Perspectives of Pragmatism –
The Cologne Video Project and the Dialogue between Pragmatism and Constructivism

In recent years, there has been an increasing interest in international dialogues between pragmatist and constructivist theories and approaches. The Cologne program of interactive constructivism stands in first line of such exchanges and regards pragmatism – especially in the wake of John Dewey – as one of its most important theoretical dialogue partners. For some years now we have been trying to further the communication and mutual enrichment of both traditions and to critically explore their potentials and resources as philosophical ways and methods of responding to our (post-)modern condition.

Pragmatism as well as constructivism are pluralistic approaches. They both have many perspectives. It is the intent of the video project presented here to explore some of this diversity and make it visible for a larger internet public by providing a site where users may easily hear and compare a variety of different voices from within recent pragmatist and constructivist communities. More specifically, the aim of our project is to present classical and actual insights of Deweyan pragmatism and discuss them with leading Dewey scholars today. We have therefore chosen a number of topics that, to our minds, are highly relevant from the perspective of contemporary pragmatism as well as interactive constructivism. The selection does not claim to give a systematic introduction. Rather, it tries to explore exemplarily important perspectives in the continual reconstruction of Deweyan pragmatism.

Each scholar will be represented in documentation (15-20 minutes film). S/he will be confronted with well-known quotations from Dewey’s works and be asked to give an interpretation about what, in his or her mind, is the actual import and relevance of this thought. Supplemented by a curriculum vitae and selected references of the scholar, the documentation will be accessible in the internet on the website of the Cologne Dewey-Center. With this project we hope to create a multilayered collection of personal statements about possible approaches to interpreting crucial questions and challenges of pragmatism for our time. The collection is meant in the first place to present a public site of information for newcomers, students and all those who are interested in the dialogue. The presentation shall provide vivid personal impressions about important issues, perspectives and theoretical resources in the pragmatic tradition. The dialogues intend to emphasize the practical relevance of these resources in the face of urgent problems in our complex contemporary world.

After the recorded interview each scholar will have the opportunity to see the complete material that we wish to present in the internet. They will be free to agree to or deny publication with regard to any part. For publication, we will need a brief CV and a list of about 10 selected publications. If wished, we will link the presentation to the homepage of the scholar. We intend to complement the project over the upcoming years. All scholars in the pragmatic community are invited to cooperate in the project.

Our questions stand in connection with selected quotations from Dewey. We are aware of the fact that this selection can never be complete, and probably it will not even be sufficient or satisfying for many. There are just so many valuable and meaningful connections that could be drawn to Dewey and other pragmatist classics – far too many to be sufficiently taken account of here. But we trust in Dewey’s belief that every age will do it own reconstructions,
anyway, of its relevant ideas and communications from the view of those involved and affected. There seems to be reasonable warrant, then, for us to do our own selection and leave it to our dialogue partners to bring in their own contexts and perspectives and thus broaden the fields of discussion.

We have grouped the questions to 11 general topics. The 12th topic at the end of the interview is reserved for a specific question that gives the respective scholar the opportunity to talk about his/her particular specialization(s). The selection of the topics and quotations to be interpreted depends, of course, on central theoretical interests of interactive constructivism. This is part of our “input” into the dialogue process. We should therefore venture, in the following, to explain to you, by way of an introduction, which issues and materials we have chosen and why we have done so. To illustrate the 12 topics, we will present the questions and quotations and give a response from our own constructivist standpoint.

1. Universalism/Contextualism:

“Habits of speech, including syntax and vocabulary, and modes of interpretation have been formed in the face of inclusive and defining situations of context ... We are not explicitly aware of the role of context just because our every utterance is so saturated with it that it forms the significance of what we say and hear ... Now thought lives, moves, and has its being in and through symbols, and, therefore, depends for meaning upon context as do the symbols ... I should venture to assert that the most pervasive fallacy of philosophic thinking goes back to neglect of context.” (LW 6:4-5)

Commentary: This quote is from the essay “Context and Thought”. Dewey wrote this brilliant analysis in the early 1930s. It is of particular actuality because it does not only refer to linguistic conditions and presuppositions of thought, but also to culture as the relevant context in which our thinking takes place. Among others, Richard Rorty has been particularly attracted by this insight which he further radicalized in his own philosophy. For Rorty, the cultural context is an essential and decisive factor even in scientific reasoning (cf. Rorty 1979, 1989, 1991, 1998). Dewey is somewhat more cautious here. He connects science with warranted assertibility in the process of inquiry that allows for relatively unequivocal statements and truth claims. But already Dewey had realized that even in the hard sciences there are no absolute truths. The problem lies, first, in the fact even coherent statements of truth may readily become meaningless if they are universalized beyond any specifiable context: “The fallacy of unlimited universalization is found when it is asserted, without any such limiting conditions, that the goal of thinking, particularly of philosophic thought, is to bring all things whatsoever into a single coherent and all inclusive whole. Then the idea of unity which has value and import under specifiable conditions is employed with such an unlimited extension that it loses its meaning.” (LW 6:8) Dewey insists that we must be cautious, therefore, to call things “real”. This “reality,” after all, is only what we do with things through our own constructive activities in inquiry. “Within the limits of context found in any valid inquiry, ‘reality’ thus means the confirmed outcome, actual or potential, of the inquiry that is undertaken.” (LW 6:9-10) Secondly, Dewey tells us that context provides “background and selective interest” (LW 6:11). Background in and of experience is of course cultural background; it is temporal and spatial; it can be theory. Background consists of the always already taken for granted assumptions and conditions that are being “understood” in just being there. In this connection we must be particularly critical in philosophy and science (cf. e.g., Gavin 2003), because this background also engenders interests that affect the warranted assertibility. Again, Dewey is extraordinarily up-to-date here: “There is selectivity
(and rejection) found in every operation of thought. There is care, concern, implicated in every act of thought. There is some one who has affection for some things over others; when he becomes a thinker he does not leave his characteristic affection behind. As a thinker, he is still differentially sensitive to some qualities, problems, themes. He may at times turn upon himself and inquire into and attempt to discount his individual attitudes. This operation will render some element in his attitude an object of thought. But it cannot eliminate all elements of selective concern; some deeper-lying ones will still operate.” (LW 6:14) To our minds, this is already a constructivist position because Dewey recognizes that subjectivity always has a constructive influence on inquiry even if – in some disciplines more efficiently than in others – severe rules of inquiry may help to delimit this subjective factor through generally accepted methodical procedures. The argumentation is constructivist because Dewey suggests that we understand and interpret scientific knowledge adequately only within the contexts of its time and place – or the contexts of its construction, as we would say. This is the only way for us to do justice to the progress of science and at the same time be aware of the fact that even in the future our constructions will still be on trial. Then others will examine and investigate in what contexts our theories and ideas have originated and what viability they had for these contexts. This examination of viability in relation to context is a central concern of interactive constructivism.

2. Re/de/constructions:

In interactive constructivism we distinguish between constructions, reconstructions, and deconstructions as dimensions of acting, observing, and partaking. This distinction implicitly already appears in Dewey (cf. Neubert 1998). We wish to discuss them here step by step:

Construction (experience):
“I have used the word construction” to denote “the creative mind, the mind that is genuinely productive in its operations. We are given to associating creative mind with persons regarded as rare and unique, like geniuses. But every individual is in his own way unique. Each one experiences life from a different angle than anybody else, and consequently has something distinctive to give others if he can turn his experiences into ideas and pass them on to others.” (LW 5:127)

Commentary: Dewey uses the term “construction” (or “to construct”) in several of his works. It stands for the fact that we explore and explain meanings which always implies constructive activities. He speaks of experiences being constructed in the process of living, or more specifically of ideas and theories, facts and data, observations and statements being constructed in the processes of inquiry. Constructions are an intrinsic component in all creative activity in which something new is generated. “We use our past experiences to construct new and better ones in the future.” (MW 12:134) And all that we know, too, is what we have constructed: “When it is realized that in these fields [i.e., social and moral matters] as in the physical, we know what we intentionally construct, that everything depends upon determination of methods of operation and upon observation of the consequences which test them, the progress of knowledge in these affairs may also become secure and constant.” (LW 4:149)

In this connection a crucial problem arises for constructivists and pragmatists alike: What degree of subjectivity is tenable for knowledge given its dependence on construction and creativity? And how can its necessary objectivity be defended and secured against arbitrariness and excessive relativism?
The above quote is taken from the essay “Construction and Criticism” that Dewey wrote at the end of the 1920s. The title with its combination of the two terms indicates the answer that he gave to the questions just raised. He writes that construction/creation and criticism in mental life are companions, that they “cannot be separated because they are the rhythm of output and intake, of expiration and inspiration, in our mental breath and spirit” (LW 5:139). Experience in the sense of construction involves for Dewey, first, the subjectivity which every human being, even as scientific researcher, brings into his/her observations, actions and participations in communities – part of which is the cultural background and selective interest about which we talked in the foregoing discussion of contextualism. Subjectivity in the sense of originality of personal experience is crucial for all progress in society and culture. For if humans were only copies of their environments, nothing new would ever emerge. Dewey was a path-breaker for a constructivist pragmatism or pragmatic constructivism because he realized that from within our acting in contexts of culture we construct ideas and theories which then become a new reality, a constructed reality besides natural processes. But not all constructions may be good or viable for all people. Therefore we also need criticism lest the constructive phase of our experience and inquiry become chaotic or merely representative of the interests of a few. Such cultural criticism must address values that connect construction and creation with what seems desirable from the perspective of all of those whose experience is affected by the products and results that are constructed or created. This is a basic implication of Dewey’s radical understanding of democracy. Construction is always production of something. “Production that is not followed by criticism becomes a mere gush of impulse; criticism that is not a step to further creation deadens impulse and ends in sterility.” (LW 5:140) Interactive constructivism tries to further develop the idea of construction in this sense.

Reconstruction (habit):
“There is no one among us who is not called upon to face honestly and courageously the equipment of beliefs, religious, political, artistic, economic, that has come to him in all sorts of indirect and uncriticized ways, and to inquire how much of it is validated and verified in present need, opportunity, and application.” (LW 5:142)

Commentary: The term “reconstruction” (to “reconstruct”) is found in lots of Dewey’s writings, too. He tells us that we continually have to reconstruct our experiences, our theories and ideas as well as ourselves. We must do so in connection with changing contexts because only by reconstruction we can try to adequately understand our doings and undergoings. In the quote, from “Construction and Criticism,” Dewey points out possible dimensions in which the challenge for reconstruction as a cultural, political, and personal task confronts us in modern life. Reconstruction for him never means sheer reproduction. He rejects all copy or spectator theories of knowledge. It is an essentially active process in which the emphasis lies on constructing anew. This is somewhat different to the common German use of the word “Rekonstruktion” where the focus is more on reproduction. Dewey’s use of reconstruction therefore is very inspiring for us, because, among other things, he shows that in our experience we only resume things and events from the past insofar as we ourselves can connect meaningfully with them. Here the way to reconstruction is through construction. Among other things, this is a water-shed insight of fundamental importance for education. Dewey made this very clear in his 1916 writing “Democracy and Education”, where he defined education as a process of active reconstruction of experience. To emphasize the active side he wrote: “But these experiences do not consist of externally presented material, but of interaction of native activities with the environment which progressively modifies both the activities and the environment.” (MW 9:85) He also makes clear that reconstruction of
experience for him always means a personal as well as social process. In education, construction and reconstruction must be seen as companions (cf. LW 17:251). In interactive constructivism we say that there should be no reconstruction in education without construction.

Deconstruction (criticism):
“Creative activity is our great need; but criticism, self-criticism, is the road to its release.” (LW 5:143) And: “We cannot permanently divest ourselves of the intellectual habits we take on and wear when we assimilate the culture of our own time and place. But intelligent furthering of culture demands that we take some of them off, that we inspect them critically to see what they are made of and what wearing them does to us” (LW 1:40).

Commentary: The words “to deconstruct” or “deconstruction” were not part of the vocabulary of Dewey’s time. But the sense of these terms is not alien to him. There are many places in his work where he discusses the value and the limits of deconstruction in the sense of criticism. Criticism is discovering the self-consistency of arguments and scientific theories, with criticism one can analyze the backgrounds and viabilities of these theories in their contexts. And it sounds a bit as if Dewey had known Derrida, when he says in one of his early writings: “Criticism, in a word, as understood by the French, is the ability to stand with and outside of an author at the same time.” (EW 3:36) Criticism is not fault finding, it “is judgment engaged in discriminating among values” (LW 5:133). Therefore it is a necessary supplement to creativity and construction. And Dewey already suggests an insight that has become widespread today among all sorts of deconstructivists: “Thus we may say that the business of philosophy is criticism of belief; that is, of beliefs that are so widely current socially as to be dominant factors in culture. Methods of critical inquiry into beliefs mark him [the philosopher] off as a philosopher, but the subject matter with which he deals is not his own. The beliefs themselves are social products, social facts and social forces.” (LW 5:164) At the same time Dewey warns us against a criticism that contents itself with deconstructing everything whatsoever and does not sufficiently combine deconstruction with constructive and reconstructive efforts. Interactive constructivism very much appreciates this Deweyan understanding of criticism. But for us there remains at least one lesson from the diverse deconstructivist movements of our time that pragmatists and constructivists should deal with (cf. also Bernstein 1992): There are selective interests and omissions in every discourse, even in scientific inquiry. They are constitutive conditions and not only errors to be prevented. On principle, Dewey saw this very clear. But deconstructivists like Derrida and others have demonstrated how we can use this insight for retrospective analysis and criticism of philosophical and scientific discourses in a methodologically reflected way. Thereby we can increase the probability of detecting hidden risks, exaggerations, onesided tendencies, exclusions and so on.

3. Truth and Warranted Assertions (Experimentalism):
“… the term ‘warranted assertion’ is preferred to the terms belief and knowledge. It is free from the ambiguity of these latter terms, and it involves reference to inquiry as that which warrants assertion” (LW 12:16).

Commentary: This passage is taken from Dewey’s 1938 volume “Logic: The Theory of Inquiry,” the most comprehensive and subtle discussion of his philosophical concept of inquiry. The book is still an inspiring reading today on the critique of knowledge for both
pragmatists and constructivists. Among other things, it deals with the problem of truth (cf. e.g., Burke et al 2002).

Interactive constructivism agrees with pragmatism that truth claims are not only necessary for science, but appear in all fields of social life. It has become a commonplace in all modern scientific and philosophical discourses that truth has to be warranted. However, there are a lot of different standpoints as to the forms and methods of inquiry as well as the grounds and expectations of reasoning. These differences appear not only in the specific disciplines but also in philosophy. Dewey quotes from Peirce to make his own position clear: “C. S. Peirce, after noting that our scientific propositions are subject to being brought in doubt by the results of further inquiries, adds, ‘We ought to construct our theories so as to provide for such [later] discoveries . . . by leaving room for the modifications that cannot be foreseen but which are pretty sure to prove needful.’” (Collected Papers, Vol. V., par. 376 n.) (LW 12: 17; fn 1)

This is an argument that interactive constructivism shares. But it depends on the contexts in what ways we interpret the application of this argument. Looking back at the 20th century, we can observe that many of the hard tools and methods of scientific research proved to be weak in the sense of hidden risks they ignored in the process of inquiry. Today we therefore maybe realize even more clearly than Dewey could in his time that criticism has become more and more indispensable as a tool of counterbalancing the often narrow tendencies in science in a capitalist society. This concerns not only the directly involved aims and values in scientific research, but also the more general conditions and effects of such research and its results in global contexts. Constructivism should not aim to abandon truth claims. But the relativism in such claims – as pointed out by Richard Rorty (1991) – must also be taken into account. Here it completely depends on the cultural context what side we prefer. To give an example: If some powerful group in our society tries to subvert scientific standards like Darwin’s theory of evolution and to advance the teaching of creationism in public schools, then we have to defend the warranted assertibility of the theory of evolution against a political strategy that mingles pseudo-scientific claims with obviously supernatural beliefs. Even if we know that there are no absolute truths, the theory of evolution in this context is still the best truth we have. On the other side, if in the established scientific communities and their routines there are strong tendencies to a mainstream that begin to drive out possible alternatives, then we should enforce recognition of the relativity of truth claims to enhance the chances that new ideas and theories can emerge. Interactive constructivism here uses the criterion of cultural viability to make clear that on principle even scientific truth claims demand for a well-balanced relativism with regard to contexts.

4. Experience and the Real:

“… the question … is what the real is. If natural existence is qualitatively individualized or genuinely plural, as well as repetitious, and if things have both temporal quality and recurrence or uniformity, then the more realistic knowledge is, the more fully it will reflect and exemplify these traits” (LW 1: 127).

Commentary: This quote (as well as some others that will follow) is taken from Dewey’s 1925/29 book “Experience and Nature” which, for us, is one of his most important philosophical writings. The book develops his concept of experience in the most subtle and complex way and can, in this respect, only be complemented by the later volume “Art as Experience.” Among other things, “Experience and Nature” contains a comprehensive and today still very instructive theory of culture, an extensive elaboration of Dewey’s philosophy
of communication, and a multilayered critical discussion of many aspects of the history of Western philosophy.

We have chosen the above quote because the term “the real” denotes a crucial concept in interactive constructivism and we believe it is helpful to compare the ways in which pragmatists and constructivists speak about the term. The Cologne program distinguishes between reality and the real (cf. Reich 1998 a). Realities are constructed by observers who participate in interpretive communities. They always involve some kind of order, foresight, “recurrence or uniformity”. The real, on the other hand, stands for all those unique events that enter our experience (at least to some degree) uncontrolled, unplanned and unexpected. Dewey’s account of the stable and precarious phases of all experience bears some resemblance with our distinction between reality and the real, and his general philosophical account of the role of contingency offers many seminal insights in this respect. Dewey is very clear about what it means that we – as observers, participants and agents – can never foresee all potential consequences or implications of our observations, participations and actions. Our constructions are always limited. They are selective and partial. Therefore, they are vulnerable to the occurrence of real events that could not be anticipated, expected or imagined. To the degree in which we remain open to the real in our experiences, we may use these events as cornerstones around which new constructions, deconstructions and reconstructions of reality can be built. Here Dewey’s rich and complex theory of human problem solving comes in as a valuable perspective that helps clarify many important aspects.

Among other things, Dewey’s writings bring the educational importance of a philosophy of experience and the real to the fore. He interprets human problem solving as a matter of education and growth and philosophy as a general theory of education (see Garrison 1998). Interactive constructivism shares this interpretation and has itself developed a comprehensive pedagogical approach that in many ways tries to connect learning with experience and the real (see Reich 2005). Here we are brought back, once more, to the issue of contextualism and its importance for education. Both Deweyan pragmatism and interactive constructivism believe that in order to be open-minded to the originality of learners and to facilitate real learning experiences, educators must be attentive to the multiple and often complex contexts of their learners’ experiences. Learning always begins in the middle of things i.e., from within the contexts of experience that individual learners as well as groups of learners carry with them. These contexts involve e.g., their cultural background and life-worldly histories including interests, habits, biases, skills, linguistic preconceptions, their knowledge and ways of understanding.

In contrast, however, to what may be called Dewey’s “metaphysical realism,” Cologne constructivism claims that we can and should today abandon the question “what the real is” – i.e., the philosophical search for the really real beyond all constructions of reality. Interactive constructivism builds on an observer theory of knowledge (see Reich 1998 a, b) that rejects all claims to realism in the sense of either “a form of copy theory of knowledge” or “a view that is at some point in the hope of an approach to reality as it ‘is’ – given – without sufficient regard to observer positions.” (Neubert/Reich 2006, 173) We use the real strictly as a concept that denotes a limit. It is itself a construct that reminds us of the limitedness of all reality constructions. Interactive constructivism speaks of the real as a “void signifier” in the sense that it cannot be filled with metaphysical content. We take this as a necessary conclusion from a large number of modern and postmodern discourses on the critique of knowledge. Therefore we are sceptical about the naturalistic or realistic claims of “Experience and Nature,” although we think that Dewey in his time was one of the most important pioneers in the philosophical movements of the 20th century that contributed to the necessary overcoming of old metaphysical traditions in Western thought and that paved the ground for the establishment of an observer theory of knowledge like that held by interactive constructivism.
5. Experience and Language:

“If existence in its immediacies could speak it would proclaim: ‘I may have relatives but I am not related.’ In aesthetic objects, that is in all immediately enjoyed and suffered things, in things directly possessed, they thus speak for themselves.” (LW 1:75-76)

Commentary: This passage from „Experience and Nature“ is not easy to interpret. Dewey here talks about the naïvity of classical Greek thought that could afford to believe that things and events speak by and for themselves. This belief was founded on early idealist assumptions about prototypes that operate as essences behind appearance. “In the classic philosophy of Greece the picture of the world that was constructed on an artistic model proffered itself as being the result of intellectual study. A story composed in the interests of a refined type of enjoyment, ordered by the needs of consistency in discourse, or dialectic, became cosmology and metaphysics.” (LW 1:76) We have long lost this form of naïvity. We have learned to abandon these origins. We had to emancipate ourselves from metaphysical tradition. But how far should the emancipation go?

At present there are different answers to this question. As far as we can see part off the difference is due to different traditions in dealing with the term metaphysics, especially between Anglo-American and German discourses. For example, contemporary American Dewey scholars often defend the use of the word metaphysics with regard to special parts of Dewey’s philosophy (e.g., philosophical reflections on the generic traits of existence as a ground map of criticism). They do so although Dewey himself was somewhat more ambivalent about the term and finally had to understand at the end of his life that his use of the word had too often been misunderstood. We have the impression that many Deweyans today try to save the word to show the importance and the profoundness of the approach in comparison to other philosophical traditions. We speak from a different context. In Germany we had nothing like the pragmatic reconstruction of metaphysics for which Dewey and others stand in America. We had a very strong metaphysical tradition coming from the 19th century that finally collapsed in the discourses of the 20th century. In this connection, Jürgen Habermas’ (1992) book “Postmetaphysical Thinking” summarizes the criticism and explains as a necessary conclusion the need both to overcome the tradition and to abandon the term. At least since the 1980s this has become a standard in modern philosophy.

Anyway, there is no doubt that in the 20th century developments of philosophy the linguistic turn was a mayor power for advancing the emancipation from the metaphysical traditions. Pragmatism has a long history of being misunderstood for using common terms with a reconstructed meaning. Dewey, e.g., had to learn this lesson even with regard to his core concept “experience”. For us, the difficulty with using the word “metaphysics” seems to lie in the task to prevent common connotations from sneaking into the reconstructed use of the term. We think it is wiser today to talk about words like existence, nature, the real as constructs that depend on contexts of observation. In order to prevent misunderstanding, we should not try to fill them with content that we label metaphysical. Behind such labels many people expect universal, essential, unequivocal, eternal, context-independent last words.

Further, interactive constructivism takes it as a lesson from the linguistic turn – and here we have learned much from Richard Rorty – that language games are powerful but also ambiguous instruments of interpreting experience and existence. In our truth claims we need language games even if in our primary experience there is always more than language. But we have to understand both sides. On the side of primary experience we find a richness of individual sense certainty that should not be explained away by philosophical or linguistic
sophistication. On the side of language (secondary experience) we find a diversity of discourses and language games that we have to assimilate and accommodate to our immediate experiences. In Dewey, we sometimes find that he underestimates this distinction. In the above quote, he suggests that in artistic perceptions we may hear existences speaking for themselves, we may sometimes listen to the voice of nature or find some other access to things in and for themselves. If we take the linguistic turn seriously, we should concede the impossibility of this access. If we hear, listen, watch and so on we are already observers and agents in re/constructive participation of our cultures and their language games.

6. Communication and Participation:

“Of all affairs, communication is the most wonderful. That things should be able to pass from the plane of external pushing and pulling to that of revealing themselves to man, and thereby to themselves; and that the fruit of communication should be participation, sharing, is a wonder by the side of which transubstantiation pales.” (LW 1:132) “Communication is the process of creating participation, of making common what had been isolated and singular; and part of the miracle it achieves is that, in being communicated, the conveyance of meaning gives body and definiteness to the experience of the one who utters as well as to that of those who listen” (LW 10:248f).

Commentary: Communication is a core concept in Dewey. We find it from his early to his later writings. The quotes that we have chosen here are from “Experience and Nature” (1925/29) and „Art as Experience“ (1934), the two mayor books that contain Dewey’s most elaborate theoretical treatments of the concept.

Communication is necessary to coordinate human activities and to secure human survival. Language is its tool. The fruit of communication is education through which the social and cultural life is transmitted and to which we owe all our opportunities for leading a humane life. Communication and education presuppose participation. Communication, in school as outside, must be mutual in order to be educative. If the individuals cannot have their own active share in communication and cooperation – which implies articulating their own views and taking their own responsibilities –, if there are merely subjected to the wit and will of others, no community of action can emerge. Following Dewey, we can speak of a principle of shared activities (see MW 9:18 ff) that is of fundamental significance for education and learning. According to this principle, education occurs in every-day life-worldly practices as a side effect of shared activities with others – activities that are experienced by the learners as sufficiently meaningful and rewarding to engender a vital interest in their joint execution. The resultant communities of action are a precondition for all genuine social life. Without them democracy is impossible, since democracy “is a name for a life of free and enriching communion.” (LW 2:350) Dewey reminds us of the origin of the word communication: “There is more than a verbal tie between the words common, community, and communication. Men live in a community in virtue of the things which they have in common; and communication is the way in which they come to possess things in common.” (MW 9:7)

Communication and participation are therefore intrinsically linked to democratic rights that we must secure and further in our societies. Among these are: “free speech, freedom of communication and intercourse, of public assemblies, liberty of the press and circulation of ideas, freedom of religious and intellectual conviction (commonly called freedom of conscience), of worship, and … the right to education, to spiritual nurture” (MW 5:399). Such rights only live in and of communication; they must be communicated to be effective.
Here we encounter a permanent challenge and risk of democratic decay that may become a trap in society – in our times at least as much as in Dewey’s. If democracy is not actively lived through communication and participation, it easily degenerates – for the individuals as well as for the society as a whole – to a merely external procedure. A democratic order that only rests on external representation but is not lived in daily practice will perform decay because it does not act in accord with its professed proclamations. Recent developments in Western democracies show the aptness and visionary quality of this Deweyan insight. Democracy seems weakened because it cannot communicate fully and in all fields of living what the claimed democratic rights and principles seem to promise: The participation of all in public decision making and social problem solving. More and more people turn their backs to politics because they hardly see any opportunities for real participation.

“All communication is like art. It may fairly be said, therefore, that any social arrangement that remains vitally social, or vitally shared, is educative to those who participate in it.” (MW 9:9) Dewey had a very positive view on communication that took its starting point from the direct face-to-face intercourse in small groups and local communities. He already witnessed and theoretically reflected the beginning age of mass media communications (see LW 2:235-372), but of course he could not fully predict its almost explosive developments in the second half of the 20th century. When he wrote that „[t]he means of public communication – press, radio, and theater – are powerful instruments of instruction and influence” (LW 11:538), he was already aware of the ambivalent insight that beneath their educative power modern mass media also involve an unprecedented power of manipulation. But he could not foresee that modern society would eventually erect the completely fictitious worlds of action that recent media like PC and the internet make possible – a counter world to the realm of face-to-face communications that involves completely new opportunities for both education and manipulation, participation and isolation. Against this background, Dewey’s warning that „[t]he mass usually become unaware that they have a claim to a development of their own powers” (LW 11:218) gains completely new actuality and urgency. It seems all the more important for us to learn the Deweyan lesson that only a cultural universe that combines communication with participation secures the necessary conditions for democratic engagement on a sufficiently large scale.

After Dewey’s life-time, communication theories have been proliferating considerably (cf. e.g., Bateson 2000, 2002; Watzlawick et al 1967). The distinction between relationships and contents has helped e.g., to enlarge our understanding of communication. Likewise, theoretical accounts of the circularity of communicative processes have become influential in the analysis of communicative action. But many of these more recent theories tend to neglect the necessary connections between interpersonal communications and the larger participation in culture. Here we should today re-establish the link to Dewey’s comprehensive philosophical account of communication, which means for interactive constructivism, among other things, to bring the social, cultural and political dimensions of communication back to the fore.

7. Democracy (Liberalism and Socialism):

“The end of democracy is a radical end. For it is an end that has not been adequately realized in any country at any time. It is radical because it requires great change in existing social institutions, economic, legal and cultural.” (LW 11:298f)

Commentary: The quote is taken from Dewey’s 1937 short essay “Democracy is Radical”, a manifesto that nicely sums up his radically democratic commitment and belief.
How much democracy do pragmatists and constructivists need? This question implies that there may be very different versions of democracy. And pragmatists and constructivists, we suggest, need the strongest version. Since they believe that we shape and construct our realities through our own actions, that we create though admittedly not the natural world in which we live, yet at least our own ways of living, they need all freedom of experiment, inquiry, observation, action and participation. They need democracy as a radical aim in all areas of life if they wish to apply their own principles to life at all. Dewey believed that the experimental method “is, in short, the method of democracy, of a positive toleration which amounts to sympathetic regard for the intelligence and personality of others, even if they hold views opposed to ours, and of scientific inquiry into facts and testing of ideas.” (LW 7:329) If democratic rights were restricted or even not sufficiently developed, pragmatists and constructivists would first become misfits and finally disappear altogether. Their very approach disposes them to claim a liberal stance in science as in life and to include social issues in all discussions. And they further suppose that the struggle for democracy is not decided once and for all, but that it is a continual challenge that “requires great change in existing social institutions, economic, legal and cultural.” (LW 11:298f) For example, with regard to the tensions of democracy and capitalism, Dewey wrote in the early 1930s: “The essential fact is that if both democracy and capitalism are on trial, it is in reality our collective intelligence which is on trial. We have displayed enough intelligence in the physical field to create the new and powerful instrument of science and technology. We have not as yet had enough intelligence to use this instrument deliberately and systematically to control its social operations and consequences.” (LW 6:60) And it seemed clear to him that a crucial challenge for democracy in his time was to reconstruct economic relationships in a more democratic way lest democracy become the prey of capitalism: “In order to restore democracy, one thing and one thing only is essential. The people will rule when they have power, and they will have power in the degree they own and control the land, banks, the producing and distributing agencies of the nation.” (LW 9:76)

Many of these issues remain unsettled to our present day, and many appear in our time on a considerably more complex global scene (cf. e.g., Laclau 1990; Mouffe 2000). Without doubt, there has been much disenchantment and disillusionment in comparison with the socialist hopes and dreams of the early decades of the 20th century. But pragmatism and constructivism stand and fall with their struggle for radical democracy because, in the end, they themselves can only be practiced under democratic conditions.

8. Democracy (Experience and Education):

“Democracy is the faith that the process of experience is more important than any special result attained, so that special results achieved are of ultimate value only as they are used to enrich and order the ongoing process. Since the process of experience is capable of being educative, faith in democracy is all one with faith in experience and education.” (LW 14:229)

Commentary: This is a quotation from “Creative Democracy – The Task Before Us,” an address that Dewey wrote for the occasion of his 80th birthday celebration (1939) and that concisely summarizes important aspects of his democratic vision. If democracy depends on action and participation, this implies that, especially for the young, it is necessarily connected with education. “When the ideals of democracy are made real in our entire educational system, they will be a reality once more in our national life.” (LW 6:98) Belief in the potentials of education is an indispensable component in the democratic faith because it is only through realization in the life-experience of individuals in communities that
democracy can flourish and be in turn enriched by a multitude of individual contributions. “If democracy is possible it is because every individual has a degree of power to govern himself and be free in the ordinary concerns of life.” (LW 6:431) Dewey here gives an important response to all those who object that you can only be as democratic as “the system” allows. The potential for self-government is something that we must (and upon the whole can) presuppose for all those who live in a professedly democratic society. But how far is the potential actualized and made use of – especially given those structural contexts that support or work against its realization?

Interactive constructivism insists that we ourselves are always already part of such contexts because we partake in their construction and reproduction. They are implicit in our daily living as well as our education. Like in Deweyan pragmatism, the only way for education to realize its democratic potentials is through immanent criticism (or deconstruction) that comes from within those experiences and contexts that are being scrutinized. In many ways, we live in a “system” or “structure” that constitutes different positions and delimits spaces for experience and action. Structural conditions like sharp economic inequalities, marginalization of individuals and groups, oppressive labor, unemployment, poverty, exclusion through cultural hegemonies etc. represent important contexts that democratic education cannot ignore (cf. e.g., Green 1999). But they never fully determine our experience and action. Faith in democracy, experience and education necessarily implies that there are opportunities for change of conditions and events. This is true as long as we live in an open and unfinished universe – a view that pragmatists and constructivists alike endorse. Therefore they are so much interested in education as a force for democracy: “Since education is the keystone of democracy, education should be truly democratic.” (LW 9:393) Interactive constructivism agrees with Dewey that it is essential for education to initiate democratic learning processes from the very start (construction) and to uncover and address democratic shortcomings as a step toward increasing the chances for more democracy (criticism). This is only possible through forms of actually lived democratic participation that include the socially marginalized and disadvantaged and give them the necessary educational support for truly partaking in the life of their society. We will not reach equality of education, but we must fight for equity. And every success in this struggle will make democracy a lived and meaningful experience for those who participate in it.

9. Democracy (Culture and the Power of Imagination):

“Imagination is the chief instrument of the good” (LW 10:350), because only “imaginative vision elicits the possibilities that are interwoven within the texture of the actual.” (LW 10:348)

Commentary: The passage is taken from the closing sections of Dewey’s “Art as Experience,” the book which, among other things, develops in most comprehensive and subtle form his account of the role of imagination in culture. The pragmatic understanding of symbolic interaction (developed largely by Dewey’s companion George Herbert Mead) gives us a multilayered picture about the necessary balance in our experiences between our imaginations, desires and impulses, on the one hand, and social expectations, roles and conventions, on the other. This balance is necessary for life in culture because only by giving due attention to both sides we can make use of the necessary symbolic resources of culture and still remain open to the fact that experience is always richer and more pregnant with potential meanings than any symbolic order. Interactive constructivism tries to further develop our understanding of interaction in culture by throwing
additional light on aspects of imagination that reach beyond symbolic interaction and appear as a limit of symbolic communication. Here we extend the theoretical perspective, in comparison with Dewey’s and Mead’s account, to include more decidedly and systematically the unconscious dimensions of human communication (see Reich 1998 a, Neubert/Reich 2006). But already Dewey was aware that imagination in culture often emerges from what he called the “subconscious” levels of experience. In our imaginations we are close to our emotions. They are affective impulsions that may become effective, not as closed inner states, but as components in our interactions with the world. They move us on to give expression and actuality to what is not already explicit in consciousness. As such, they have the power to transcend “the texture of the actual” and to bring hidden possibilities to the fore. Dewey clearly recognized the importance of imaginative vision for the symbolic articulation, in thought and speech, of ends-in-view that we must anticipate and desire before we can try to realize them. If as observers we can envision them and imaginatively construct ways of attaining them in action, we have already taken an important step toward their realization.

One of Dewey’s own essential visions about democracy lies, we suggest, in his willingness to imagine it as an open and unfinished process. “To my mind, the greatest mistake that we can make about democracy is to conceive of it as something fixed, fixed in idea and fixed in its outward manifestation.” (LW 11:182) This goes hand in hand with another crucial insight that, too, has lost none of its actuality with regard to the present state of democracy worldwide: “The fundamental principle of democracy is that the ends of freedom and individuality for all can be attained only by means that accord with those ends.” (LW 11:298; Emphasis changed) Pragmatists and constructivists can today connect with these imaginative visions and the claims expressed by their articulation. They do so because they find their own necessary values represented in them. This also applies to the following of Dewey’s meditations on the meaning of democracy: “Democracy … means a way of living together in which mutual and free consultation rule instead of force, and in which cooperation instead of brutal competition is the law of life; a social order in which all the forces that make for friendship, beauty, and knowledge are cherished in order that each individual may become what he [sic!], and he alone, is capable of becoming.” (LW 11:417)

These and other Deweyan visions today still provide us not only with democratic hope, but also with a sense of direction where to look for necessary improvements and how to define the aims of our own actions. As imaginations, they are ideal-typical in the sense that there are so many concrete situations to which they can be applied and in which their potential contents may be experienced that they themselves can never be completely exhausted or fulfilled. They require our imaginative powers, our habits, interests, emotional sensitivities and visions in order to become and remain vivid components of democratic culture (see also Eldridge 1998, Campbell 1992, Caspary 2000). Interactive constructivism fully shares this Deweyan idea of democratic imagination, but adds, among other things, more recent perspectives on the role of power, knowledge, lived relationships and unconscious desire in culture (see Reich 1998 b, Neubert/Reich 2002). We thereby hope to extend our critical resources and contribute to the further development of constructive visions of what democracy, in the concrete, may mean for us today.

10. Democracy (Intelligence and Local Communities):

“In a word, that expansion and reinforcement of personal understanding and judgment by the cumulative and transmitted intellectual wealth of the community which may render nugatory the indictment of democracy drawn on the basis of the ignorance, bias and levity of the
masses, can be fulfilled only in the relations of personal intercourse in the local community … Vision is a spectator; hearing is a participator … We lie, as Emerson said, in the lap of an immense intelligence. But that intelligence is dormant and its communications are broken, inarticulate and faint until it possesses the local community as its medium.” (LW 2:371f)

Commentary: This is a passage from Dewey’s book “The Public and Its Problems,” written in the mid 1920s, that forcefully develops his ideas about participative democracy and gives a lucid and instructive account of what democratic publics are and what difficulties they confront under the modern conditions of a “Great Society.”

As Dewey already saw very clearly, practices of capitalism repeatedly tend to put democracy at risk. In the early 1930s he wrote in “American Education Past and Future” (a draft of a radio lecture) that in earlier times “the aims of political democracy were easily understood, since they were in harmony with the conditions of soil and occupation. Now there are vast and concentrated aggregations of wealth; there are monopolies of power; great unemployment; a shutting down of doors of opportunity, a gulf between rich and poor, and no frontier to which the hard put can migrate.” (LW 6:95-96) There are considerable historical differences in the development of capitalism and its relations to democracy between Northern America and Europe. These differences, we suggest, have contributed to somewhat different democratic traditions. In Europe, the movements toward democracy have, upon the whole, been much more troublesome and continually threatened by set-backs and or even temporal defeats. If democracy as a moral ideal combines “two ideas which have historically often worked antagonistically: liberation of individuals on one hand and promotion of a common good on the other” (LW 7:349), then in Europe especially the “promotion of a common good” was a considerably more contested affair than in America. Capitalist production with all its contradictory implications between economic exploitation and emancipation struggles for social and democratic rights has had a more controversial and uneven development. In this connection, “promotion of the common good” has historically always been split into separate camps of interest that were competing for political influence. Therefore, in the processes of democratization there was a comparatively large premium put on the resolution of conflicts through mechanisms of representative democracy. On the other hand, traditions of direct democratic participation (or what today may be called “deep democracy”) seem to be weaker or at least more dispersed than in America.

Against this background, Dewey’s insistence that the prosperity of local communities is a necessary condition for the prosperity of democracy at large all the more poses a challenge that still seems very topical, for us, today. Local communities stand for direct participation in transactions that allow for face-to-face acquaintance. They are communities of learning, of developing joint interests and cooperatively solving common problems. They provide opportunities for direct democratic engagement in groups, networks and social movements that articulate the multitude of experiences by which democracy in enlivened. They are a backbone of civil society. And, most importantly, they render democracy a lived experience that of itself makes obvious its advantages as a way of life for all those who participate. Therefore, the reorientation toward the bottom expressed in the idea of local and immediate communities is important for interactive constructivism and its educational program, too. We try to include newer communication theories, in this connection, because they can enhance our abilities to encounter others open-mindedly across differences and better understand ourselves and others in and through these encounters. They can thus help to foster and develop communities of learning. (In Germany, a still important background of this necessity also lies in the fact that the disastrous (mis-)use of the word “community” in the times of National Socialism has for many decades led (as a reaction) to a widespread public and
political underestimation of the democratic and educational values of communities – at least in former Western Germany.)

Direct democracy is, of course, not opposed to representational democracy. It is “because I believe in democracy that I believe in this principle of just representation,” says Dewey, “especially when it is backed up by proportional representation that gives the minority its full voice.” (LW 9:318)¹ The quote shows that he is not willing to identify democracy with sheer majority rule, but wishes to recognize and secure minority rights. His understanding of “just representation” is directly connected with his insights into the uniqueness of each individual and the resourcefulness of each cultural group or community. It is also linked with his insistence on the democratic necessity to recognize and appreciate differences as a means for enriching one’s own life-experience (see LW 14:228). This even implies respect for others whose beliefs and convictions we consider wrong. The “mechanics of democracy can function only when there is a clear understanding of the community of interest that the membership has, and likewise a deep, sympathetic understanding of one another's weaknesses, shortcomings, and proneness to error” (LW 9:344) – writes Dewey together with other members of a Grievance Committee of the Teachers Union in a 1933 report. These and other similar principles are necessary preconditions, according to Dewey, for the emergence and articulation of a social intelligence that in the end will decided upon whether we succeed in living together democratically at all. “The problem of bringing about an effective socialization of intelligence is probably the greatest problem of democracy today.” (LW 7:365-366)² Like Dewey, interactive constructivism believes that this problem, among other things, poses a fundamental challenge for education – the problem of providing sufficient opportunities for all learners to develop social intelligence and to make constructive use of their democratic rights for learning.

11. Education as Growth:

„Since growth is the characteristic of life, education is all one with growing; it has no end beyond itself. The criterion of the value of school education is the extent in which it creates a desire for continued growth and supplies means for making the desire effective in fact.“ (MW 9:58)

Commentary: The quote is taken from the 1916 book “Democracy and Education,” Dewey’s path-breaking pedagogical opus that still today counts as the classical work which profoundly elaborates for 20th century education the theoretical and practical implications of the idea of democracy.

For Dewey, it is the continual reorganization or reconstruction of experience that constitutes growth as a crucial aim of education – or, more precisely speaking: any such reconstruction that “adds to the meaning of experience” and increases the ability “to direct the course of subsequent experience” (MW 9:82). Educational growth is a constructive process that develops from within experience. It feeds on interaction with others in a socio-cultural as well as natural environment. It can be furthered by others, but it cannot be imposed from outside. Growth depends on our ability to form habits. “A habit means an ability to use natural conditions as means to ends. It is an active control of the environment through control of the organs of action.” (MW 9:51) Habits endow experience with continuity and anchor it within

¹ This passage is taken from a stenographic report of an address that Dewey gave to the Teachers Union in 1933.
² This quote is from the second version of „Ethics“ (1932), a textbook co-authored by Dewey and James Hayden Tufts.
the body (see Kestenbaum 1977, Alexander 1987, Garrison 1997). Their range extends from relatively passive “habituation” (i.e., adaptations to specific contexts of living that are largely taken for granted in every-day practices and seldom rise to the level of reflection) to “active habits” (i.e., dynamic and flexible forces of intentional control, manipulation, adaptation, and constructive organization of the environment). Although we can never completely transcend the habitual contexts of our experience, education as a process of continual growth depends on our ability to use habits as flexible resources in specific and changing situations and thereby partly to transform them in accord with the demands of the situation. This implies the extension or reorganization of old habits as well as the creation of new ones.

Dewey’s belief that the educative process consists of a continual reconstruction of the experience of the learner and that “education is all one with growing” through successful action within the given socio-cultural contexts of learning brings him to the conclusion that education “has no end beyond itself.” (MW 9:58) Every specific educational aim must be considered and developed with regard to – or rather: from within – the concrete contexts and changeable situations of learning. It cannot be superimposed from outside without doing damage to the educational quality of the experience of learners. And it must be sufficiently flexible in order to be modified and further developed along the very processes of learning. This principle applies even to more general educational aims like “natural development”, “social efficiency,” or “culture” (see MW 9:118-130).

If, then, it is “the aim of education … to enable individuals to continue their education” (MW 9:107), this idea ultimately expresses Dewey’s belief in democracy and democratic self-governance which underlies his whole educational theory. In “Democracy and Education” he suggests that a fundamental criterion of democracy and all democratic communication consists in an appreciation of “the intrinsic significance of every growing experience” (ibid., 116). We think that this insight is crucial for education even in our time. Dewey hoped that education could be a way to foster the growth of democracy because good education can compensate for shortcomings in family life and social practices. Today we find that while progress toward more democratic education has been made in many respects, we still witness great inequalities and differently distributed chances for education and growth, even in Western professedly democratic societies. Equality in education seems to be a vision that as far as we can see is beyond any possibility of adequate realization. The struggle for educational equity bets its hopes on increased justice through at least delimiting the greatest barriers to educational participation. But the task for pragmatist as well as constructivist education has remained essentially the same: We have recognized that educational growth is a crucial opportunity for making society more democratic provided that all members of society may have a full share in an education that provides them with the necessary resources for making their own lives as well as the lives of others as rewarding as possible. As critics of our existing educational systems we must insist in posing the question whether those who have are ready to share with those who have not. Democracy in education presupposes solidarity with the disadvantaged lest education itself become a means of deepening the gulf between rich and poor. As practitioners of education we must at the same time work for the construction and continual reconstruction of ways of democratic education that contribute to the growth of all learners.

12. Special question to the scholar:

What distinguishes interactive constructivism from Deweyan pragmatism? Our discussion has shown that there are many commonalities and some differences between both approaches.
Without going too much into details, we at least wish to explain one difference which examplarily indicates for us the necessity of supplementing and further developing pragmatism today. Our constructivist distinction between the perspectives of observers, agents, and participants can be helpful here (cf. Reich 2008). We find this distinction to some degree already in Dewey (cf. Neubert/Reich 2006), although he does not explicitly develop it in full theoretical account. Among other things, the distinction allows us to shed new light on the relation between context and warranted assertibility and to overcome some of Dewey’s naturalistic argumentations. It can also help us to develop a more critical understanding of social intelligence and the role of intellectuals in culture. We thereby hope to show more clearly than Dewey the ambivalent process of constructing truth claims and the limitedness of interpretive communities. Although Dewey undoubtedly saw the aspects of selective interests and choices in all communities, he partly underestimates power relations and their dislocating effects on the construction of knowledge. Interactive constructivism situates social interactions in the contexts of cultural practices, routines and institutions. In this connection the roles of observers, agents, and participants designate different relations to context that can be distinguished, though not separated. “As observers, we see, hear, sense, perceive and interpret our world. We construct our versions of reality on the basis of our beliefs and expectations, our interests, habits and reflections. As participants, we partake in the larger contexts of the multiple and often heterogeneous communities of interpreters that provide basic orientation in our cultural universe. We participate in social groups, communities, networks and institutions of all kinds. Our partaking is an indispensable cultural resource, but it also implies commitments, responsibilities, loyalties, and the exclusion of certain alternatives. As agents, we act and experience. We communicate and cooperate and struggle with others. We devise plans and projects to carry out our intentions. We articulate ourselves and respond to the articulation of others.” (Neubert 2008, 108)

We further distinguish between the perspectives of self-observers and distant-observers. As self-observers, we observe ourselves and others in cultural practices in which we are immediately involved, i.e. we observe ourselves from within the context of our interactions. As distant-observers, we observe others in their cultural practices. We observe from a distance in time or space or reflection. This is of course only a gradual distinction. As distant-observers we are always self-observers within our own contexts of observation. As self-observers we can always try to observe ourselves “from outside”. But the distinction helps us to reflect more critically on the contextual conditions of our interactions. This also implies that when observers, agents, and participants are involved in discourses, we can at least observe them from four different perspectives that have been developed in interactive constructivism (cf. Reich 1998 a,b). The first perspective is that of power relations. Discourses are always part of hegemonic formations. They imply struggles for recognition and the power of interpretation. The second perspective points to knowledge and truth claims. All discourses imply complex processes of construction of knowledge and decisions about viability. The third perspective regards lived relationships. Interactions and communications between subjects as selves and others in mutual mirror experiences stand in the focus here. The fourth perspective concerns the unconscious as a limiting condition of all discourses.

In this connection, we think, interactive constructivism has developed a new and extended theoretical frame for understanding the cultural implications of selective interests. In particular, this extended frame provides us with an adequate approach to the necessary plurality, inconsistency, and ambivalence we have to deal with today:
• plurality, because there is more and more diversity of interpretive communities dealing with different versions of reality; here the individual and social viability of particular selections has to be taken into critical account;
• inconsistency, because there no longer exists any comprehensive or holistic approach to communication even as an ideal vision; in science it has become increasingly impossible to give unambiguous or complete explanations without contradictions between different discourses; but against arbitrariness, scientific research needs not only an overview over various approaches but also methodological reflections in order to make choices which are sufficiently warranted in experiences; viability here needs to be analyzed as a constructivist criterion for warranted assertibility in cultural contexts;
• ambivalence, because through selections and omissions, each approach will perforce bring particular advantages as well as disadvantages; here it is necessary to realize that even progress in knowledge often implies gains as well as losses; in modernity, it seems more and more impossible to harmonize different selective interests and intended solutions; it has to be realized that an enhanced sense for ambivalence is necessary lest we neglect important conditions of criticism in postmodern discourses.

We understand these perspectives as steps in the reconstruction and further development of Deweyan pragmatism. Therefore, our approach might well be labeled constructivist pragmatism or pragmatic constructivism. We owe so many crucial insights to pragmatism and see so many connecting points, that it seems adequate for us to call pragmatism a historical path-breaker for constructivism. This is also true for the connection of philosophy with education and educational practices where interactive constructivism follows a similar line like Dewey. Reconsidering “Democracy and Education” today, interactive constructivism includes many more recent debates on interaction, communication, education, learning, and teaching and uses them as resources for a postmodern pedagogy.

References:

Dewey, John: Collected Works. Edited by Jo Ann Boydston:


