

Action, Criticism & Theory for Music Education

The refereed scholarly journal of the



Volume 4, No. 1
March 2005

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Electronic Article

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ISSN 1545-4517

This article is part of an issue of our online journal:

ACT Journal <http://act.maydaygroup.org>

See the MayDay Group website at: <http://www.maydaygroup.org>



Classical Pragmatism on Mind and Rationality¹

As discussed by Erkki Kilpinen in *The Enormous Fly-wheel of Society: Pragmatism's Habitual Conception of Action and Social Theory*.

Pentti Määttänen

One of the major changes in twentieth century philosophy was the so-called linguistic turn, in which natural and formal languages became central subjects of study. After this turn theories of meaning are mostly about linguistic meaning, thinking is analyzed in terms of symbol manipulation, rules of classical logic form the nucleus of rationality, and so on. There are exceptions, of course, but this main trend has influenced strongly our intuitions about such things as mind and rationality: so much so that texts written prior the linguistic turn can be easily misinterpreted or misunderstood. This is partly due to the fact that the meaning of basic terms has changed. One of the places where this can pose a problem is in our readings of the ideas of classical pragmatists, and in particular their conceptions of mind and rationality which differ in many ways from the meanings in wide circulation today. The fact that the meanings of such terms have changed over time, however, is hardly grounds for neglecting what they used to mean. On the contrary: the fact is that nobody knows how human minds function, and as long as that problem remains unsolved it is good to think about alternative viewpoints. But first one has to understand these alternatives. That is where the classical pragmatism may be of help.

“Habit” is one of the important terms in classical pragmatic theory that is easily misunderstood. Even Kilpinen’s title seems confusing if one takes habitual to mean something routine-like, automatic, or unconscious. However, the pragmatist notion of habit also refers importantly, as Kilpinen explains in the opening pages of his book, to “the transcendence of routine.” From this perspective, mental, intellectual, and logical activity should be regarded as mental or intellectual habits. Charles Peirce wrote, for

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instance, about the habit of taking habits – an expression that shows he conceived of habit as something more than unthinking routine. “The tendency to form habits or tendency to generalize, is something which grows by its own action, by the habit of taking habits itself growing” (CP 8.317). Peirce explicitly characterizes thinking in terms of habit. “But the highest quality of mind involves a great readiness to take habits, and a great readiness to lose them; and this implies a degree of feeling neither very intense nor very feeble” (CP 6.613). Indeed, “no room being left for the formation of new habits, intellectual life would come to a speedy close” (CP 6.148). It makes sense, then, to speak about a *reflective* conception of habit in the pragmatist tradition. “Habitual conception,” even though the phrase may be a little problematic, refers to the fact that in classical pragmatism habits are kinds of conceptions – habits function conceptually. As Kilpinen puts it, “habit is the sphere where the essence of human action, its purposivity and rationality, is to be found” (Kilpinen 2000, 71).

The difficulties in understanding and accepting this view arise, I think, from a background assumption, reinforced by the linguistic turn (which to me looks more like a linguistic fallacy²), that beliefs are basically linguistic mental entities, propositional attitudes, symbolic internal representations, or something of this sort. Our knowledge of the world, then, is articulated only in language. One representative of this line of thought is neopragmatist Richard Rorty, according to whom nature without linguistic articulation is only a Kantian thing-in-itself – unknowable and unknown to us, and therefore conceptually useless. “The more one thinks about language, the less one needs to think about nature,” writes Rorty (1997, 17). On this view, habitual actions reduce basically to unreflective bodily movements; habits are things very different from, and utterly contrasted with, mind and rationality.

Classical pragmatist Charles Peirce was of the opposite opinion, however. In his writings, habits of action are repeatedly defined and treated as beliefs. Most of us, for example, have a most persistent habit of exiting rooms through doors rather than

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windows. And this habit, quite apart from its linguistic articulation, constitutes a kind of belief about the structure of the real world – a belief about the hard fact that it is usually safe to continue walking after passing through doors; a belief that surprising and undesirable things may occur if we walk through windows instead, especially in high buildings. In other words, beliefs become articulated in the structure of bodily action in virtue of our concrete interactions with the environment (muscular effort and resistance, as Peirce would say).



Rationality is a property of a system of beliefs; and habits of action belong to this system as an essential element. From this point of view habits cannot lie outside the notion of rationality. Habituality is not the opposite of rationality. On the contrary, a classical pragmatist conception of rationality is based on the notion of habit. There is a positive correlation between habituality and rationality (Kilpinen 2000, 67).³ To act is to choose between different courses of action and between different means for achieving a goal, which in itself is a form of rationality. As Aristotle observed, the choice of the right course of action in a social environment cannot be subsumed under the same type of rationality that is used in the study of nature. *Phronesis* is needed because practical situations are so different that one cannot formulate strict rules to be followed without due deliberation. The classical pragmatists followed this same line of thought. A habit of action is always carried out in a situation, and concrete situations are always somewhat different. Since one cannot obey blindly a strict rule without taking the situation into consideration, a sort of *phronesis* (practical wisdom) is obviously required.

The pragmatist approach develops or elaborates this Aristotelian point a little further, though. Practical wisdom is not simply a two-stage affair, consisting of deliberation followed by action in accordance with the conditions of a situation. Ways and habits of action are, as skills, elements of this practical wisdom. They are forms of embodied cognition, so to speak. “[A]ctions are nonverbal forms of thinking and knowing in and of themselves,” as David Elliott puts it (1995, 55) without reference to

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Peirce. He might have benefited from a more thorough study of classical pragmatists on this point. A couple of pages earlier he, following Daniel Dennett, maintains that mind “*is* the brain” (ibid., 51, emphasis in the original). I don’t think that it is quite consistent to reduce the mind to the brain, on the one hand, and take corporeal action to be a form of thinking and knowing, on the other. Classical pragmatists saw an “analogy between intellectual learning and more corporeal skill-acquisition” (66). Habits of bodily (corporeal) behavior and intellectual habits are brought under the same principle which entails that cognition is embodied and not only embrained, that is, not only some kind of processing of internal representations in the brain.

Also very useful is Peirce’s principle that habits are also meanings. In other words, meanings inhere in the habits and practices that constitute different kinds of activities. To be able participate in these practices is to understand the meanings that exist in and through these practices, linguistic and nonlinguistic. As everyone knows, verbal concepts are not enough for understanding properly musical practices. To have a proper understanding about such matters is to understand the relation between musical practices and discourses about these practices, forms of understanding and knowing that support each other. Notions of belief, meaning and understanding apply to both these dimensions of practice (that is, to the practice and discourse about it), and this pragmatist viewpoint might be of help in discussing the problems of music and music education. It follows, for example, that meanings are not “in the head,” neither do they reside in the musical work understood as a structured flow of sounds. A further consequence is that musical meanings cannot be conveyed from one head to another just by using some symbols like words and notes. Meanings do not travel with words and notes (see Määttänen & Westerlund 2001, and Määttänen 2003). In order to learn to understand some musical meanings one must somehow participate in the practices of listening and/or performing music.

In order to proceed in this direction in a consistent way it is necessary, I think, to distance ourselves from Neocartesian conceptions of mind according to which cognition

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amounts to internal symbol manipulation, or to computation – a claim that was first articulated by Thomas Hobbes and enjoys considerable currency today. As Kilpinen explains (43), Peirce rejected Hobbes’s claim that logic amounts to a kind of computation. In fact, Kilpinen tells us (188), “Peirce is wont to illustrate even inferential processes in term of corporeal skill-acquisition” (for example in CP 6.145). This comes close to the view of Georg Lakoff and Mark Johnson (1999) that abstract thinking is based on spatial metaphors: the cognitive tools that are used in thinking about movement and manipulation of things like coffee mugs and jars are used in thinking about abstract issues like the meaning of life and human consciousness. And there are also other examples of making this analogy. Michael Polanyi maintains that “[t]he structural analogy between knowledge and skill allows us to expand our perspective from discovery to invention” (Polanyi 1969, 130-131). Apparently neither Lakoff, Johnson nor Polanyi is familiar with Peirce’s writings.

A great deal of contemporary cognitive science would not have received much appreciation from Peirce. “Why employ the brain in doing what can be accomplished mechanically?” Kilpinen quotes (359). That’s what the computers are for! In other words, digital computers just store, manipulate and put out zeros and ones. Cognitive science got started with the metaphoric hypothesis that perhaps the human brain manipulates internal symbols in a similar way. This Neocartesian view has still many supporters, in spite of the empirical result that “[i]n its style of operation the brain is really not at all like a digital computer. It may be more like a very large network of extremely fuzzy analogue computers” (Donald 2001, 102). And analogue devices do not employ symbols. Illustration for music lovers: in CD records there are digits, but not in vinyl ones.

Once upon a time people made all calculations with a pencil on a piece paper, and it is this process (with the hand, pencil and paper) that digital computers perform with astonishing speed. But that’s all there is to it. From the astonishing fact that I can calculate $1+1=2$ on a piece of paper it does not follow that in my brain there has to be an

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entity “1” that the brain somehow manipulates in the brain. Digital computers are machines that do the work that was previously done with pencil and paper, but this does not entail that the brain functions like a digital computer; just like Caterpillar tractors do the work previously done by hand, spade and pick, but it does not follow that the brain functions like a Caterpillar (see Määttänen, 1997).

The notion of brain as a computational (mechanical?) device also strengthens the illusion (derived from ‘common sense experience,’ the source of which is properly called folk psychology) that the mind resides between the ears and behind the eyes – literally, in the head. “The dark old days of dualism,” as Hilary Putnam (1999, 37) characterizes this equation of mind with brain, are back, in a form that Daniel Dennett dubs the Cartesian Theatre, “a place where ‘it all comes together’ and consciousness happens” (Dennett 1991, 39). The internal representations whirl around in the brain and the epistemologist’s problem is to connect them to the external world. If Lakoff and Johnson are right in their claim that abstract thought is based on spatial metaphors, we get another reason of the popularity of this notion of mind: it is all too easy (because of the bodily roots of our intellectual tools) to think that thoughts and other internal representations are “in” the mind (or brain), like cookies in a jar.

It is time to begin thinking of the mind differently, and classical pragmatists offer us very useful ways of doing so. Beliefs as habits of action give the direction. Habits are forms of interaction with the environment, and from this viewpoint mind is not even a property of the body but rather a property of the interaction between living organisms and their environment. Mind is a relation, not a container. If this is the case, then the attempt to reduce the mind to the brain is to make a mistake in logical categories: to discuss a relation only in terms of one of its parts. In other words, one cannot discuss interaction between organism and its environment in neurological terms only.

Thinking is anticipation of action, as Dewey maintained. “Thinking is objectively discoverable as that mode of serial responsive behavior to a problematic situation in which transition to the relatively settled and clear is effected” (Dewey 1984, 181).

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Thinking, carried on in the head, forms a plan, but it takes actual operations to carry out the plan (ibid., 91). “[E]xperimental inquiry or thinking signifies *directed activity*” (ibid., 99, emphasis in the original). It is not possible to speak about *anticipation* of action without implicating an actual world in which such action might occur. In fact, the external/internal dichotomy loses its meaning if one gives up Cartesian (and Neocartesian) notions of mind and sticks to the idea that mind is necessarily embodied. It makes sense to speak about the world as external to the body but not as external to the mind because “cognition requires external objects and signs as a part of the functional organization of mind,” as I have put it earlier (Määttänen 1993, 105). “Mind and nature are constitutively intertwined, but it is not the mind that constitutes nature. The mind itself is constituted by the interaction of a living organism and its environment (which includes the social environment for human beings)” (ibid., 105). (Note that there is pretty scarce evidence that a mind can exist without a body, but the graveyards full of evidence that a body can exist without a mind, at least for a time). As necessarily embodied beings we are in the world already. Someone inspired by Dewey’s naturalism and wild west movies might say that everybody is already in: cards and stakes are on the table – exit through the morgue only.

As biological organisms we are in continuous interaction with our environment, and this emphasis on interaction concerns both bodily behavior and linguistic discourse. Of course, linguistic discourse is also a mode on bodily behavior. It makes sense to distinguish between two kinds of bodily behavior, corporeal interaction with everyday objects like coffee mugs, chairs and so on, and interaction with external (in regard to the body) signs, sign action (see Määttänen 1993). And as already explained, notions of belief, meaning and understanding apply to both these dimensions of interaction. This entails that mind and cognition cannot be defined in linguistic terms only. It seems to me that Kilpinen has not thought through this point, however, since he characterizes Peirce’s and G. H. Mead’s views about thinking and human psychology as dialogical (150). The term ‘interactive’ would probably be better, because the term ‘dialogue’ is too easily

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interpreted to mean linguistic conversation. Actually, as Kilpinen quotes him, Mead is talking about the control of our own reactions to stimuli received from others (149). But where is it stressed that those stimuli are predominantly or exclusively linguistic in nature? Such stimuli are also about what others are doing, or are going to do – how others are acting in social situations. As a matter of fact, Merlin Donald sees the origin of human consciousness precisely in the growing awareness of (conscious anticipation of) one's own action and the action of the others in primates. One outcome of this view is that in their creative origins, “symbols are a product of thought, not vice versa” (Donald 2001, 276), and this view is supported by a large amount of empirical evidence.

Thinking is anticipation of action, and we anticipate not only dialogue but also bodily behavior, both our own and that of others. And music is not a bad example of this kind of embodied cognition. Music is necessarily related to producing and listening to sounds because we all must play at least one instrument, namely the one and only instrument of our own life, the body. There is no experience independent of this instrument, and musical experience is, indeed, a vivid instance of anticipated actions.

Calculation or computation cannot, from the standpoint of embodied cognition, be a universal form of rationality, although it is naturally a very important tool in the natural sciences, engineering and the like. In the pragmatist tradition rationality is always very closely intertwined with the notion of habit (44, 50, 55). Also from this viewpoint it is more close to Aristotelian *phronesis*, thoughtful application of general principles (habitual conceptions) in changing practical situations. Aristotle distinguished between *praxis* and *poiesis* on the ground of the goal (*telos*) of activity. In *poiesis* the goal of action is the product. For example when one makes a boat the goal is the boat. But in *praxis* the goal is the activity itself. It is something that is carried out for its own sake, as for example in dance. In Aristotle's thought this involves a deep ethical point. The highest goal of human beings is good life, happiness (*eudaimonia*). This may sound too easy if one thinks about egoistic individualism, but for pragmatists (and for Aristotle at the standards of his time) we are irreducibly social beings. Rationality in action is, then,

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closely connected to the ethical issue of selecting and adjusting the means and ends of our lives in a society, in continuously ongoing social practice.

John Dewey also emphasized the embodied nature of cognition and knowledge acquisition, and this operational conception of knowledge was to be applied also in social sciences. According to this conception we get genuine knowledge by making changes to the object of knowledge. We can then observe the result(s) of such operations – the differences they make. In *The Quest for Certainty* Dewey developed this conception in the context of physics, or experimental natural science. In the case of social sciences, Dewey's conception means we cannot get genuine knowledge about societies by making detached observations, collecting statistics and generalizations from an 'outside' point of view. On the contrary, we must *make changes* in order to see the results of operations, and in society this is always an ethical and political issue. We have to discuss what kind of society gives its members fair possibilities to live a good and happy life, here and now.

The ethical dimension thus relates in important ways to the problems of habituality and rationality in modern societies. Institutions, as Kilpinen says, can be defined with the concept of habit (353-361), and even laws can be considered as social habits of action (311). Modern society is growing more calculable and foreseeable, but is it really becoming more rational? From the viewpoint of *phronesis* one might come to the opposite conclusion. Is modern society becoming more human? Thorstein Veblen's idea, Kilpinen explains, is that economics "pays lip service to freedom and rational choice, but in closer analysis it treats man as a mechanical intermediary in a causal sequence" (201). This is clearly an ethical point, and one might criticize Kilpinen for insufficient discussion of this dimension, deeply intertwined as it is with pragmatist notions of knowledge and rationality. On the whole, however, Kilpinen's treatment is a good and a fresh approach to classical pragmatism in the sense that he manages to present these views authentically, minimizing the distortions so easily caused by the 'self-evident' background assumptions of our time.

Notes

¹ The work on this paper has been supported by Academy of Finland (SA 201402) and Emil Aaltonen Foundation.

² By the linguistic fallacy I mean the erroneous belief that cognition is disembodied either in the sense of being purely linguistic or in the sense of being only “embrained” as is the case when the mind is identified with the brain.

³ Unless otherwise indicated, page numbers that follow refer to Kilpinen’s book.

References

- Dennett, Daniel (1991). *Consciousness Explained* (London: Penguin Books).
- Dewey, John (1984). *The Quest for Certainty. The Later works, Vol. 4*, ed. by Jo Ann Boydston (Carbondale and Edwardsville: Southern Illinois University Press).
- Donald, Merlin (2001). *A Mind So Rare. The Evolution of Human Consciousness* (New York: W.W. Norton & Company).
- Elliott, David J. (1995). *Music Matters* (Oxford: Oxford University Press).
- Lakoff, George & Johnson, Mark (1999). *Philosophy in the Flesh* (New York: Basic Books).
- Määttänen, Pentti (1993). *Action and Experience. A Naturalistic Approach to Cognition*, *Annales Academiae Scientiarum Fennicae B 64*, Helsinki.
- Määttänen, Pentti (1997) Intelligence, Agency and Interaction, in *SCAI'97, Sixth Scandinavian Conference on Artificial Intelligence*, ed. by G.Grahne, IOS Press, Amsterdam, pp. 52-58.
- Määttänen, Pentti (2000). Elliott on Mind Matters, *Bulletin of the Council for Research in Music Education* No. 144, 40-44.
- Määttänen, Pentti (2003). Riemer on Musical Meaning, *ACT* 2:1.
- Määttänen, Pentti & Westerlund, Heidi (2001). Travel Agency of Musical Meanings? Discussion on music and context in Keith Swanwick’s Interculturalism, *British Journal of Music Education* 18:3, 261-274.

Määttänen, P. (2005). Classical pragmatism on mind and rationality as discussed by Erkki Kilpinen in The Enormous Fly-wheel of Society: Pragmatism's Habitual Conception of Action and Social Theory. *Action, Criticism, and Theory for Music Education*. Vol.4, #4 (March 2005).
http://act.maydaygroup.org/articles/Maattanen4_1.pdf.

Putnam, Hilary (1999). *The Threefold Cord Mind, Body, and World* (New York: Columbia University Press).

Polanyi, Michael (1969). *Knowing and Being*, ed. by Marjorie Grene (Chicago: The University of Chicago Press).

Rorty, Richard (1997). *Truth, Politics and 'Post-Modernism'* (Assen: Van Gorgum).

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