Perception and Depiction in the Light of Embodiment

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We can approach different depictive systems (*i.e.*, pictorial and linguistic) from the perspective of cognitive capabilities. The difficulty, which arises from the logically encoded incapability of expressing the relation between the depictive system and the depicted world within the given depictive framework, can be eliminated only by stepping beyond the depictive system and taking into account its cognitive background. Within this cognitive background, the notion of embodiment provides the leitmotif. That is, I suggest a relation between pictorial/linguistic capabilities and the world they depict on the basis of bodily experiences and evolving cognitive capabilities. Within this framework, it becomes possible to highlight how a picture can display its pictorial form (*TLP* 2.172), and how propositions mirror their logical form (*TLP* 4.121). In this paper I will focus on pictures.

1. Embodiment

Wittgenstein touches upon the question of bodily sensations and movements, underscoring the riddles we face when trying to either relate them to mental states or describe them in minute detail. We can also find remarks on the bewitching character of language giving rise to unsolvable anomalies in philosophy, and on the lack of "the requisite nomenclature" for being able to depict certain mental states or bodily sensations such as pain. (Wittgenstein 1998: 482) Wittgenstein speaks about the difficulties encountered when we try to describe the location of pain or joy, and suggests that emotions and sensations have a common feature, namely "they have characteristic expression-behaviour. … And this itself implies characteristic sensations too." (Wittgenstein 1998: 488) Here emerges the question of how sensation and its manifestation relate to each other. We can think of James' often-quoted idea that emotional consciousness is "not a primary feeling, directly aroused by the exciting object or thought, but a secondary feeling indirectly aroused... [by] ...the organic changes, muscular and visceral, of which the so-called 'expression' of the emotion consists." (James 1969: 346) Wittgenstein refers several times to this idea of James' and despite his criticism[1], he seems to accept it. "There is a particular interplay of movements, words, expressions of face, as of manifestations of reluctance or readiness, which are characteristic of the voluntary movements of a normal person." (Wittgenstein 1998: 594) Some paragraphs later, Wittgenstein suggests that we have no sufficient reason to directly connect thought-processes with brain-processes. "The idea of thinking as a process in the head, in a completely enclosed space, gives him something occult". (Wittgenstein 1998: 606) That is, mental states/dispositions, muscular activity, and words belong together in the course of human activity, although their relations are not as direct as one would expect. "The feeling of an unbridgeable gulf between consciousness and brain-process: how does it come about that this does not come into the considerations of our everyday life?" (*PI* 412)

I believe that the notion of embodiment and the enactive approach might help to resolve this situation. Embodiment, unlike Cartesian dualism, suggests that human rationality and conceptual capacity is determined by having a body. Perceptive capabilities, the muscular system, and different aspects of the human body and its experiences provide the ground for the development of higher cognitive functions. As Bergson suggests in *Matter and Memory*, "[o]ur daily life is spent among objects whose very presence invites us to play a part: in this the familiarity of their aspects consists. Motor tendencies would, then, be enough by themselves to give us the feeling of recognition. But we hasten to add that in most cases there is something else besides. … our past physical life is there." (1991: 95) That is, motor responses and the recollections of earlier bodily experiences yield the ground for creating a responsive relation with our environment. And, as Merleau-Ponty later highlighted, perception of the external world is possible only via the perception of one's own body; there is no other way to access things in our environment.[2] Valera *et al*. stress the importance of the body and its embeddeness into its environment in their discussion of embodiment as something that "highlights two points: first, that cognition depends upon the kinds of experience that come from having a body with sensorimotor capacities, and second, that these individual sensorimotor capacities are themselves embedded in a more encompassing biological, psychological, and cultural context." (Valera *et al.*, 1993: 172f.)

The importance of the cultural context is quite obvious in light of the Wittgensteinian notion of *form of life*. Though Wittgenstein does not conspicuously emphasize the importance of bodily engagements, we can find hints suggesting its importance. As he wrote, "[t]here is no need of a theory to reconcile what we know about sense data and what we believe about physical objects, because part of what we mean by saying that a penny is round is that we see it as elliptical in such and such conditions." (Wittgenstein 1980: 69) According to the enactive approach, we perceive things around us because we bear motor skills which provide the possibility of being able to act in the world without any reflection to paradoxes constructed in the framework of language.[3] That is, at first sight the paradoxical situation described by Wittgenstein can be easily resolved if we take into account the role of motor skills, namely, the possibility of touching a coin and the recollection of earlier experiences of touching. "Perceiving how things are is a mode of exploring how things appear. How they appear, is however, an aspect of how they are. To explore appearance is thus to explore the environment, the world. To discover how things are, from how they appear, is to discover an order or pattern in their appearances. The process of perceiving, of finding out how things are, is a process of meeting the world; it is an activity of skilful exploration". (Noë 2004: 164)

2. Image Schemas and Mapping

Skilful exploration of the environment, which at the same time is the perception of our own body, presupposes a basic cognitive capability that enables us to identify and individuate things and situations. This capability is the distillation of certain recurring patterns, schemas. These schemas make the most mundane acts possible, as well as conceptual processing and depiction of the world either through pictorial or linguistic means.

As Arnheim posits, "[t]he artificial distinction between perception and conception has been superseded by evidence that perception does not start from particulars, secondarily processed into abstractions by the intellect, but from generalities. 'Triangularity' is a primary percept, not a secondary concept. The distinction between individual triangles comes later, not earlier. Doggishness is perceived earlier than the particular character of any one dog." (Arnheim 1974: 167) This emphasis on generalities has gained further evidence thanks to experiments with infants. Experiments with young children in their first year show that they distinguish more and more kinds of things, so-called sortals, along their development. "A sortal is a concept that provides principles of individuation and principles of identity. … Sortal concepts enable us to enumerate and to track identity over time". (Xu 2007: 400) Young children develop sortals gradually: first the sortal of "object", then that of a "person", and only afterwards do basic-level sortals emerge, such as "ball", "duck", "cup", and the like. That is, these basic-level categories emerge later than some super-ordinate categories, unlike the Lakoffian conceptual metaphor theory.

Beside sortals or categories, kinaesthetic image schemas play a crucial role in cognition. They create (beside basic-level categories) the other crucial pillar of conceptual metaphor theory. Kinaesthetic image schemas make transparent the importance of embodiment, namely, that embodiment yields "a *nonarbitrary* link between cognition and experience". (Lakoff 1990: 154) Propositional and image-schematic models characterize the structure of the cognitive model, while metaphoric and metonymic models feature the way we use structural models. (Lakoff regards language as being a symbolic model.) In this process, image schemas are decisive since they "are concepts that have directly-understood structures of their own, and they are used metaphorically to structure other complex concepts." (Lakoff 1990: 283)

Image schema is a gestalt structure, *i.e.*, "an organized, unified whole within our experience and understanding that manifests a repeatable pattern or structure." (Johnson 1990: 44) These patterns are independent from linguistic skills. However, they can be refined by a conceptual system, which is possible thanks to language.

The idea of mapping emerges even with Merleau-Ponty when he calls attention to the parallelism of bodily experiences and the meaning of words. As he puts it, "if the words 'enclose' and 'between' have a meaning for us, it is because they derive it from our experience as embodied subjects. In space itself independently of the presence of a psycho-physical subject, there is no direction, no inside and outside. A space is 'enclosed' between the sides of a cube as we are enclosed between the walls of our room." (Merleau-Ponty 1962: 236)

3. Perception and Depiction

According to Arnheim and conceptual metaphor theory, bodily experiences provide the ground for schemas which enable us to act in and perceive the world. And we can add: they provide the necessary background for depiction. Relations to pictures, such as recognizing a picture as a picture of something, or drawing a picture of something, highlight some key characteristics of the mechanism of how pictures depict the world.

Pictures have exceptional status regarding recognition. Since they represent something that is not present, we can speak about the riddle of pictures: that they are the pre sence of an absence.[4] Accordingly, a picture is a kind of wedge in both spatial and temporal order. (Brandt 2005: 43) "[B]ecause infants do not understand the nature of pictures, they sometimes respond to depicted objects as if they were real objects." That is, young children do not recognize this wedge-like character of pictures[5] with a realistic depiction and thus they try to resolve their uncertainty by manual exploration of the picture. Experience with pictures by 18 months of age results in a decline in the manual exploration of depicted objects, *i.e.*, the recognition of picture-like entities gradually evolves. (DeLoache 2004: 68)

An interesting phenomenon, often quoted by anthropologists, is that "in groups unfamiliar with photography people have trouble identifying human figures in the kind of picture that looks so 'realistic' to us because we have learned to decipher their devious shapes". (Arnheim 1974: 44) This demonstrates the importance of image schemas in the process of recognizing pictures. I suggest that this situation is generated by a difference of schemas. Tribesmen have a certain schema of the human body, but this schema is not as detailed as what we can see on a photo. Also, because they lack technology, less complicated and detailed schemas provide the patterns of depiction.

Investigating children's drawings, we can recognise a tendency whereby younger children are satisfied with simple schemas of persons and things, and they gradually become capable of adding details for the sake of recognisability. The drawings nicely mirror the schemas they have: people are round-shaped entities with two arms and legs, often depicted as tadpoles without a trunk; for a four-year-old child, there is no significant difference between the figure of the experimenter and him/herself when depicting them, but s/he is capable of adding details when it turns out that the drawing is for communication. (DeLoache 2004: 68) "As the mind becomes more refined, the patterns it creates become more complex, and the two growth processes constantly reinforce each other." (Arnheim 1974: 170) That is, if in a tribe the depiction of a human figure does not reach the level of minute detail found in a photo, and/or a special emphasis dominates the image schema of the man, then even though the wedge-like character of the picture is recognized, the figure in the photo does not meet the accustomed schema, and thus it is unrecognizable.

According to the idea of embodiment, "a person's visual concept of an object is generally based on the totality of observations from any number of angles. Yet it is a visual concept, and not a verbal definition obtained by intellectual abstraction. Intellectual knowledge sometimes helps form a visual concept, but only to the extent that it is translatable into visual attributes." (Arnheim 1974: 107) When we see a child's drawing, we see the manifestation of "an invisible universal". (Arnheim 1974: 461) But in order to be able to draw an invisible universal, we need to know the form. As Arnheim aptly states, "'The difference' … 'is not primarily between perception and representation, but between perception of effect and perception of form, the latter being needed for representation.'" (Arnheim 1974: 170)

We perceive the effect on the basis of previous experiences, and we learn to perceive the form on the same grounds. Form and effect are bound together by physical and cultural embeddedness.[6] We perceive the effect when we see a building or a figure "comfortably poised" because we "know from the muscle sensation in [our] bodie[s] … that things on our planet are pulled downward." If we recognize the pattern, *i.e.*,"[e]nough weight at the bottom makes the object look solidly rooted, reliable, and stable", we perceive the form as well. (Arnheim 1974: 31)

Endnotes

[1] See *PI* 413

[2] "Every external perception is immediately synonymous with a certain perception of my body, just as every perception of my body is made explicit in the language of external perception" (Merleau-Ponty 1962: 239)

[3] I have in mind topics like change- or inattetional-blindness, and visual presence. For more details, see Noë 2004: 52, 59-65.

[4] See Mitchell 1987: 17, Belting 12.

[5] It is important to note that young children are not prepared for dual representation, *i.e.*, to understand how symbols work. For details, see DeLoache 2004: 69

[6] Arnheim relates certain compositional rules to literate cultures. (Arnheim 1974: 33-36) The influence of culture on the manner of depiction is clearly visible in the case of a tribesman who does not recognize his mate in a photo because he lacks an institution of detailed depiction.

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