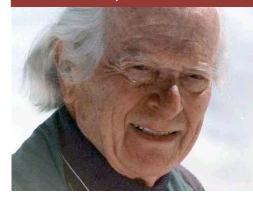
Constructivist Foundations

VOLUME 2, NUMBERS 2-3



Festschrift for Ernst von Glasersfeld

celebrating his 90th birthday

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To Find a Daisy in December

Impressions of Ernst von Glasersfeld and an Interview with Him about Constructivism and Education

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The systemic-constructivist

recognition of autonomy,

curiosity, responsibility and

developments and solutions

characterized by the

the quest for viable

approach describes an attitude

respect, appreciation, empathic

the eyes of many, Ernst von Glasersfeld is a man and scientist quite different from others. This is particularly important in our

postmodern times, which celebrate outer appearance and public efficiency – pretence over being.

In the first place, it was the *man* Ernst von Glasersfeld who impressed me. Later, I recognized that it was a special *Haltung* (attitude) that had shaped and pervaded his whole

person, thinking and acting, his scientific work, his appearance in public and private contexts. It was that whole attitude – which is obviously more than the sum of its parts – that appealed to me as a model for my own theoretical reflections and ways of acting in the field of systemic-constructivist education.

"The systemic-constructivist approach describes a *Haltung* (attitude) characterized by the recognition of autonomy, respect, appreciation, empathic curiosity, responsibility and the quest for viable developments and solutions." (Voß 2005, p. 53)

First encounter in Sulitjelma (1988)

Sulitjelma is an old mining town in the mountains of Norway above the arctic circle. When in June 1988 some 170 clinicians and scientists from several countries met there, this sleepy village awoke to new life for a couple of days. Indeed, it was like joining a "Greek kitchen," as the invitation from the Norwegian family therapists had announced: a cosy place of intimate, personal and in-depth conversation. The aim of the conference was to bring

together experts in epistemology and clinical therapy to discuss the question of how to relate second-order cybernetics to daily therapeutic

practice. Among the participants of this meeting were Heinz von Foerster, Ernst von Glasersfeld, Humberto Maturana, Lynn Hoffman, the clinical teams from Galveston (Anderson, Goolishian), Milano (Boscolo, Cecchin) and Tromsö (Andersen, Flam), and others

The first joint dinner was meant to bring people together in a pleasant and relaxed atmosphere to become acquainted with one another. Places at the table were allocated by drawing lots. Next to me was an older man, tall and athletic, his hair turning gray. He almost seemed aristocratic to me; a very nice and friendly man, polite, reserved, nearly shy, modest and careful. I conversed with a man who turned to me with great empathy and interest. Unlike the usual behavior of the majority of scientists, his did not show any attempt of self-promotion. We talked about the place of the meeting, which evoked many memories of my childhood in a German mining town.

The next morning in the plenary, Ernst von Glasersfeld gave me the impression of a calming influence between the "wizard and entertainer" Heinz von Foerster and the rather intellectually reserved appearance of Humberto Maturana. In an upright posture (both physically and mentally) he presented his positions in a precise way. He did not pretend to proclaim certain knowledge, but his whole presentation was marked by his characteristic modesty, with which he created a unique atmosphere.

First Heidelberg conference on systemicconstructivist school education (1996)

On the occasion of my first nationwide conference on systemic-constructivist school education, organized in cooperation with the International Society of Systemic Therapy, I found myself together with Ernst von Glasersfeld in a small pub in the historic part of Heidelberg. He recounted stories from his life which gave me the impression that constructivism had been important to him since his early childhood days.

"I grew up in-between three languages, without a mother tongue so to speak. Under such conditions you quickly recognize how different the worlds are that you're speaking of ... And gradually I realized that one has to construct a different Wirklichkeit (reality) in each language." (Glasersfeld in: Foerster & Glasersfeld 1999, pp. 192, 195).

Born in Munich to Austrian parents, Ernst von Glasersfeld grew up in Switzerland and Austria. After only three semesters at universities in Zurich and Vienna, he emigrated to Australia, where he worked as a skiinstructor. Later, he was a farmer in Ireland for several years. In 1946, he moved to Italy, where he worked as a journalist and as a cooperator at the Ceccato's Scuola Operativa Italiana. He was already in his 50s when he entered the Scientific Community without a formal qualification such as a PhD. From a German perspective, this seems almost incredible. From 1970 onwards, he taught cognitive psychology at the University of Georgia, Athens (em. 1987). Later he became an Associate Member of the Scientific Reasoning Research Institute at the University of Massachussets, Amherst.

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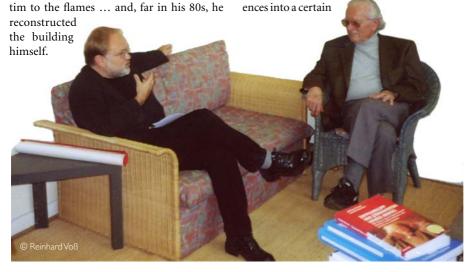
"Well, of course, if you have the feeling that you can do it, that's fine and you won't stop learning." (Glasersfeld in: Foester & Glasersfeld 1999, p. 41)

Lecture at the University of Koblenz (2001)

On the occasion of a brief visit to Ernst von Glasersfeld's house in Amherst, I invited him to give a lecture at the University of Koblenz. He did so in December 2001. Waiting for the start of his lecture, he took a walk along the Rhine. On his return, I witnessed an enthusiastic Ernst, beaming all over his face. He presented a tiny flower that he had found, exclaiming: "A daisy in December!"

After his impressive lecture, we sat together in a little wine-cellar by the Moselle (i.e., the river that meets the Rhine in Koblenz). In a relaxed atmosphere, drinking wine and eating dainties, I discovered yet another side of the man who only minutes ago had cast a spell over his audience with his scientific talk. Bright and appreciative, boyish and full of humor, he enjoyed the simple, country-style food. The variety of German bread especially filled him with enthusiasm, evoking memories of his Austrian years, which contributed to a lively conversation.

Some time later, a fire accident destroyed Ernst von Glasersfeld's house in Amherst, which he had built with his own hands. His entire private and scientific property fell victim to the flames ... and, far in his 80s, he



system of experi-

"The trouble is that the word 'viable' says too much. The only thing that matters is to get by." (Glasersfeld in: Foester & Glasersfeld 1999, p. 129)

Ernst von Glasersfeld has succeeded in finding a viable fit between the man and the scientist and in embodying a *Haltung* (attitude) that represents constructivism. He was prepared to get involved with a "different way of thinking" and to deal with a matter that is often "demanding and uncomfortable" for those affected. Ernst von Glasersfeld, in an interview with me on questions of constructivism and school:¹

Dealing with an uncomfortable matter – An interview with Ernst von Glasersfeld

There are so many images of, opinions about and prejudices against radical constructivism. Could you please explain to a freshman or to a teacher who is interested in constructivism, because he or she is looking for new, helpful perspectives to put into practice, what radical constructivism means for you? *EVG:* I believe that this is not difficult. First I would say that constructivism cannot be considered as a form of metaphysics. Constructivism is not a reflection of the world, but simply a way of thinking. I think that constructivism offers a possibility to put our

order and in my opinion this is the most important thing. What distinguishes constructivism from other theories of cognition is above all the relation between what we call knowledge and the so-called reality, that is a world as it may be before we know and capture it. In the conventional theory of cognition, this relation has always been conceived as a copy or representation of something or whatever you would like to call it. Constructivism abandons these ideas completely and believes that what we construct as an imagination of the world has to fit into reality. This fitting is a very simple term, more simple than the kind of fitting we are talking about when we are buying a pair of shoes. First, the shoes have to be big enough for our feet to fit into, but not so big that we get blisters when we walk. The kind of fitting in the theory of cognition is only the first part: there is no 'too big.' In other words, everything works that passes the conditions of the real world. That is a radical difference. Indeed, the expression 'radical' came from this realization. This, of course, has considerable consequences on education.

There are many forms of constructivism such as social constructivism, radical constructivism and methodical constructivism. This often confuses teachers and students who want to approach constructivism. Do you believe that these different ways of approach have something in common beyond epistemological and philosophical differences?

EVG: Yes, sure, otherwise people could hardly speak of constructivism. One thing they have in common is, for sure, the realization that what we call knowledge has to be built up by children, pupils, students and all learners. It cannot be adopted as a whole. They have to build it up step by step. From my point of view, this is a trivial form of constructivism. As a second condition I would add, and most constructivists agree with this to a certain extent, that we no longer see knowledge as a representation of one reality, but as a possible way of behavior within a world that we cannot describe properly. These are the two things on which, I believe, all constructivists agree more or less.

Would you content yourself with these basic consensual tenets or would you rather sug-

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gest that it is equally important to recognize the differences between specific constructivist approaches?

EVG: Yes, sure, because there will be confusions if one does not pay attention to the differences. The people in America who call themselves "social constructionists" assume that language and society exist a priori. To my

"The trouble is that the

much. The only thing that

word 'viable' says too

matters is to get by"

mind, this is an unprovable assumption. I cannot agree with it, because from my point of view at first every child has to build up language by themselves from pieces of their own experience.

This experience cannot be given to a child. They have to build up their own understanding of society, before they can recognize social phenomena as what they are. These are considerable differences.

You were a ski-instructor in Australia. Later you worked as a university professor for many years. You have been a teacher in fact. With your constructivist way of thinking, did you behave differently from other teachers who had not been engaged in constructivism?

EVG: Those were two different things. As a ski-instructor, I definitely did not think about constructivism. But my experience as a skiinstructor became very important to me later on when I built up constructivism. When you teach people skiing, the main difficulty is that almost all the movements a skier has to make are directed against their instinctive behavior. When you go downhill, for example, and it gets steeper and steeper, your instinct tells you to lean backward. But then your skies run away from you. You have to do the exact opposite: when it gets steeper, do something like a header. That is very difficult because the whole automatic system of the body works against it. How can you finally get a beginner to try to behave like that? In this case, we as ski-instructors learn quickly to let the beginner go through something like a wave in the ground which is pushing him forward. This way he leans to the front and cannot move backwards. If that happens once or twice, the beginner realizes that it works and so he can bring his instinctive reactions under control. I think this is very important, although it works a bit differently, in the field of education. Here, we do not work against instincts, but very often against the fact that no terms exist at all. But when you can lead pupils into a situation in which it is possible or even probable that they will develop certain chains of thought, maybe they will develop the right thoughts. And if they have developed the right thoughts, first the pupils will realize that they

did it themselves, that it was their own production, and second, that it worked. With this, one can build up motivation to face new problems without being told how it has to be done.

Right now I have to smile a bit, because I noticed that you said "right." In fact, you do not use this term often. You never say: The "right" movement, the "right" behavior. But you use "pushing," and maybe we should keep that in mind for everyday practices in education.

EVG: Yes, "right" is always relative. It is how the teacher wants to appear.

You have clearly influenced a part of American education, first of all in mathematics and natural sciences. How would you, from a temporal distance of 15 years, if I am right,

describe the importance and the usefulness of radical constructivism for schools and teaching? Could you make the differences with the traditional way of teaching a bit more explicit? If the two of us were visiting a

school class now, how would you be able to tell whether the style of teaching was more constructivist or traditional?

EVG: I think you can see that very easily. When you find the teachers explaining how something has to be, as a matter of fact, when you find them giving the answers to the pupils themselves, they are no constructivists for sure. Because one of the main characteristics of the constructivist way is to have the pupils find the answers themselves. The answers should not be given to them. All you can give is an orientation to think in the right direction. That is a radical difference. When the opponents of constructivism say that this sounds all nice but that it would take years

before they found the solution themselves, this objection, to my mind, is exaggerated. It is not true. Once a pupil has found out that he or she can find answers, it often goes quickly. And when pupils have learned how to find answers themselves, it is possible to give them answers from time to time by telling them: "Try it yourselves." They will transfer it right away into their own way of thinking and behaving and try it out. In this case it will be something self-made and nothing they had to take over from someone.

I very well understand what you are saying because I have had the same experience. Do you have an explanation for why teachers so often say: "Children cannot do this." Why is this point of view so popular even among committed educators?

EVG: There are certainly a number of reasons, but one of the main reasons is the fact that teachers traditionally consider themselves as the keepers of knowledge and still have the idea that they pass it on piece by piece. And very often teachers still have the illusion that concepts can be transmitted through language. In my opinion, this all an illusion. By means of language one can only, as Humberto Maturana says, orientate, but one can never transmit. One can never send ideas from one person to another like in a postal package.

On our study trip across the

United States, we met many

teachers who did not refer to

radical constructivism but to

Dewey, Piaget, Vygotzky or

even only to secondary liter-

"Very often teachers still have the illusion that concepts can be transmitted through language"

ature on constructivism. How do you assess the chances and dangers of a pragmatic, if that is what you want to call it, or trivialized constructivism?

EVG: Differently, I would say. Dewey never called himself a "constructivist." But he wrote a lot and had many good ideas that are absolutely compatible with constructivism. The whole pragmatism – I have said that before in my writings – is very close to constructivism. The difference, the main difference which I see, is that the pragmatists have always proclaimed that instead of taking over truth, they would take over the functioning of ideas. But at the same time they have spent little time on finding out how this practice is built up. But this is exactly what constructivism wants. And

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this links constructivism to Piaget, who actually was the main constructivist in the past century. He brought constructivism back to the agenda again. In his cognitive psychology, he tried to explain the building-up of knowledge schematically. And in my opinion, this is the main task of constructivism.

On this campus (University of Koblenz) for example, many students are interested in Maria Montessori, and I believe there is a certain affinity. I would not go as far as calling her a constructivist, but a lot of what she says could be brought in relation to constructivism. What do you think?

EVG: I would say that every person who has dealt with Montessori and comes to constructivism must realize that constructivism is the fundament. Maria Montessori developed the practice brilliantly and almost everything she said can be directly taken over to the constructivist way of thinking. But she was not interested in theory. She did not formulate a basic theory. That is no disadvantage; she just did not need it.

I personally experienced constructivist positions as effective, helpful and useful, at the beginning in the field of therapy and later in education and teaching. The 1996 "school conference" in Heidelberg was an attempt to create a platform for systemic-constructivist thinking in school education. What can we do to give teachers an understanding of constructivism? Or, in the words of Fritz Simon, how can we "infect" them with constructivism the same way people get infected with a flu virus? How would you explain the usefulness of constructivism in educational practice to experienced teachers who are looking for a new orientation?

EVG: This is a difficult question. I think the main opportunity to convince teachers of con-

"Starting to think

constructivistically, one

realizes that one has to

one has thought before"

change radically everything

structivism is to get them involved in situations in which they themselves have to learn something and to stimulate them to reflect on their own learning. That means to give them a problem they have no idea of and

let them write a journal for themselves about what they think, how they think and how they progress with the problem. That can take a while if the problem is complicated. But when they get closer to a solution, they will realize that they have to do everything themselves and that it does not help at all to have the solution given to them. This solution they could repeat, learn by heart and so on, but that would not mean that they had understood anything. To understand it, they have to construct it themselves. I believe their own experience with this

"The conventional theory,

too, could not do anything

against Hitler"

process is the best method to convince them to organize their own teaching this way.

But, as a consequence,

this means we also need a different practice of teacher training and of university education. It should give students the opportunity to learn not only from theories, but also from practices and from meta-reflections on theories and practices.

EVG: Yes, sure, but this is impossible by means of lectures alone.

My last question: at a dinner in Heidelberg we talked about the influence and the meaning of constructivism in the future. You sounded a bit pessimistic then. Has your opinion changed over the past few years?

EVG: I was pessimistic insofar as I did not believe that constructivism would turn out to be a common attitude. In this point nothing has changed, I think. I believe this will take a long time, for reasons I have talked about numerous times before. Starting to think constructivistically, one realizes that one has to change radically everything one has thought before. There are almost no former opinions one can hold on to. And this is a hard and very unpleasant thing to do. Most people are afraid to do it and therefore they rather push constructivism aside. I do not know if that will be a common opinion after some time. If you

remember what happened to Vico, who was the first constructivist, it does not look very promising.

Maybe one more question for me personally. I have found the usefulness of constructivism in

practical experience. Therefore, I have come to the conclusion that the main thing is a form of ethics. That it is a *Haltung* (an atti-

tude) which works. It is a question of values and anthropology, of responsibility and tolerance. Can you agree with this?

EVG: This is a very delicate question. As for tolerance, I'd say "yes!" Being a constructivist, you must be tolerant for the very reason that it is a main principal of constructivist thinking to consider no model, no matter how well it works, as the only model. One has to apply

that straight away to constructivism, and I'd say constructivism certainly is not the only way to be happy. There are others. Where ethics, in the sense

of values and general ideas about values, is concerned, I always say: "Constructivism is a theory of rational thinking." In my opinion ethics is a non-rational matter. Ethics, as well as aesthetics, lie outside the rational and cannot be realized rationally. This is my point of view, with which you can be satisfied or not, but this is how I see it.

Is there maybe a correlation with your personality, with your modesty, that you live everything in your own person and do not pay too much attention to it as a subject?

EVG: I agree with Heinz von Foerster, who made the wonderful remark: "Ethics tell me how to behave myself, morals let me preach how others should behave." Therefore I plead for ethics and not for morals. Tolerance – that is an attitude which often gets attacked. People have told me, in more than one situation, that even constructivism could not do anything against Hitler. But I can only answer: "The conventional theory of cognition, too, could not do anything against Hitler." One cannot claim that any theory of thinking, of rational thinking, can influence ethics in any way.

But with regard to practices and a practical understanding of theories, I would like to take a different point of view. I think it is important to touch these issues in a world of less and less tolerance? Don't you think that this emphasis would underline the relevance of constructivism in our time?

EVG: Yes, I absolutely agree with you on the point about tolerance. A number of times I have written that the concept of viability in constructivism – the term for the constructs, the theories, the conceptions and so on which are accepted as functioning – that this concept

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consists of at least two levels. The first level refers to the observation that I recognize something as useful to my own experience. The second level, which is a higher level, refers to the observation that I can interpret others in the sense that they use the same or at least analogous principles. In this case these principles would be more viable at exactly this level. To build up a viable reality, I do need the others. To some extent I need the acknowledgement of others, although this acknowledgement is always a result of my own interpretation of other people. But my interpretation must be possible, after all, and sometimes it is not. This is not a question of arbitrariness. In this sense I agree with the point of tolerance. But tolerance is only a beginning of ethical principles.

If this is the beginning, what comes next?

EVG: There would be questions which Heinz von Foerster calls the undecidable questions. I am always responsible for deciding on them myself.

Therefore responsibility is important in any case.

EVG: Yes. When you construct your own Wirklichkeit (reality), the one in which you live, you are responsible. That is unavoidable, and it is one reason why constructivism seems to be an uncomfortable matter for many people. If you were a biologist for example, you could say that this is because of your genes and that you cannot help it. If you were a behaviorist, you could say that the environment is just what it is and that you cannot do anything about it. As a constructivist you cannot do this

Thank you very much.

ABOUT THE AUTHOR

Reinhard Voß, teacher, family therapist, is a professor for school education at the University of Koblenz in Germany.

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Note

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