

A Mind of Many

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1. In his own words, von Glasersfeld can think of “no better way” to approach the question of how we form our knowledge of society than to “examine how patterns arise from the perception of disconnected elements” (§1). Accordingly, he briefly examines the active elements in visual perception (in particular perception of images). This move plays the role of a first step in a story of individual construction of knowledge of what would seem to be increasingly complex entities, namely, objects, animals, humans, social agents, social institutions, communities, etc., each constructed out of fully constituted but “not yet properly connected” simpler elements. The result is an individualist, locked-in, notion of society, both in the sense that social entities are understood (constructed) by individual minds first and foremost and in the sense that they are composed of ready made atomic elements (intentional agents already constructed as self-sufficient by an individual mind).

2. What this view denies (without argument or evidence) is any intervention of “higher order” elements (e.g., social norms and institutions, language, etc) in the very processes that are involved in their construction as knowable entities by individuals. We should note that this is not the same as denying any involvement of social categories in the formation of an individual’s knowledge of them (that would be non-sensical), but it does mean that this intervention is inherently external to individual construction and consequently society only plays the role of a constraining factor that must be satisfied by a process of constitution that is the sole responsibility of an isolated mind. While von Glasersfeld’s “epistemological model involves consciousness, memory, and some basic values” (§47), our argument from an enactive perspective is that these axiomatic elements are not atomic and already imply the participation of those social processes they intend to ground and that this fundamental intervention happens before these processes are constituted as knowable by the individual mind they shape.

3. While sharing many elements with radical constructivism, e.g., the role of viability constraints and the logic of fitting vs. matching, the enactive approach to cognition (Thompson 2007; Varela et al. 1991) would see this account of sociality as very one-sided and hence likely to miss a proper understanding of crucial social phenomena.

4. Our objection begins with von Glasersfeld’s initial step (and could be repeated in a similar vein in the remaining moves). How is it warranted that the activity by which an individual constructs the perception of a visual image is totally devoid of social influence? Do we really learn to *see* images on our own as isolated individuals? Like von Glasersfeld, let us consider static images. Studies on the origins of image making have shown that our capability for perceiving images as such is nothing if not a rather late and culturally laden achievement of the evolution of the human mind. Our ancestors only started making images (and understanding them as such) around 30,000 years ago in the spiritual paintings of cave art. Our culture is so saturated with images that the problem of how they first became capable of making and understanding them strikes us as a non-problem: we simply do it and it seems apparent that this would be a natural capability of our minds. However, when we consider that no activity of image-making (or of perception of human-made images) pre-existed the first image ever made, we start to wonder how this understanding could have developed in a world devoid of such images.

5. There are interesting theories of how this may have happened (e.g., Lewis-Williams 2002), but I want to draw attention to certain facts that are discovered along the way to answering this mystery. It turns out that the perception of images is a socially mediated activity. For instance, in studying the Abelam people in New Guinea, Forge found that adults could simply not “see” anything when shown photographs of themselves and others if they were not head-on shots. Only with some training would young children begin to develop an ability to comprehend the convention of photographic representation. He concluded that their vision had been socialized in a way that makes photographs especially hard to see (Forge 1970; see also Seegall et al. 1966). Similarly, stories abound in the history of art of “culture clashes” in how images are intended to be understood. Henri Breuil (Spivey 2006) tells of a 19th century Turkish man who, on being shown a “realistic” painting of a horse, said that he could see no resemblance between the pattern on the canvas and a horse. “A horse has a backside, you can walk around it; that thing on the wall does not even begin to resemble a horse”.

6. We may assume here as uncontroversial that the socialization that leads to human-made image perception is unlikely to leave the processes of general visual perception unaffected. We can then see that even for activities that would seem to come naturally to an individual and isolated mind, the processes of development that lead to the capacity for performing these activities are already socially-mediated. (Isn't this also the case in apparently “natural” and “universal” skills such as bipedal walking? Are not the accounts of feral children raised in the absence of human intervention who walk on four legs the ultimate proof of social mediation at the most fundamental levels of individual activity?)

7. An even stronger case could be made for the perception of animality and the perception of other persons. Von Glasersfeld suggests that, as we develop, we keep on adding categories such as intentions, plans and the notion of the other and of communities, to individually constructed perceptions in what he sees as a natural scale of complexity. However, evidence shows that the hierarchy on this scale is very questionable. Infants already respond to others as others (Trevorthen 1979) and they are able to engage in interactions a few hours after being born (Meltzoff & Borton 1979). They become sophisticated social beings much earlier than we can safely say that they develop the concept of an object or an image (Stern 2002). These apparently higher-level social elements are already present before constructive abilities that would seem to require no sociality – moreover, a good body of evidence suggest that those abilities actually rely on the appropriate development of such close social skills (Trevorthen & Hubley 1978). If we construe knowledge as an embodied and situated coping, an infant's knowledge about sociality comes too early to fit von Glasersfeld's story.

8. An enactive approach to cognition (Di Paolo et al. 2008; Thompson 2007; Varela et al. 1991) recognises the constructive activity of the individual mind. It has a specific name for it: *sense-making*. This activity is what defines a cognitive agent as such. Its constructive aspects have been argued for extensively in ways that strongly overlap with von Glasersfeld's radical constructivism (Varela et al. 1991). In addition, the logic of sense-making has recently been formally grounded on the processes of self-constitution of living beings (Di Paolo 2005; Jonas 1966; Thompson 2007; Weber & Varela 2001). However, unlike radical constructivism, the enactive approach places the notions of autonomy and emergence on an equal footing to those of experience and sense-making. Under the resulting, more dialectical view, it becomes evident that the level of the individual is not the only autonomous level upon which a cognitive entity might emerge. Social interactions as dynamical processes – let alone social institutions – may themselves acquire an autonomy beyond that of the individuals that participate in them, and steer themselves in a direction that may not be that of the individual intentions that

participate in them (as anyone stuck in trying to get past an oncoming person along a narrow corridor, or anyone participating in a sour argument that every person involved in is desperately trying to avoid, may have experienced). A detailed exposition of how enactivism can be extended to social interactions and the resulting tensions between different kinds of autonomy can be found in De Jaegher & Di Paolo (2007).

9. In this view, individuals are as much constituted by social processes as they constitute them. A good set of definitional properties that make me an individual are provided by the social processes through which I develop as such, including my knowledge of myself, my world and my community (this is not about separating this developmental engagement into cultural and biological elements – this would miss the point that humans are precisely those beings that culturally steer their biology in body, action and experience in order to become a project unto themselves, beings concerned with their own being). And, in a mutually constraining and constituting loop, social institutions and interactions cannot completely erase individual autonomy if they are to remain viable themselves (though this does not rule out the possibility of widespread oppression).

10. Individual minds come to know about society by the combination of their own individual activity (whose origins are socially mediated) and their direct *participation* in social interaction, not just its observation. There is no better evidence for this than the phenomenology of intersubjectivity, in particular as spelled out by Sartre, Merleau-Ponty, Gurwitsch and Schutz, who von Glasersfeld himself cites. The experience of the alterity of the other, of her alternations between being for me a fully understandable entity I can interact with and a totally opaque centre of subjectivity that pushes me around with intentions that I find mystifying, is the clearest evidence of the direct participation of social processes in individual sense-making. In examining Husserl's later accounts of transcendental intersubjectivity, which already concede the primordially of intersubjectivity over the constitution of objects, Schutz still finds it problematic and inaccurate as an account of how others are experienced in their whole otherness and also as subjects that constitute ourselves with their actions, their gaze, and ultimately through social norms (Schutz 1966). Schutz finds even the later Husserl still too individualistic.

11. It would be simply impossible to provide a clean and productive passage between the sciences of life and cognition to the sciences of sociality if we could not acknowledge the complexity and mutual influence among the different entities we encounter along this spectrum (from genes, to organs, to bodies, to animal selves, personal selves, socio-linguistic selves, interactions, communities and institutions, etc.). There is no simple linear progression that tells the full story. If there was, the result would be the kind of universal, reductive social science that von Glasersfeld seems to prefer, one that is itself devoid of social influences, one that is based on "more or less accepted methods" that the attentive observer gleans from experiences, experiments and statistics (§43). Such a cocktail may make perfect sense for a contemporary Western scientist, but it may be a poor recipe for understanding and successfully negotiating the complexities of other cultures. Ironically, this difficulty is an implication of radical constructivism itself – one that von Glasersfeld does not draw – and this is so precisely because *the relations between individuals and societies follow the law of fit rather than match*: different societies and their individuals drift to different satisfying conditions of viability. It makes little sense as a general rule to employ the methods that work for knowledge generation in one society indiscriminately to achieve the understanding of another.

12. It should be clear that, though critical of a *Rear Window* approach to the social, the enactive approach shares a lot with radical constructivism: its logic of fit, the eschewing of useless conversations about "reality", and the commitment to pragmatic and scientific approaches to knowledge. Von Glasersfeld ends his essay by signalling his distancing

from post-modernism. While I agree with this discomfort, I think von Glasersfeld essentially reverts to a modernist view. Enactivism should perhaps be seen as an attempt to overcome and transcend postmodernism without ignoring its lessons. This would mean a return to reason for sure, but a reason that is embodied and socially situated, aware of its limitations and with no claims to universality.

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