## **Open Peer Commentaries**

## How Radical Is Radical Constructivism?

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- In section 1, Ernst von Glasersfeld sets out to explain how familiar patterns (signs) arise in private experience—and how they are extracted or "recognized" as such. These patterns are recursive, which imposes significance (familiarity) on them, and are, in the course of time, collected into a "bulk of experience." I think a convinced constructivist can—if hesitantly—accept his rendering, even though it is one that lacks the stringency one expects from a supposedly natural scientist (§46). However, the crucial point is that this paper does not address the convinced constructivist but rather the opposite camps, and I doubt he succeeds in convincing them.
- 2 We can question von Glasersfeld's radicalism early on since section 1 is devoted to the analysis of visual patterns, which is typically the endeavour of a realist, to whom it is quite natural to survey the supposed domain of "reality" by using vision. The true constructivist, on the other hand, surveys nothing but his own experience and in this endeavour the faculty of vision does not necessarily play a deciding role – even if today's observer-oriented sciences pay a one-sided interest in visual experience. At the level of human experience we rather expect all types of sensation and feeling to be on equal terms. In that view he is neither "going to the roots" nor "uncompromising," which he claims is the distinctive mark of his brand of radical constructivism (RC)
- 3 The genuine constructivist is always subject-oriented. He is exclusively oriented towards his personal experience i.e., he makes predictions, draws conclusions, produces models and knowledge etc., on the sole ground of subjective experience. On that point (\$5, \$17) I agree with him. However, when he refers to dedicated realist conceptions or "outside" phenomena he starts a pro-

- cess of confusion, to which von Glasersfeld himself later gives clear prominence (§29). Unfortunately he does not apply this to his own teaching, since this paper in this respect seems larded with ill-advised formulations.
- 4 It is compulsory to avoid "outside" references in explaining your own "constructivist" lines of thought, albeit unendurably difficult. Whenever you use the word "line" (§7), a realist refers to a continuous dot pattern "out there," whereas a constructivist (hopefully) refers to a trace of experience, and when you use the word "thing" the realist refers to a palpable set of sensations "out there" and the constructivist once again refers to a trace of experience. In explaining this crucial difference we must be extraordinarily careful otherwise we simply create confusion. E.g., what happens when you start to call a trace of experience a "pattern" or a "picture"? To the realist each visual pattern and picture is a set of "particles of pigment," i.e., "outside" phenomena. To be honest, I am uncertain as to what von Glasersfeld is referring to when he uses confusing expressions of this kind. I am certain a realist thinks he is suggesting that there are "particles of pigments" and "spare drawings" in his mind - which sounds extraordinarily weird. The goal of the constructivist must be to convince the realist that each and every phenomenon arises in his personal experience and there only, which is a situation odd enough for a realist to understand. Not because he is ignorant - but because he has always been trained to think that the causes of sensation are "outside." One suggestion is to make the intent of reference exceedingly clear in the use of the "prefix" trace, calling "line" and its corresponding experience as the "trace of a line" or saying "thing" as opposed to the "trace of a thing" or alternatively "thin/kin/g."
- on how *private* knowledge can be *constructed* from *private* knowledge can be *constructed* from *private* experience and how this bulk of experience can be useful in *private* prediction. Also, in this task you cannot be too careful to lay stress on *privacy*, since you find here the *determining dividing line between realism* and constructivism (or rather dualism and monism.) The term "constructivism" is con-

- fusing to a realist because constructivists make it their task to *construct* knowledge (hence the name), but realists (naïve or not) have, as witnessed, also been busy constructing their knowledge for millennia. Accordingly, the process of construction is not the watershed, but rather the idea that knowledge of *different kinds* is produced namely *subjective* respective *objective knowledge*, or better knowledge for private use versus collective use. Here we spot confusion, since on this point RC is very unclear.
- 6 The apparently careless use of terms in §5 also creates confusion, since it leaves the reader uncertain as to whether he refers to "existence" as it pertains to a private or to a public domain. "Existence" in a private domain is the result of a private decision and "existence" in a public domain is a matter of consensual decision. So if we all come together and decide that "reality" exists - it exists - and does so simply by convention. This is, of course, not an example of "existence" of the classical "pre-given" kind but rather a kind that is agreed upon in social consensus. However, when discussing "existence" the constructivist must be very careful in separating apples from pears – so to speak. In §29 and §37 he claims that "meaning" is a matter of "private symbolism" - which notwithstanding also includes the "meaning of existence."
- ▼ Von Glasersfeld devotes section 2 to RC's idea that some patterns are selected as "prototypes of recognition" on the ground of their usefulness (viability) in prediction and not on the ground of visual resemblance or "truthlikeness" (§17). However, he fails to point out that constructivists can then successfully bracket (to borrow Husserl's term) the issue of pre-given existence. From this point on, a thinker can solve the tasks of living prediction in a single domain of experience (monism), i.e., on the grounds of past private experience I predict what private experience there is to come. Hence all subsequent reference to "outside" phenomena is in principle forbidden, along with any uncritical use of realism-loaded terms or formulations.
- 8 In section 3 he successfully applies the suggested pattern-recognition methodology

to identify self-moving entities (including self-like "others") but I am unable to see how their *capacity for actions* is included in the models as developed along the lines given in sections 1 and 2. He then rightfully claims that social constructivists take the "other" for pre-given in the same vein as scientific realism takes the "things of the world" for pre-given (§21).

9 When von Glasersfeld, in section 4, brings up human communication, we understand that the "pattern analysis" of section 1 is hopelessly partial. He has neglected not only to take into account other feeling but visual experience, but also to extend this "pattern" analysis to include the action capacities (autonomous behaviours) of the living entities named "others." In the abstract ("Benefits"), he sets out to clarify this point but fails. To construct a private model of interpersonal communication you need, in fact, to study the conceived subjective entities of your experience for a long time and under different circumstances not only momentary patterns. Afterwards you can then explain how these conceived model entities of "others" interact by the exchange of "messages" - all of them being models residing in my bulk of private knowledge; since the Self is also a model of the same domain, it is included in these acts of communication. To my mind this provides the answer to the problem von Glasersfeld initially posed, but I am unable to extract this interpretation from his paper.

The "recognition of physical semi-permanent features" in section 1 must be considered irrelevant for the analysis of *human interaction*, since in this discussion the social individual can be regarded equally well as a *pure point abstraction*, which is actually what engineers of communication tacitly do. In this way we can cultivate in isolation the *action capacities of living beings*, and this is exactly what sociology – in parallel with the systems sciences – tries to do, albeit not very successfully because we are prone to take for granted that these capacities of action are innate (or pre-given), a situation that von Glasersfeld also recognizes (§21).

III In section 4, in the spirit of Piaget, von Glasersfeld delivers very deep constructivist insights concerning language and communication. In §25 he digs out the essence of human communication and its inability to mediate "meaning" and its immediate consequences (§§26-28) for language acquisition in the respect it must be considered a strictly private1 endeavour - and that language initially is not something handed over to mankind from some sort of authority (§38). Furthermore, in §\$28-29, he brilliantly digs out the consequences of this privacy of language acquisition for all efforts of scientific communication. What is annoying is that he himself, without further precautions, always uses a language that has long been shaped by the realist's way<sup>2</sup> of thinking. In uncritically doing so, the discrepancies are bound to "generate perturbations" in all interactors, as he readily admits (§29) - for not to say so would cause deprecation in the realist camp. He brings to our attention §§31-33 that social constructivists take the "other" and its action capacity for pre-given, and in \$\$35-38 he usefully elucidates that both meaning and language are traditionally regarded as pre-formed in society (and thus pre-given).

12 In §§42–43, von Glasersfeld lays stress on RC's effort to build a model of how knowledge of the "real world" and "society" can be extracted from strictly private experience, and in the same breath he claims that likewise all that is written in sociology is a reflection of the consensual acceptance of such models. Very well – but this goes for any epistemology, including RC. I would rather emphasise that sociology, besides language, has very few viable models - and that the concords of consensus are not very widely spread. The claim that steps of personal adaptation do not eliminate subjectivity (§44) appears weird since this is the very motivation for such steps. However I guess von Glasersfeld wishes to say that the point of departure of constructivism is strictly subjective.

III §45 he attempts to deal a useful but unjustified blow to social constructivism. I think it is a good practice to avoid throwing stones at people while sitting in a glass house,

since the legitimate claim advanced in §45 goes for any science – and RC is no exception. In this paper von Glasersfeld uses, and has always used, a tool of explication that has been developed under the spell of naïve human realism, namely language, the use of which is also frequent in scientific realism. In spite of this situation it is not the characteristic of natural science to use such an ambiguous (for not say bewildering) instrument of explication. However von Glasersfeld takes, without further precautions, this realism contaminated language exactly "as it is" and in doing so he in practice takes it "for given." Thus he also commits the same "sin," and he simply saws off the branch he himself is sitting on – to the detriment of RC.

III So what language should von Glasersfeld use? Well – here we recognize a huge problem; but the fact that he does not entertain or alternatively fails to launch this insight is neither radical nor coherent. Sitting in the glass house of traditional language, we must at least make the effort to use it with the utmost care. The alternative is to develop better tools of explication, a communicational practice that is highly cherished within the natural sciences, and this I would really rate as radical

allows the natural scientist to (vacuously?) postulate a "stable environment," whereas he, in the same vein, forbids sociology to postulate "social interaction." Of course both camps are allowed to hypothesise whatever they like – the all-pervading problem is to confirm the usefulness of these hypotheses.

To sum up, I think von Glasersfeld is a prominent thinker who has done a lot to give prominence to the ideas of constructivism, which he, in spite of his shortcomings, also does in this paper. But radical – no!

## Notes

- Even if we choose to learn a language already in use in order to become a fully fledged social individual.
- In fact the realists' interpretation of language is unable to capture the basic ideas of constructivism.

66 Constructivist Foundations