborn activating mechanism* – in German designated as "angeborene Auslösemechanismus" (AAM). This action pattern does not rest upon *conceptual insight*.

The robin has a bright red breast and it controls its own domain. The activating stimulus for protecting its domain is precisely the bright red breast of other members of the same species – any trespasser entering this domain will be attacked. In 1943 Lack succeeded in placing a dummy robin – without the red breast – within the domain of a robin and no attack followed. When an artificial robin is constructed with a red breast, the attack is once again launched. In 1960 Peiponen obtained the same result with bluebreast robins (Eibl-Eibesfeldt 2004: 162-163). This clearly shows that the robin does not have a *concept* of a robin as a bird. It therefore differs from human perception, for when humans perceive a robin it is immediately recognised (identified) as a bird. In other words, human perception is cognitively opened and deepened, to the level of what we called *conceptual representations* – and we shall see that such conceptual representations play a crucial role in visual communication.

THE MYSTERY OF THE EYE

It appears to be hopeless to provide an evolutionary explanation for the origination of the eye. The biochemist Behe categorically states:

Anatomy is, quite simply, irrelevant. So is the fossil record. It does not matter whether the fossil record is consistent with evolutionary theory, any more than it mattered in physics that Newton's theory was consistent with everyday experience. The fossil record has nothing to tell us about, say, whether or how the interactions of 11-cis-retinal with rhodopsin, transducin, and phosphodiesterase could have developed, step by step (Behe 2003: 292).

The remarkable fact is that the past 60 years have witnessed an incredible increase in our knowledge of the micro-dimensions of living entities. On the one hand these developments opened up a domain that cannot be reconstructed from fossils and on the other it revealed such an astonishingly complex picture that questions now arise – not because we know too little – but because we know so much. Darwin honestly stated:

If it could be demonstrated that any complex organ existed, which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down (Darwin 1859: 219).

Although Darwin did not pretend to give an account of the origination of the first living entity in his 1859 work *On the origin of species*, his openness towards refutation stated in respect of "any complex organ" may be applied to the (origination of the) cell as well.⁷ In view of the complexities discovered by biochemistry, and particularly as a result of the complex (simultaneous) interaction of all parts of living systems, Behe introduced the idea of *irreducibly complex systems*.⁸

BEING ATTENTIVE: ITS SIGNIFICANCE FOR VISUAL COMMUNICATION

Since the acquisition of concepts in humans is *normed*, in the sense that one can identify properly (a circle is a circle) and distinguish properly (a circle is not a non-circle), and since we can also arrive at illogical concepts (such as a square circle),⁹ the rational intelligence present in humans pre-supposes a freedom of choice. This uniquely human feature enables human beings to alter or vary their focus of attention and this feature is indeed a pre-condition for visual communication.

Portmann aptly characterises this peculiar human freedom of choice:

The narrow limitations of animal interests is opposed to our freedom of choice and direction. Animals can escape the bonds of their urges only to a limited extent, while I myself can, in every moment, in accordance with my whole attentiveness, turn my entire inwardly participative dedication to some or other matter, however insignificant it may appear to be (Portmann 1974: 102).

The German word used by Cassirer in this context is *Aufmerksamkeit*, which he sees as capturing the truly creative capacity of the formation of concepts: "... the power of

being attentive as the truly creative ability of concept formation".¹⁰ The fact that communication is qualified by the term "visual" in the title of this article (and this special number), suggests a restriction, disregarding "audible communication" as a form of *non-visual* communication.

COMMUNICATIVE AND NON-COMMUNICATIVE EXPERIENCE OF THE WORLD

The biologist Jakob von Uexküll introduces the notion of a "functional circle" in order to account for the structural coherence between the animal body and its environment. He points out that the "features" of the environment are co-dependent upon the sensory organs (and neural structures) of animals. What turned out to be particularly striking is that these structures *in advance* co-determine the quality and intensity of the relationship between the animal and its environment. Von Uexküll's aim is to penetrate to the "inner" side of animal experience (*erleben*) – a domain where quantitative methods fall short. Once this switch has been made, a new world suddenly appears – a world of colours, forms, sound tones, and odours. The joys and pleasures accompanying them indeed appear as the worthwhile "object" of scientific biological research (cf. Portmann 1970: xii).

Von Uexküll constantly argues that a human being is unable to see, hear, smell, or feel what another sees, hears, smells, or feels (Thure von Uexküll 1970: xxv). The relationship between animals and their environments is given in an intricate and intimate connectedness, which causes Von Uexküll to capture this reality in terms of a true totality (*Ganzheit*).

Although we cannot see, hear, smell, or feel what other human beings can see, hear, smell, or feel, we are capable of sharing our experiences by means of communicative acts. Through such communicative acts human beings open up a communal domain that is absent in the case of animal *Umwelten*. For example, although the oak tree is a biotic subject in its own right, it may serve in multiple ways within the *Umwelten* of different animals. Through their sensitive experience of the oak tree the latter is *objectified* in the lives of animals.¹¹ The fox may explore the roots of the oak tree in order to find a hiding place – thus the tree only acquires a *protective* tone for the fox, which is similar to that of the owl. For the squirrel, by contrast, the tree has a *climb* tone, for the bird that builds its nest in the tree it has a *supporting* tone, and so on.¹²

Human beings, by contrast, amongst others, owing to their communicative capacities, not only have overlapping *Umwelten* but can also share, through meaningful communication, what they experience within them. In these communicative acts, the sign mode obviously plays a key role. Humankind has the ability to express meaning and interpret it in its response to the normative demand of *assigning meaning*, the command *to signify*. Within inter-human contexts such an expressive assignment of meaning or signification always calls forth the interpretative response of another human subject (irrespective of which visual objects may aid, mediate or support such interpretations).

When we merely look at our shared human calling to signify,¹³ we may capture the nature of this mode of functioning by designating it as the *semiotic* aspect of our experiential world. Of course we may restrict ourselves to the act of signification embodied in conscious language use, for in this case we may refer to this aspect as the *lingual* aspect of reality. The third option emerges when we focus on the meaning established through acts of signification, in which case we may speak of the *semantic* mode. However, when we want to combine these three options, namely the semiotic, lingual and semantic, into one concise and encompassing designation, the best choice is to call it the *sign mode*.

VISUAL COMMUNICATION AND THE SIGN MODE

Various authors in all sorts of ways distinguish between signals, symbols and other phenomena that appear (function) within the sign mode, including the expressive capacities of the human body. Practically every work on general linguistics or on semantics will emphasise the lingual relation between the *visible* sign and its (invisible) *meaning*.¹⁴ For Von Bertalanffy symbols are representative in that they stand in one way or the other for the thing symbolised; they are transmitted by tradition (that is, by the learning processes of the individual in contrast to innate instincts); and finally they are freely created (cf. Von Bertalanffy 1968: 15; 1968a: 134).

In order to demarcate visual communication, a distinction between modal concepts of function and concepts of entities and processes is needed. Classifying certain kinds or types of entities always pertains to a limited class or group of entities. The group of Germanic languages is limited in the sense that not all languages are Germanic languages. Likewise, different kinds or types of communication in every instance embrace solely those instances belonging to a specific type of communication.

However, when we direct our theoretical attention toward the *modal* or *functional* aspects of reality – such as the *spatial* aspect, the *physical* facet, the *lingual* mode or the *social* function – we are no longer involved in the *classification* of entities according to the kinds or types to which they belong, and are therefore also not interested in the "kind laws" or "type laws" for entities. Modal laws hold for whatever exists, type laws only hold for a limited class of entities.¹⁵ Von Weizsäcker expresses this insight by observing: "Quantum theory, formulated sufficiently abstractly, is a universal theory for all *Gegenstandklassen* (classes of objects)" (Von Weizsäcker 1993: 128).

The sign mode exhibits the same *modal universality* evinced by all the other aspects of reality.¹⁶ This means that everything has a function within the sign mode of reality – either a subject function or an object function. Individual human beings as well as lingual communities actively function within the sign mode and they do that in various ways. Normal (spoken or written) language pre-supposes the individual language user and the linguistic community to which such a person belongs. Non-verbal¹⁷ language, such as sign language, body language (including postures and gestures),¹⁸ and various images, signals, signs, and symbols not belonging to the human body, still invariably

function within the sign mode. Although what is most of the time listed as non-verbal signals, such as facial expression, gaze, gestures, posture, bodily contact, spatial behaviour, clothes, and smell (cf. Argyle 1988: 1), could be expanded, the actual issue is consistently to detect *typical* functions of the human body within the sign mode. What does this entail?

SUBJECT-SUBJECT RELATIONS AND SUBJECT-OBJECT RELATIONS

Human communication always concerns the relation between at least two *subjects* (or subject-positions within one person's subjectivity). Therefore one can also characterise it by saying that communication is constituted as a subject-subject relation. Since the meaning intended in communication is not open to sensory perception, the following question may arise: if communication concerns a subject-subject relation, how does one bridge the gap between two human subjects?

First of all it must be noted that what we normally experience as "objects" also function within the sign mode of reality. In the simplest case we can simply name any visible (or visual) "object." Any act of naming pre-supposes the ability to locate and identify, within a perceptual field, what will be named. Acts of signifying that are exploring, on the basis of human "Aufmerksamkeit," these *latent* sign function of "objects" do that by making them *patent*, *manifest*.¹⁹ Another way to state this is to say that they are *objectified* within the sign mode. Such acts of objectification, however, are always performed by human subjects, which means that objectification is a subjective act.²⁰

Of course these intended "objects" are not *objects* in all contexts. Just consider *material* "*objects*." Closer investigation reveals a more intricate picture. Insofar as *physical* entities are material in nature, they are not *objects* but *subjects*, that is to say, they are subject to physical laws, and insofar as they are *objects*, they hold this status because they are considered according to some or other *non-physical trait* – for example, as something *perceived* (a sense object), as something *analysed* (identified and distinguished from something else – logical-analytical object), as something *designated* (object function within the sign mode), as something *bought* or *sold* (economic object), and so on.²¹

In general, everything, including human beings, either have a subject-function or an object-function within the sign mode of reality. The implication is that bodily expressions may equally communicate what is intended. But "language" is not something specific to any part of the human "body". In fact, biologists have made the claim that we, as humans, do not even have "speech organs"! If a speech organ is defined as a bodily part existing solely in service of the production of speech sounds, then a surprising fact is that there are no human speech organs. The lungs, larynx, mouth cavity, palate, teeth, lips, and nose cavity, without exception, will continue to perform their primary functions within the human body even if human beings never uttered a single word (Overhage 1972: 243). Human language simply takes hold of all these different organs in the production of speech sounds.

The mere existence of something like sign language, solely using the hands, fingers and accompanying facial expressions, shows that human language is not the product of particular organs, but rather is a typical and total human phenomenon.²²

A further remarkable feature of language is that it positions itself between the *grasp* of the hand and the *view* of the eye. Plessner calls the eye the "organ of making-something-immediately-present". Thus, in various respects, the hand and the eye become relatively dispensable (cf. Plessner 1965: 38; Hofer & Altner 1972: 203).

However, what does not become dispensable is one or another *mediating* subjectsubject relation. This mediation normally takes on one of three forms: it is mediated through what is heard (audible), seen (visible) or felt (tactile – Braille). In the strict sense of the phrase, visual communication concerns the *intended meaning* attached to all sorts of objectification within the sign mode. Whatever is objectified can never "bypass" the realm of physical entities or entities having a subject-function within the physical aspect (just as little as oral communication in the narrow sense can by-pass physical sounds) – and the same applies to whatever else is chosen to mediate communicative subject-subject relations.

Since we have noted that insofar as material things are physical they are not objects but subjects, it follows that human communication takes place solely when physical things are objectified within the sign mode of reality. The sharing of meaning involved in communication pre-supposes a *deepening* of the modal structure of the sign mode guided by the meaning of the social aspect. In this way the sign mode, through communication, is *opened up* by disclosing its inherent structural element pointing forward to the social aspect. Communicative encounters should therefore be appreciated as socially deepened lingual acts. We may once more ask: Where does the "visual" element of visual communication fit in?

Since *objectification* is always the result of an act performed by a *subject*, in the case of communication we actually discern at least two subjects and two objects. The first subject (*subject-1*) is the subject who objectifies that which produces *object-1* (whatever is objectified as medium – images, signals, signs, names, and so on). *Object-2* relates to the object-function of what is designated (through its objectification in the sign mode). And *subject-2* is the human person interpreting what has been objectified. In other words, visual communication is constituted by a *subject*₁*-object*₂*-subject*₂ relation – which is a more inclusive account than the well-known view of communication as the connection between a "sender, medium and receiver" (which is merely a subject-object-subject relation).²³

Without an understanding of objectification one cannot give an account of (visual) communication. Therefore, although it may appear that communication merely involves subject-subject relations, it should now be clear that this subject-subject relation is always mediated by a twofold subject-object relation.

Animal communication, by contrast, according to Plessner, does not know a "mediation through objects" (Plessner 1975: 380, cf. 379). That is to say, animals are incapable of

actively functioning (as *subjects*) within the sign mode of reality and therefore they are not capable of visual communication in its lingually deepened sense. This is intriguing, since, in the domain of human sensitivity, the sense of seeing and the sense of touching dominate that of smelling (cf. Haeffner 1982: 16). Thus language provides human beings with a *mediated immediacy* in the world – not only opening up an awareness of the past and the future (transcending the *now*), but also opening up the domain of human *imagination*. Animal communication, by contrast, does not refer to the past or the future. It refers to the vital *here* and *now*. Closely connected to this is the fact that animal signs strictly have a single content for every sign, whereas human sign-use presupposes choice and requires interpretation.²⁴

All human communicative utterances can signify a number of different things, depending on the context, intention, or even, in the case of written language, the punctuation – and words in a human language have their specific semantic domains, most of the time encompassing multiple meaning-nuances. When this ability is compared with the famous dance of the bees it is immediately clear that every element of the dance always means *exactly the same*.²⁵ The effect is that the semantic elements used in animal communication always just have one value. Referential signs such as "I" and "you" are absent. Chimpanzees do not have hypothetical statements (the *conjunctive*) and they possess no *yes* or *no* questions. The anthropoids display no grammatical competence and do not speak in propositions (see Eibl-Eibesfeldt 2004: 230).

IMPLICATIONS OF THE SUBJECT-OBJECT-OBJECT-SUBJECT RELATION The expression "visual communication" could therefore be approached from two different angles:

(1) One can focus on the possibility to *see* what occurs between two communicating persons; or

(2) One can focus on the above-mentioned subject-1, object-2 and subject-2 relation (which embraces all forms of visual communication, verbal and non-verbal alike).

Regarding (1): This perspective provides just another instance of objectification within the sign mode of reality. While observing a subject-object-object-subject relation, the latter as such is also objectified.²⁶

Regarding (2): By acknowledging the intended subject-object-object-subject relation it is underscored that all subject-subject relations are founded in subject-object relations.²⁷ The subject-subject relation entailed in human communication cannot manifest itself except on the basis of a two-fold subject-object relation.

Animals experience reality exclusively from their natural inclination, directed at that which is physically, biotically, and psychic-sensitively important to them. Animals experience reality in terms of what is negotiable and not negotiable, edible and inedible, in terms of same sex and opposite sex, the same species and different species,²⁸

comforting and alarming. What is also known within the animal realm is *warning* and *emergency calls*. The sounds used in these calls flow directly from the relevant organs employed in producing them – without (as Plessner pointed out) being mediated by distinct objects (objectified artefacts) or showing the possibility of free, imaginative variation inherent in human lingual sound production. Therefore, in an audible sense animal subject-subject relations are indeed founded in subject-object relations, but since no objectification, distinct from subject-bound sound production takes place, animals do not function on the level of human *visual* communication, mediated by distinct objects, such as technically (formatively) produced images, signals, signs, symbols, and linguistic systems (fully-fledged languages).

Just like a beautiful sunset is different from a painting of a beautiful sunset, natural sounds produced by animals are different from freely formed sounds or from meaning-bearing cultural objects which are products of formative human control, guided by the human imagination. Immanuel Kant defined the human *Einbildungskraft* (imagination) as the ability to represent an object that is not present in our intuition.²⁹ Conversely, the free formative imagination of human beings can also accomplish the opposite task, namely it can imagine what is given to the senses to be *different* from the way in which they are given. Cultural artefacts are founded in the formative imagination of human beings. What is distinctive of human artefacts is that their *form*, *function* and *manner of production* should not be suggested (cf. Narr 1974: 105; Narr 1976: 99-101).

Visual communication does not merely disclose the latent object-functions of natural phenomena since it also incorporates the products of formative control according to an imaginative design.

SEPARATING SUBJECT-SUBJECT AND SUBJECT-OBJECT RELATIONS

Habermas separates (i) instrumental from (ii) communicative actions. The former actually represent subject-object relations and the latter subject-subject relations – and our entire argument is that the subject-subject relations involved in communication can only exist on the basis of subject-object relations. Habermas, for example, distinguishes two kinds of bodily movements instead of simply recognising that both kinds have a function within the physical aspect, the sign mode and the social facet of reality (cf. Habermas 1984: 97; Habermas 1981: 146; Strauss 2009: 323-325).

Both kinds of bodily movements at once equally display "physical" and "semantic" or "social" features. The question is therefore straightforward: what is wrong with acknowledging "bodily movements" as functioning within aspects of nature, such as the physical and the biotic, as well as within normative functions, such as the logical, the lingual or the social?

Juxtaposing subject-subject relations and subject-object relations runs parallel with the powerful naturalistic legacy in which causality is restricted to *physical causality*. This tradition has continued to hamper the approach of Habermas. In the final analysis it (has) caused him to deny what we have called the modal-functional universality of the

sign mode. That is, the insight that every single entity, in addition to its functioning in all the other aspects or processes of reality, always also has a function within the sign mode as well. This modal universality of the sign mode embraces both the subject-subject relations and the subject-object relations found within it.

And it is the presence of subject-object relations and cultural artefacts that make visual communication possible. The inevitable presence of *lingual objects* accessible to the eye, of seeing and functioning in the sign mode mediated by lingual objectification underscores the fact that subject-subject relations are always founded in subject-object relations.

OTHER IMPORTANT FEATURES OF VISUAL COMMUNICATION

Whereas one can appreciate visual communication as being embedded in the deepened meaning of the sign mode, since it discloses the *depicting* nature of the lingual sign towards *sharing* (communicating) what has been signified with fellow human subjects, we can take a step back in order to illuminate other important features of visual communication – its relevance for the distinction between ethnology and the science of history, its significance for a *Gestalt*-switch and for hermeneutics.

The sign mode precedes the social aspect of reality, but is itself preceded by the cultural-historical aspect. This explains why morphology is foundational to semantics – for language requires formative human acts, taking shape in syntactical rules serving the intended lingual meaning through which the qualifying role of the sign mode is displayed. The typical nature of language is therefore built upon *formative control* – the cultural-historical foundational function of language.

The difference between oral and visual communication has an important bearing on the distinction between what traditionally used to be designated as *ethnology* (currently: cultural anthropology) and the *science of history*. In cultures that are still dominated by oral traditions there are no true sources for the historian. It is only when the meaning of the cultural-historical mode is deepened under the guidance of the (written?) sign mode that the awareness emerges of what is historically *significant* and therefore distinct from what is historically *insignificant*. The intended consciousness of what is historically significant materialises in inscriptions, monuments, written historical accounts, and so on. The latter serve as *sources* for the historian. The difference between what *is* historically significant or insignificant is made possible by the forward-pointing (anticipatory coherence) between the cultural-historical aspect and the sign mode. Cultures in which this anticipatory moment is not yet disclosed do not, strictly speaking, participate in world history, as Hegel realised. Consequently, the distinction between ethnology and the science of history runs parallel with that between oral communication and visual communication.

Moreover, an articulated understanding of what is historically significant, dependent upon the nature of visual communication, even enables a more nuanced identification of a cultural community with its historical past and at once highlights avenues through

which what is fruitful in its tradition could be pursued in further historical development. Once the meaning of the cultural-historical aspect is deepened towards the aspect of social intercourse with other cultures, it leads to an equally articulated development of the national identity of communities.

The phenomenon of a *Gestalt*-switch is dependent upon the analytical attentiveness of human perception (its *Aufmerksamkeit*) which enables one to explore alternative conceptual representations in each *Gestalt*-switch (for example the well-known *Gestalt*-switch between a vase or two faces looking at each other).

In the case of the general discipline of understanding and interpretation, hermeneutics, the apparent univocal visual text allows for multiple lingual interpretations.

CONCLUSION

The transcendental-empirical method directed our reflection towards an investigation of the following eleven transcendental conditions making possible our experience of visual communication:

- The fundamental difference between aspects and concrete entities and processes both underlie the perceptive aspect and the sharing of meaning upon which communication takes place;
- The real existence (ontic status) of the sign aspect;
- The disclosed analytical ability of human beings to form conceptual representations and to focus on any section of the human visual field (*Aufmerksamkeit*);
- The type law for being human demarcates human and animal experience;
- While animal *Umwelten* are non-overlapping, human experiential contexts do overlap in the sense that they are communally shared by human beings through visual communication;
- Human communication, owing to its foundation in the logical and sign modes of reality pre-supposes choice and requires interpretation;
- Animal communication does not know a mediation through "objects", that is through cultural artefacts designed according to the free, formative imagination of human beings leaving open the form, function and way of production;
- Animal signs only have one single "meaning";
- Human language is a pre-condition for visual communication and, in the absence of specific speech organs, language is a total human phenomenon;
- Visual communication is made possible by the distinct presence of subject-subject relations and subject-object relations within the (deepened) sign mode; and
- The ultimate condition for visual communication is given in the fact that subjectsubject relations are founded in subject-object relations.

Endnotes

¹ Instead of "embodying" what is intended by an image, the history of the image concept largely turned on the idea of *representation* – see Sachs-Hombach (2006: 30 ff.).

² See Scollen and Scollen on "visual semiotics" (2003: 17 ff.).

³ De Saussure prefers not to use the word "symbol" as a designation of the "linguistic sign", because, as he argues: "[O]ne characteristic of the symbol is that it is never wholly arbitrary; it is not empty, for there is the rudiment of a natural bond between the signifier and the signified. The symbol of justice, a pair of scales, could not be replaced by just any other symbol, such as a chariot (De Saussure 1966: 68).

⁴ She circumscribes culture as a "representational, symbolic and linguistic system" (Dikovitskaya 2006: 48). Znanieki captures much more in the term *culture*: "The concept which this term symbolizes includes religion, language, literature, art, customs, mores, laws, social organization, technical production, economic exchange, and also philosophy and science" (Znanieki 1963: 9; cf. 374).

⁵ We shall give a closer account of this expression below.

⁶ We do not use the word *biological*, because biology is the academic discipline studying living entities while being alive is a *biotic property* of such entities.

⁷ Therefore the general assessment of Behe is also applicable in this context: "The story of the slow paralysis of research on life's origin is quite interesting, but space precludes its retelling here. Suffice it to say that at present the field of origin-of-life studies has dissolved into a cacophony of conflicting models, each unconvincing, seriously incomplete, and incompatible with competing models. In private, even most evolutionary biologists will admit that they have no explanation for the beginning of life" (Behe 2003a: 292).

⁸ "By *irreducibly complex* I mean a single system composed of several well-matched, interacting parts that contribute to the basic function, wherein the removal of any one of the parts causes the system to effectively cease functioning" (Behe 2003a: 39).

⁹ This example is actually derived from Immanuel Kant (1724-1804) – see his *Prolegomena zu einer jeden künftigen Metaphysik die als Wissenschaft wird auftreten können* (1783: 341; § 52b).

¹⁰ "... der Aufmerksamkeit als dem eigentlichen schöpferischen Vermögen des Begriffsbildung" (Cassirer 1910: 31).

¹¹ Only human beings function actively or subjectively within the logical and postlogical aspects or reality (the historical, lingual, social, economic, aesthetic, jural, moral and certitudinal). Things, plants and animals can be objectified by humans within these aspects (buying and selling them – economic object function, naming them – lingual object function, and so on). The highest subject function of material things is found in the physical aspect (on the basis of subject functions in number, space and movement), that of plants within the biotic aspect and of animals in the sensitive aspect. Water, for example, a physical subject, is a "means of life", i.e. a biotic object. Likewise, the nest of a bird and the web of a spider are not sensitive subjects – they are objectified by animals within the sensory mode, they are sensitive objects and not sensitive subjects.

Even within the modal aspects themselves do we find subject-object relations – for example within the spatial aspect where a line is a one-dimensional spatial subject (continuously extended) and a point is a spatial object (lacking extension in any dimension). Images are physical subjects with possible object functions in the sensitive en lingual modes. Lingual signs are cultural objects, having their foundational function within the cultural-historical mode and their qualifying function within the sign-mode. ¹² Jakob von Uexküll writes: "Each *Umwelt* isolates out of the oak tree a particular part whose characteristics are appropriate to be the bearer both of the properties and activities of their functional circle. In the *Umwelt* of the ant the whole of the oak tree diminishes in its cracked bark which, with its valleys and heights, becomes the hunting field of the ant. ... In all the various *Umwelten* of its various inhabitants the same oak plays a widely diverging role, sometimes with particular and then again with none of its parts. The same part can be large or small, the same wood hard and soft, it can serve as a means of shelter or attack" (Von Uexküll 1970: 98-100).

¹³ The normative command: signify!

¹⁴ According to Cassirer the signals and symbols are different in the sense that the former belongs to the physical world of *being* and the latter is a part of the human world of *meaning*, the world of human culture (see Cassirer 1944).

¹⁵ The main laws of thermodynamics, such as the law of energy constancy and the law of non-decreasing entropy, hold universally for all possible physical entities.

¹⁶ The different aspects of reality provisionally identified are the numerical, spatial, kinematic, physical, biotic, sensitive, logical-analytical, the cultural-historical, the sign mode, the social, economic, aesthetic, jural, ethical and certitudinal (see Strauss 2009: 82-103).

¹⁷ An interesting chapter in non-verbal communication is found in the relation between emotional intelligence and deception detection (see O'Sullivan 2005: 215 ff.).

¹⁸ Goldman accounts for postures with reference to the "more static and unchanging aspects of movement" (Goldman 1994: 7). What she has in mind are certain *enduring* or *persistent*, virtuous attitudes. Gestures express the "adaptations of *parts* of the body, not the whole body" (Goldman 1994: 7).

¹⁹ In the history of philosophy a distinction is sometimes drawn between *primary* and *secondary* properties. However, whereas primary qualities – such as mass, volume, etc. – are seen as belonging to the real entities "out there," secondary qualities – such as heat, colour, taste, etc. – are considered merely to belong to the "subject". The view advanced in this article does not accept this dualism between primary and secondary qualities, for the latter are understood as *latent object-functions* inherent in concretely existing physical entities.

²⁰ "Subjective" is here understood both in the sense of *actively functioning within* an aspect and in the sense of *being subject to* the modal laws or norms of an aspect. But it is not used in the sense of *arbitrariness*.

²¹ Therefore, although such things could be objectified by humans, this objectification pre-supposes their primary existence as (physical) subjects. Speaking of them in all possible contexts as *objects* simply underscores the powerful subjectivistic (human-centred) legacy in Western thinking.

²² This highly developed and subtle cooperation, especially of three organs so heterogeneous in character as the mouth, the larynx and the brain, integrated in the production of human speech sounds, makes it rather difficult, if not hopeless, to provide us with a causal evolutionistic explanation of this astonishing phenomenon. The question still unanswered by our current scientific knowledge is: How many miraculous changes should have occurred to produce the conditions necessary for the articulation of truly human language?

²³ Consider the sentence: "John, this dog is too expensive." The speaker is $subject_1$; the word /dog/ is $object_1$; the (lingually objectified) entity /dog/ is $object_2$; and John is $subject_2$. The objectification of the entity dog is therefore *mediated* by the lingual sign /dog/.

²⁴ Eibl-Eibesfeldt understood the emotional context of animal communication when he states that that "which, by contrast, regarding animals, is generally designated as 'language', exclusively moves within ... the domain of interjection, of the expression of moods lacking insight" (Eibl-Eibesfeldt 2004: 214).

²⁵ The (i) tempo, (ii) direction and (iii) angle of the figure eight executed, always indicates the (i) distance, (ii) location, and (iii) direction of the source. Interestingly, the distance-indication is apparently neither related to the actual distance, nor to the duration required to fly to the destination, for what is communicated is simply the effort required to reach the source (see Eibl-Eibesfeldt 2004: 258 ff.).

²⁶ This is similar to the objectification of a mere subject-object relation, for example when a person observes someone reading a book. By *reading* a book the subject-object relation within the sign mode is actualised, because the human subject performs the act of reading, through which the latent lingual object function of the book is made patent. ²⁷ Of course with the exception of the numerical aspect of reality, for within it, all numbers always merely stand in a subject-subject relation to each other – when added, multiplied, subtracted, or divided.

²⁸ Remland underscores the importance for animals to know "whether another animal belongs to the same species", something in most instances accomplished "by relying on various visual and vocal cues" (Remland 2000: 35).

²⁹ "Einbildungskraft ist das Vermögen, einen Gegenstand auch ohne dessen Gegenwart in der Anschauung vorzustellen" (Kant 1787-B: 151). See also Kant (1800-A: 67) where he defines the *Einbildungskraft* (facultas imaginandi) as the power (*vermögen*) to bring objects to consciousness without their presence to the senses.

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