# Coherent Constructivism

## A Response to Mackay

**Jonathan D. Raskin**
STATE UNIVERSITY OF NEW YORK AT NEW PALTZ

**Robert A. Neimeyer**
UNIVERSITY OF MEMPHIS

ABSTRACT. In this article we outline a response to Mackay's (2003) critique of constructivism as anti-realist, anti-determinist and anti-scientific. We argue that Mackay and constructivists operate from very different theoretical premises. Whereas Mackay sees his philosophical bases as foundational absolutes, constructivists see theirs (as well as Mackay's) as postulated premises. Thus, Mackay's theoretical assumptions, in combination with his construction of a 'straw figure' version of his opponents, lead him to see constructivism as incoherent. However, this tells us more about Mackay's point of view than it does about constructivism's coherence. In our view, constructivism is not hostile to scientific discourse, and, indeed, converges at important points with Mackay's own treatment of 'experiential meaning'. Ultimately, however, constructivists attempt to stretch the boundaries of permissible scholarly discourse beyond the realist bases advocated by Mackay, in order to analyze and critique the social epistemology by which both psychotherapeutic and scientific processes are constructed.

KEY WORDS: constructivism, idealism, meaning, postmodernism, psychotherapy, realism, social constructionism

Mackay (2003) presents a lengthy and detailed critique of constructivist psychology. In it, he condemns constructivism as anti-realist, anti-deterministic, anti-scientific and downright incoherent. In light of these strong accusations, we have been asked to respond briefly to Mackay and defend constructivism. Although we are skeptical that anything we say will change Mackay's opinions in view of the passion with which he lodges his accusations, we nevertheless hope that others reading this response will give constructivism a fair hearing, and reach a balanced conclusion regarding its lessons and limitations as a framework for psychology and psychotherapy. We will begin by considering Mackay's philosophical underpinnings and his

insistence that all inquiry be rooted in realism, essentialism and determinism. We then consider how this philosophical absolutism makes it impossible for Mackay to even entertain constructivism, which attempts to move beyond the realism–idealism debate in psychology (Chiari & Nuzzo, 1996). We then proceed to correct Mackay's caricature of our supposed idealism and hostility to a scientific psychology, and to examine points at which his argument ironically converges with our own. Finally, we conclude by arguing that constructivist and social constructionist accounts vitalize rather than vitiate psychological theory and practice, offering a critical and pragmatic basis for understanding how institutional and personal realities are constructed and deconstructed in a social field.

## Mackay's Philosophical Assumptions

Consider this typical scenario in a high school math class where geometry is being taught. The teacher presents various mathematical postulates. 'We take these statements as true,' she says. 'They cannot be proven because they are the assumptions from which everything else we will learn springs.' The wiseacre student (every high school class has one!) raises a hand and asks, 'So if I refuse to accept these postulates, does that mean I don't have to learn geometry?'

Just as in high school geometry, constructivists believe every system for making sense of things has premises upon which it is built. And yes, to assert that there are premises for every way of understanding is itself a premise, one that can take us down an infinite regress (as Mackay repeatedly warns). However, it only does so if we presume that apodictic certainty is required before we can rely on our premises to develop systems of understanding. Not even Mackay presumes that, as he cannot—and does not try to—prove his postulated premises any more than constructivists do. He adopts certain theoretical assumptions and a way of understanding the world, of initiating scholarly and personal inquiry, results. If constructivists differ from Mackay in this respect, it is only in the candor with which they acknowledge the assumptive frameworks on which their theoretical systems are built (Neimeyer, 2002). Far from being 'anti-scientific', a theme to which we will return, the adoption of a metatheoretical 'hard core' of assumptions that are not themselves empirically disputed characterizes the most progressive of scientific research programs (Lakatos, 1974). Kelly (1955/1991a), the original clinical constructivist, recognized this clearly in positing his 'fundamental postulate' that 'a person's processes are psychologically channelized by the way in which he [or she] anticipates events' (p. 32). In proposing the organizing role of anticipation in his theory of human functioning, Kelly was not making a 'truth claim' in Mackay's sense, but instead recognized that

[a] postulate is, of course, an assumption. But it is an assumption so basic in nature that it antecedes everything which is said in the logical system which it supports. Now, a person may question the truth of a statement which is proposed as a fundamental postulate; indeed, we are always free, as scientists, to question the truth of anything. But we should bear in mind that the moment we do question the truth of a statement proposed as a postulate, that statement is no longer a postulate in our subsequent discourse. . . . If we bring that statement into dispute, as well we may in some instances, we must recognize that we are arguing from other postulates either explicitly stated or, more likely, implicitly believed. . . . In modern scientific thought it is always customary to accept even one's postulates as tentative or add interim statements of truth and then see what follows. (pp. 46–47)

Kelly and many other constructivists are in effect saying, 'Suppose we construe people as if they were capable of bounded agency in actively constructing the meaning of their experience. What kind of psychological science might then ensue, and what might be its implications for psychological practice?' Part of Mackay's apparent difficulty in following this 'as if' theoretical move results from his procrustean theory of semantics. Following Petocz (1999), he dichotomizes meaning into two forms, *linguistic/symbolic* and *experiential*. The former, for Mackay, can be 'formal, informal, idiosyncratic, conscious or unconscious', but it in any case tends to be *referential*, 'making reference to a state of affairs' (p. [13ms]). As Mackay emphasizes, 'Linguistically meaningful sentences generally have some descriptive function or reference, and may be true or false, or, if complex, partly true and partly false' (p. [20ms]). The clearest alternative, for him, are experiential meanings defined in terms of their motivational salience for the person, arising from the interaction between an object or event, on the one hand, and the person's interests, on the other. Although this latter category of semantics is interesting and will receive further attention below, this dichotomy has striking limitations when conceptualizing the functions of language and symbol. Certainly, for constructivist and social constructionist theorists and therapists, a restrictive focus on the referential and motivational functions of linguistic or symbolic activity leaves aside much that has relevance to psychological practice, whether construed as a therapeutic endeavor or as a critical perspective on social life. When an oppressive husband defends his priority in the family by citing scriptural references to a woman's place in marriage, this 'act of meaning' is inadequately understood in representational terms, as a 'truth claim' about an objective external state of affairs, or even as a simple reflection of its 'motivational salience' to the husband. Likewise, when a therapist helps a bereaved woman seek her deceased husband's 'permission' to enter into a new partnership using an imaginal two-chair dialogue, the rhetorical subtlety (and potentially freeing effect) of this move is poorly caught on either horn

of the semantic dilemma that Mackay poses. Instead, such acts emphasize the *constitutive* functions of language, the ways in which discourse and rhetoric construct and constrain the alternative identities available to oneself or others in a social field (Burr, 1995). It is this view of language as the *performance of meaning* that constructivists emphasize, the way in which discourse strategically positions people in relation to one another. For example, Mackay's self-declaration that 'I am a realist' may be less interesting as a reflection of an objectively verifiable self-reference than as a way of staking an identity claim, taking a position in a dialogue or argument. Particularly in the real-life context of psychotherapy, the construction and deconstruction of such 'subject positions' takes on considerable relevance (Neimeyer, 1998).

It is against the backdrop of this expanded (and pragmatic) conception of language that Mackay's protests about the putative 'incoherence' of constructivism lose their force. For example, Mackay is particularly vituperative in his rejection of the 'social construction of reality', repeatedly intoning the warning that the idea that there is 'a personal or socially constructed *truth* is simply false, and to suggest that there are many realities . . . , truths for me or my kind, but not for others, is equally false' (p. [22ms]). But to emphasize the construction of social realities in discourse is entirely coherent with a postmodern perspective, whether those realities take the form of oppressive cultural ideologies (e.g. colonialism and 'the white man's burden') or liberating social charters (e.g. the American Constitution's 'We hold these truths to be self-evident . . .'). Simply because these and all social institutions (including organized psychology and psychiatry) are constructed in discourse in no way makes them less substantial: as the familiar symbolic interactionist maxim holds, 'Anything defined as real is real in its effects.' Constructivist and constructionist scholars focus specifically on the processes by which such competing realities are constructed and the way in which they vie for ascendancy in a social field. Likewise, therapists animated by a similar vision (e.g. White & Epston, 1990; Winslade & Monk, 2001) attempt to discern and reframe the 'dominant narratives' and confining 'position calls' implicit in the accusatory arguments of warring family members, without attempting to adjudicate whose claims are 'true' or 'false' with reference to some transcendent reality beyond the conversation itself.


## Realism

Mackay advocates a realist approach to human knowledge, wherein he assumes there to be 'one order of the real' (p. [22ms]), as well as universal essences that exist independently of human perception. Realists believe that

people can, more or less, access these essences via empirical examination (Chiari & Nuzzo, 1996; Harré, 1986), viewing perception as ultimately more influenced by the immutable properties of independent objects than by the structure and perspective of the human perceiver. Constructivists, obviously, emphasize the reverse. We contend that both are theoretical assumptions from which intellectual inquiry begins. Neither is beyond question.

Mackay's philosophical realism permeates his argument against constructivism. Of course, realism has its merits and might even be a valuable presupposition in sustaining some socially valuable 'language games', such as the empirical assessment of scientific theories. In acknowledging this, constructivists are not 'anti-realist'; they simply see realism (and all philosophical positions) as lenses one can look through in order to see things in a given manner. This leaves open the possibility that some of the problems faced by psychology simply fall outside the 'range of convenience' (Kelly, 1955/1991a, 1955/1991b) of the 'realism–idealism' construct. How useful, for example, is philosophical realism to the therapist trying to help a client envision the outlines of a new and more sustainable life following a major loss or transition? In such cases, sober discourses of the 'real' might be less relevant than audacious discourses of the 'possible', using language in a propositional rather than literal mode (Vaihinger, 1911/1924) to 'speak into being' new constructions of self and circumstances. Stated succinctly, Mackay insists that '[r]ealism proper is not a theoretical option but immanent in discourse' (p. [28ms]), whereas constructivists see realism as a theoretical template or discursive modality that is a useful, but in itself insufficient, guide for navigating life.

Interestingly, Mackay himself seems to acknowledge this indirectly in his focus on 'experiential meaning', wherein 'some object, event, process, thought, perception and so forth, has particular salience to a person [because it] plays some special part in the person's motivational economy' (pp. [13-14ms]). Mackay contrasts this with the chiefly referential semantics of linguistic/symbolic functioning, in which meaning is established through reference to an external 'state of affairs'. Instead, he stresses, '[i]t is because a person has hopes of, fears, loathes or desires something that that something or its symbol has experiential meaning for that person' (p. [14ms]). Without wedding himself to any particular theory of motivation, Mackay then underscores the critical but neglected role of motives in supplementing a cognitive view of human functioning, with its over-reliance on the explanatory role of belief. 'A complete intentional or "folk psychological" explanation', he contends, 'uses . . . the intentional categories of . . . cognition and . . . conation to explain some action' (p. [14ms]).

Although Mackay apparently construes this argument as a damning indictment of constructivism, there is in fact much in it that accords precisely with a constructivist account of meaning, so much so that a

substitution of the term 'constructions' for 'motivations' yields a remarkable convergence in the two perspectives. Kelly (1955/1991a, 1955/1991b) and contemporary personal construct theorists, for example, repeatedly emphasize that 'events' and 'constructs' are mutually defining: events without constructs are devoid of significance, and constructs without events are simply abstractions. Indeed, much of Mackay's strenuous objection to the adequacy of constructivist theorizing derives from his equation of 'constructs' with dispassionate 'beliefs', an equation that constructivists consistently reject. Instead, constructions are better viewed as ways of organizing human perception and activity, ways in which we are typically passionately invested. In this sense, all construing is motivated construing; it is not divorced from emotion or conation, but thoroughly interpenetrated with it. It is true that constructivists generally resist reifying motivation into the lists of needs favored by the trait psychologists of the 1940s and 1950s, just as they regard the 'folk psychological' distinction between beliefs and motives as simply a (somewhat clumsy) cultural construct for capturing a more holistic impulse toward finding orientation in one's phenomenological world. But at an abstract level, the 'quest for coherence' or 'sense making' that Mackay finds fault with functions simply as a 'master motive' from which other more specific motives can be derived. For example, the motivation to 'avoid anxiety' can be seen as the 'flip side' of the motivation to render events interpretable and predictable within one's existing anticipatory structure. Likewise, a 'revenge motive' could be construed as an attempt to validate a core belief in a certain kind of 'justice', in a way that is coherent with dominant cultural or personal narratives. Thus, constructivists (perhaps in distinction to cognitive therapists) take the motivated nature of construing as a cardinal assumption, although they—like Mackay—are reluctant to reify the subtly shifting nuances of experiential meaning into a simple set of categories of internal traits or propensities.

## Determinism

Mackay advances a clear and distinct determinism, repeatedly complaining about constructivists who posit human autonomy in the creation of meaning. He asserts that, even in all its complexity, human motivation 'is necessarily . . . determinate' (p. [16ms]), and he laments that constructivists see determinism as 'so obsolete . . . that no one in the meaning-making literature bothers to mount a proper argument against it' (p. [17ms]). Interestingly, he has no difficulty taking it as an article of faith that all human experience is 'necessarily . . . determinate', even though he provides no argument for it. While he sees no need to justify determinism, he insists constructivists are

required to refute it before proceeding. Constructivists, however, feel no need to endorse either free will or determinism in any final way; rather, each is viewed as a philosophical construction sometimes useful for psychologists. We see the determinism versus autonomy controversy as a debate that can never be resolved because, once again, each side premises its arguments on contradictory philosophical starting points.

At the same time, we are disappointed that Mackay resorts to a one-dimensional portrayal of both poles of this conceptual dialectic, offering a grossly simplified rendering of both determinism and autonomy. In the first instance, he apparently equates determinism with efficient causality, a mechanistic 'history of causal interaction between an evolved primate . . . and the environment in which it acts' (p. [16ms]). However, *mechanism* is merely one interpretation of causality, one 'world hypothesis' or 'root metaphor' (Pepper, 1942) of possible relevance to human psychology and psychotherapy. Other causal frameworks are equally relevant, including *formism*, which emphasizes material causes originating in the basic structure of phenomena, *contextualism*, which entails formal cause based on the temporal patterning of events, and *organicism*, which is organized around final causes implied in the telic unfolding of developmental change. Significantly, each of these world hypotheses—and particularly the last three—can be discerned in the work of constructivists like Maturana and Varela (1992), Bruner (1986), and Piaget (1970/1971), respectively (Lyddon, 1995). Likewise, Mackay oversimplifies the autonomy pole of the dialectic, caricaturing it as the *ex nihilo* creation of human individuals or collectives. But in actuality, constructivists routinely acknowledge a whole range of constraints within which people operate in constructing experience, including the limitations imposed by their embodiment, family systems, historical and cultural context, and the stubbornly substantial social discourses and institutions into which they were born and upon which they draw in punctuating, interpreting and structuring their lives. Indeed, constructivists such as von Glaserfeld (1995) even acknowledge the constraints imposed by physical realities, which may say 'no' to our hypotheses even if they cannot inform us directly about their nature. But the acknowledgement of constraints in no way precludes individuals or groups from making idiosyncratic or creative contributions to the meanings they construct. We find it disconcerting that Mackay insists on utter mechanistic determinism and cannot consider the pragmatic utility (not to mention theoretical plausibility) of positing some form of bounded agency in the functioning of persons. Certainly there are scientific psychologists who value the idea of human choice and see important differences between studying people and inanimate objects (Martin & Sugarman, 2000). We recall William James' distinction between tough- and tender-minded approaches to psychological inquiry. Surely there is room for both.

## Essentialism

Mackay's consternation with constructivists further derives from his belief that, in their focus on the epistemology of the observer, they deny the essential ontology of the thing observed. But meaning, he asserts, requires a relation 'between distinct, existent entities. The entities must have intrinsic properties and not be defined in terms of their relations to one another' (p. [18ms]). This insistence that objects and events have intrinsic qualities and preformed boundaries constitutes an essentialist approach, an orientation that constructivists do indeed reject (Polkinghorne, 1992). Constructivism is premised on the assumption that what counts as the basic unit of observation is always decided upon by human beings, whose distinction-making is a function of their goals in pragmatic contexts. For example, in medicine, whether whole populations, individual human bodies or specific organ systems are the units of analysis depends on the intentionality of the medical specialist. Perhaps cells are the basic entities; but then again even cells can be further broken down into mitochondria, cell membranes, nuclei, and so forth. The definitions of the entities with which psychological theories are concerned (e.g. reactance potentials, id impulses, metacognition, need for achievement) are, if anything, even more obviously observer-dependent. Maturana's constructivism is explicitly based on the idea that 'unities' occur at different levels and human involvement is always part of bringing them forth (Maturana & Varela, 1992).

Even more pointedly, in many of the pragmatic contexts faced by psychotherapists, identifying the 'intrinsic qualities' required by Mackay would be as difficult as it would be irrelevant. Does the 'fear of commitment' of one romantic partner exist independently in any definable way apart from the 'need for intimacy' of the other? Clearly, the identification of intrinsic essences, the objective adjudication of truth claims, and the tracing of efficient causal paths may not suffice in considering this couple's circumstance; and pursuing an objectivist agenda of this sort may even militate against therapeutic progress by clouding the therapist's view of the couple as a collaborative, meaning-making unit. Of course, we offer this applied example because we find it ironic that Mackay repeatedly criticizes constructivists for their 'hostility to the canons of argument and evidence', attributing these putative failings to their training being 'largely psychotherapeutic rather than philosophical'. (p. [6ms]) We do not see such a strong cleavage between the pragmatic and scholarly worlds Mackay describes. His argument recalls old and unproductive disagreements between those more interested in pure science and those preferring applied practice. Surely we see the two worlds as inexorably intertwined, and regard Mackay's characterization of constructivists as hostile to evidence or argument as little more than a straw figure. If anything, a quick perusal of the literature reveals that constructivists provide a great deal (sometimes too much) of each! Mackay

mistakes intellectual disagreement for hostility. That is, the kinds of evidence and arguments that constructivists offer are so foreign to his sensibilities that he simply cannot comprehend them in a meaningful way and hence concludes that constructivism must in the end be incoherent. That is unfortunate, for Mackay seems to miss what so many others are discovering—namely that constructivism has much to offer psychology.

## Scientific Psychology

Much of Mackay's animus toward constructivism reflects his foreboding that its purported 'anti-realism' and endorsement of human 'autonomy' will undermine the foundations of scientific psychology. To build a bulwark against this, he argues that the construction of meanings

> ... is an objective, determinate process, open in principle to scientific examination. ... their causes are in principle specifiable. Meanings are not the autonomous creations of persons. If the latter were true, their arbitrariness and unpredictability would make nonsense of all systematic psychological investigation. (p. [20ms])

Mackay seems particularly offended by the challenge to scientific authority and truth posed by a social epistemology. Constructivism, he states in no uncertain terms, 'wrongly assumes that knowledge is a social construct' (p. [30ms]).

Notwithstanding the possibility that some 'systematic psychological investigation' *is* nonsensical, constructivists do not generally position themselves as enemies of empirical psychology, as Mackay presumes. Despite his astonishment that constructivists undertake scientific studies—and we have certainly conducted, supervised and peer-reviewed our share—we do not see how constructivism precludes us from making use of scientific method. On the contrary, constructivist epistemology merely steps away from the naïve realist notion that science directly traces reality. We simply know that our current hypotheses are reliable and useful in a variety of ways, with these hypotheses seen as determined by our psychological and perceptual structures in conjunction with social context. The structure of the knower becomes as important as the object known.

This position can be clarified with reference to Chiari and Nuzzo's (1996) useful differentiation of epistemological and hermeneutic varieties of constructivism. Epistemological constructivists (Kelly, 1955/1991a, 1955/1991b; Mahoney, 1991; von Glaserfeld, 1995) believe that the world exists, but that human beings never access it directly (Chiari & Nuzzo, 1996; Raskin, 2002). That is, people only know the world indirectly through their constructions about it. This is not anti-realism; epistemological constructivists do not contend that there is no external reality beyond human perception. Rather, they merely assert that people can only know reality through their

perceptual structure and contextual point of view. Therefore, people can never rest assured that their understandings carve nature at its joints. Although constructivists of this ilk would be skeptical of the claim that reality fully determines the meaning that human beings impute to events, they would not take exception to the view that our embeddedness in a world imposes constraints on which meanings might be viable. As implied in our earlier remarks about the assumption of bounded agency of human beings—an assumption shared by many scientifically productive humanistic psychologists—we do not see how such a postulate undermines scientific research. If anything, it simply underscores the provisional nature of our theorizing, and suggests that even our best research designs will continue to have their share of unexplained 'error variance' for epistemological as well as methodological reasons.

Hermeneutic constructivists (Burr, 1995; Gergen, 1999; Maturana & Varela, 1992) take a more controversial position than epistemological constructivists, arguing that linguistic and relational factors shape the reality people experience (Chiari & Nuzzo, 1996; Raskin, 2002). Because understandings of reality are negotiated communally via the ways people talk about things, hermeneutic constructivists believe we can never detach the knower from the known. They are inseparably intertwined. To speak of reality independent of those who know that reality makes little sense to a hermeneutic constructivist. It is like asking what sound a tree makes when it falls in the forest but nobody is there to hear it. Sound without a listener is not sound, as people know it. As we implied earlier, Mackay directs much of his criticism at hermeneutic constructivism, probably because it so directly contradicts his ideas about entities having fundamentally specifiable boundaries and properties. Nevertheless, it is our opinion that the hermeneutic constructivist emphasis on people collaboratively developing ways of understanding themselves and their world does not produce the dangerous, nihilistic, anything-goes enterprise that Mackay insists it must. Indeed, it is not incoherent for social constructionists to grant that scientific discourse is a legitimate and often useful 'language game'; it is simply not the *only* language game. Viewing science in these terms does not negate its substantial contributions, but it does contest its ultimate hegemony as the most vaunted 'way of knowing'. Instead, constructivists and constructionists of a hermeneutic orientation remind us that even our best theories are the products of their time and place, and their sustaining assumptions and methodologies are most assuredly shaped by social as well as intellectual factors. (Can any serious observer of the history of psychology conclude otherwise?) Equally important, hermeneutic constructivists insist that a plurality of alternative discursive frameworks might be brought to bear on psychological science itself, offering grounds for trenchant critique of its social utility, ethical implications and marginalization of competing discourses. When practiced well, such critiques will not so much decimate

social science as prompt it to become more reflexive, methodologically diverse and responsive to the needs of the people and communities it attempts to study.

## Coherent Constructivism

Mackay finds constructivism incoherent because it questions foundational premises he takes for granted, namely realism, determinism and essentialism. However, constructivism does not reject these 'isms' so much as it sees them as postulated starting points that can produce a useful—if ultimately limited—human science. At the same time, constructivists believe that other postulated starting points can prove fruitful, including those that emphasize the role of human individuals, groups and cultures in the construction of meaning. We are most perplexed when Mackay laments that constructivism 'is so hopelessly incoherent that it forbids no position' (p. [23ms]). We are troubled not so much because Mackay is calling us incoherent (a portrayal with which we obviously do not identify), but because we wonder why we *should* 'forbid' any theoretical position. We would agree that the 'tolerantly pluralist epistemology' of constructivism permits all manner of discourses—even those as polemical as Mackay's—to be given voice, but—and this may be the heart of Mackay's discomfiture—it does not compel universal assent to any one truth. Ultimately, we believe that different theoretical positions should be permitted to compete in the marketplace of ideas and we trust that those theories that generate knowledge that people find valuable for maneuvering through the world will thrive and those that do not will fall by the wayside. Mackay's insistence that some theories should be forbidden simply because they are incoherent within his own procrustean conceptual framework exemplifies the kind of dogmatic thinking that constructivism cautions is most dangerous to furthering human understanding. We hope that readers will refrain from this kind of intellectual intolerance and meet constructivism on its own terms. While we do not presume that constructivism's range of convenience will suit everyone all of the time, we are confident it will suit enough people enough of the time to continue to be relevant to the future of psychology and psychotherapy.

## References

Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.

Burr, V. (1995). *An introduction to social constructionism*. London: Routledge.

Chiari, G., & Nuzzo, M.L. (1996). Psychological constructivisms: A metatheoretical differentiation. *Journal of Constructivist Psychology*, *9*, 163–184.

Gergen, K.J. (1999). *An invitation to social construction*. London: Sage.

Harré, R. (1986). *Varieties of realism: A rationale for the natural sciences*. Oxford: Blackwell.

Kelly, G.A. (1991a). *The psychology of personal constructs: Vol. 1. A theory of personality.* London: Routledge. (Original work published 1955.)

Kelly, G.A. (1991b). *The psychology of personal constructs: Vol. 2. Clinical diagnosis and psychotherapy.* London: Routledge. (Original work published 1955.)

Lakatos, I. (1974). Falsification and the methodology of scientific research programs. In I. Lakatos & A. Musgrave (Eds.), *Criticism and the growth of knowledge* (pp. 91–196). Cambridge: Cambridge University Press.

Lyddon, W. (1995). Forms and facets of constructivist psychology. In R.A. Neimeyer and M.J. Mahoney (Eds.), *Constructivism in psychotherapy* (pp. 69–92). Washington, DC: American Psychological Association.

Mackay, N. (2003). Psychotherapy and the idea of meaning. *Theory & Psychology*, *13*, xxx–xxx.

Mahoney, M.J. (1991). *Human change processes*. New York: Basic Books.

Martin, J., & Sugarman, J. (2000). Between the modern and the postmodern: The possibility of self and progressive understanding in psychology. *American Psychologist*, *55*, 397–406.

Maturana, H.R., & Varela, F.J. (1992). *The tree of knowledge: The biological roots of human understanding* (R. Paolucci, Trans.; Rev. ed.). Boston, MA: Shambhala.

Neimeyer, R. A. (1998). Social constructionism in the counselling context. *Counselling Psychology Quarterly*, *11*, 135–149.

Neimeyer, R.A. (2002). How firm a foundation? A constructivist response to Mahrer's archeology of beliefs about psychotherapy. In J.D. Raskin & S.K. Bridges (Eds.), *Studies in meaning* (pp. 247–264). New York: Pace University Press.

Pepper, S. (1942). *World hypotheses*. Berkeley: University of California Press.

Petocz, A. (1999, April). *Psychology in the 21st century: Closing the gap between science and the symbol.* Paper presented at the International Society for Theoretical Psychology, Sydney, Australia.

Piaget, J. (1971). *Psychology and epistemology* (A. Rosin, Trans.). New York: Viking. (Original work published 1970.)

Polkinghorne, D.E. (1992). Postmodern epistemology of practice. In S. Kvale (Ed.), *Psychology and postmodernism* (pp. 146–165). Newbury Park, CA: Sage.

Raskin, J.D. (2002). Constructivism in psychology: Personal construct psychology, radical constructivism, and social constructionism. In J.D. Raskin & S.K. Bridges (Eds.), *Studies in meaning: Exploring constructivist psychology* (pp. 1–25). New York: Pace University Press.

Vaihinger, H. (1924). *The philosophy of 'as if': A system of the theoretical, practical, and religious fictions of mankind* (C.K. Ogden, Trans.). London: Routledge & Kegan Paul. (Original work published 1911.)

von Glaserfeld, E. (1995). *Radical constructivism*. London: Falmer.

White, M., & Epston, D. (1990). *Narrative means to therapeutic ends*. New York: Norton.

Winslade, J., & Monk, G. (2001). *Narrative mediation*. San Francisco, CA: Jossey Bass.

JONATHAN D. RASKIN, PhD, is an associate professor of psychology at the State University of New York at New Paltz. Dr Raskin has published over twenty articles and book chapters applying constructivism to psycho-therapy, abnormality and ethics. He co-edited *Constructions of Disorder: Meaning-Making Frameworks for Psychotherapy* (with Robert A. Neimeyer; American Psychological Association, 2000) and *Studies in Meaning: Exploring Constructivist Psychology* (with Sara K. Bridges; Pace University Press, 2002). He serves as Book Review Editor for the *Journal of Constructivist Psychology*, and is an appointed editorial board member for that journal and for the *The Humanistic Psychologist*. Dr Raskin is licensed as a psychologist in New York, where he maintains a small private practice. ADDRESS: Department of Psychology, State University of New York at New Paltz, 75 South Manheim Blvd., New Paltz, New York 12561, USA. [email: raskinj@newpaltz.edu]

ROBERT A. NEIMEYER, PhD, holds a Dunavant University Professorship in the Department of Psychology, University of Memphis, in Memphis, Tennessee, where he also maintains an active private practice. The majority of his research has drawn on constructivist concepts and methods in advancing an understanding of human distress and psychotherapy. Neimeyer has published eighteen, including *Constructivism in Psycho-therapy* (with Michael Mahoney) and *Constructions of Disorder* (with Jonathan Raskin), both of which were published by the American Psycho-logical Association (in 1995 and 2000, respectively), *The Development of Personal Construct Psychology* (University of Nebraska Press, 1985) and *Advances in Personal Construct Theory* (Praeger, 2002). The author of over 200 articles and book chapters, he is currently most interested in developing a narrative and constructivist framework for psychotherapy, with special relevance to the experience of loss. Neimeyer is the Co-editor of the *Journal of Constructivist Psychology*, and serves on the editorial boards of a number of other journals. In recognition of his scholarly contributions, he has been granted the Eminent Faculty Award by the University of Memphis in 2002, has been made a Fellow of Division 12 (Clinical Psychology) of the American Psychological Asso-ciation (1997), and received the Research Recognition Award of the Association for Death Education and Counseling (1999). ADDRESS: Department of Psychology, University of Memphis, Memphis, TN, 38152, USA. [email: neimeyer@memphis.edu]