Bridging Social Constructionism
and Cognitive Constructivism:
A Psychology of Human Possibility and Constraint

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A theory intended to bridge social constructionist and cognitive constructivist thought is presented, and some of its implications for psychotherapy and education are considered. The theory is mostly concerned with understanding the emergence and development of the psychological (mind, selfhood, intentionality, agency) from its biological and sociocultural origins. It is argued that the psychological is underdetermined by the biological and sociocultural, and possesses a shifting, dynamic ontology that emerges within a developmental context. Increasingly sophisticated capabilities of memory and imagination mediate and support the emergence of genuinely agentic psychological phenomena from appropriated sociocultural forms and practices.

In North American and European psychology, there traditionally has been a strict separation and juxtaposition of private–individual and public–social domains. Moreover, it has been assumed that the proper object of study for psychology is the isolated individual subject. On this assumption, psychological phenomena are viewed as the products of processes or mechanisms of change that are mental aspects of the individual, processes that exist distinctly and separately from the natural and sociocultural worlds.

Of course, the strict separation of individual from natural and sociocultural domains in psychology owes much to the philosophical legacy bequeathed by Descartes (1637/1960, 1641/1960). Descartes claimed that there is a distinct ontology for human mentality that is given by each individual's capacity for rational thought and free choice, capacities that bear

no necessary relation to the automatic sensations and impulses of bodily experience that he believed arise independently of rational thought. In Cartesian philosophy, mind and body are of different orders, with mind the sacrosanct realm of the individual — an immaterial reflective consciousness separate from a material body. Contemporary cognitive psychology, in particular, presumes the Cartesian dualistic metaphysics. Human thought and action are to be explained in terms of inner mental attributes of the individual, whose mind and mental development exist in ontological isolation from a metaphysically divorced, external world of natural and sociocultural phenomena.

In recent years, social constructionism has mounted a significant challenge to prevailing psychological dualisms between private–individual and public–social domains. In particular, social constructionists have attacked the radical dualism of cognitive, constructivistic psychology, arguing that the reification of sovereign, isolated individual processes evident in such work has contributed greatly to what social constructionists regard as poor, misguided psychological science, and a morally suspect psychological practice that contributes to unnecessary alienation, selfishness, and anti-communitarianism. On a radically social constructionist view, psychological phenomena are constituted mostly or entirely of prevailing and emergent sociocultural forms and practices, and only can be understood in these nondualistic terms. The fundamental challenge to psychology then becomes one of justifying its existence as a distinct, legitimate area of scholarly work separate from more holistic, nondualistic forms of sociocultural study.

In this article, we respond to the social constructionist challenge, by presenting a theory of the emergence and development of the psychological that incorporates much social constructionist thought, but which still leaves room for bona fide psychological phenomena of agency, intentionality, self, and creativity. The major premise of our theory is that in order to comprehend the nature of psychological phenomena, it is necessary to take into account both the private–individual and public–social domains that mark our existence as individual and collective beings. It is important to note from the outset, however, that both these domains are encompassed by a broader context of human development. It is only within this broader developmental context that the significance of relations between the individual and the social in human psychology can properly be understood. Our theory offers a mildly dualistic, developmental view of the emergence and evolution of the psychological, one which is premised on the core ideas of (a) a *shifting psychological ontology* that relies on the gradual emergence of imaginal and memorial capabilities and mediational functions, and (b) the *underdetermination* of these mediational capabilities and functions (and the psychologies they enable) from their sociocultural and biological origins.

As seen within the developmental context, human sociality provides the possibility for, and imposes certain constraints on, the nature and genesis of individual psychology. At the same time, however, it is individual human agency that makes possible, and yet constrains, the conditions provided by sociocultural milieus. Focusing exclusively on the individual elides important social relational practices essential to acquiring the psychological tools necessary for constructing our experiences as individuals, and for forging our individual psychologies. If we are provided by our cultures with the means for psychological development, our psychological constructions cannot be viewed simplistically as the expression of wholly autonomous cognitive processes. However, while the nature of our individual psychology and subjectivity arises as something of a cultural endowment, it also is misleading to underplay our unique individual sense of agency, our individual moral accountability, and our creative, transformative capabilities.

When we think and act, we experience and understand ourselves as individuals. This experience of individuality is central to interpreting our experiences and intentions as meaningful. Much of our existential condition is undeniably individual. There is little to gainsay the experiential reality of one's vacillation in indecision, fortitude in resolve, pain in sufferance, or exhilaration in discovery. On the one hand, a view that presumes such phenomenology as resulting solely from autonomous sovereign processes would be fallaciously ideological — methodological individualism resulting from an overgeneralization of political liberalism. On the other hand, a view that abjures our existential individual agency and individual transformative powers denies the reality of our experiential lives.

With social constructionists like Vygotsky (1934/1986), Mead (1934), Gergen (1985), and Shotter (1993), we contend that the individual arises from the sociocultural. However, with cognitive constructivists like Bartlett (1932), Piaget (1954), Kelly (1955), and Mahoney (1990), we also contend that the individual is not isomorphic with, nor reducible to, the sociocultural. However, one cannot simply conclude that both sides of an issue have merit and leave it at that. Such a declaration is not an end, but merely a beginning. The hard work has just begun — that is, the work of arguing and demonstrating how positions such as social constructionism and cognitive constructivism, with fundamentally different assumptions and metatheories, might be integrated or bridged has yet to be accomplished. Indeed, what really is necessary amounts to a new theoretical approach, one with ontological and epistemological assumptions different from either of the positions to be bridged.

It is impossible to provide all of the necessary arguments and demonstrations in support of such a theory in a single article. What we hope to do here is to provide a detailed sketch of our developmental, bridging theory,

especially our core theses of *shifting psychological ontology* and the *underdeter-mination of the psychological.* We also articulate likely implications of our theory with respect to understanding both psychotherapeutic change and educational development. In this way, we hope to illustrate some of the specific ways in which we believe our position might influence both psychological theory and practice.

Beyond Social Constructionism and Cognitive Constructivism

In our bridging theory, the individual is seen to arise from the social but is not isomorphic with, nor reducible to, the social. It is precisely because the individual is not an exact replica of, and to some extent can transcend the social, that various kinds of human psychological transformation such as learning, psychological change, and creative innovation are possible. Clearly, such a view moves us beyond standard formulations of either social constructionist or cognitive constructivist thought, while bearing an affinity with some of the ideas central to classic forms of symbolic interactionism as developed by Dewey (1929), Mead (1934) and Vygotsky (1934/1986). These scholars insisted that attempts to explain mental functioning and its relation to the physical and sociocultural world in strictly biological, divine, transcendental, or in any terms that radically separated the human mind from the body's active engagement in sociocultural contexts constituted a kind of naturalistic or philosophical fallacy in which phenomena to be explained — the human mind, its relation to the world, or human development and creativity — are posited as explanations.[1] Dewey, Mead, Vygotsky, and their followers have insisted that such fallacies abound in the tortuous area of mind and consciousness, and that far too many explanations for mind and human development are only attenuated expressions of primitive animism, springing from the Cartesian myth of the ghost-in-the-machine. By insisting that the mind is not a separate substance entrapped in the body, but a symbol for a functioning process of active personal involvement and engagement with the sociocultural world, such scholars offer a new way of understanding human psychological development. However, as we hope to make clear, the basic conundrum of human creativity, how we succeed in going beyond forms and practices extant in relevant sociocultural contexts, has not been resolved entirely by this tradition of scholarly work as it stands.

We hope to explain how humans develop beyond their biological and sociocultural origins to create change and innovation. Part of our strategy is to construct a powerful synthesis of work in this century that has been con-

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[1]For example, a variety of instincts, predispositions, potentials, agencies, or mechanisms of creativity have been postulated as explanations for human creativity.

cerned with this problem in what we consider to be productive ways. The other part of our strategy is to articulate, elaborate, and defend two core theses of our own (what we call our *shifting ontology* and *underdetermination* theses) that explain how the personal, the psychological, originates in the collective, the sociocultural, but is not reducible to these origins. In doing both, we take a strongly developmental perspective that, while mildly dualistic itself, avoids the difficulties created by more radically dualistic, traditional approaches to our problem.

In psychology and social science, social constructionism (Gergen, 1985; Harré, 1984; Shotter, 1993; Shotter and Gergen, 1989) holds that psychological phenomena, from the ways in which thoughts occur to the ways in which we are able to conceive of ourselves as subjects, are at root conversational and interrelational. Psychological activity, viewed initially as a kind of conversational analogue, is seen to arise from, and to reflect our immersion in, discursive social relational practices. It is through our involvement in such practices that we acquire, develop, convey, and confer upon others the symbolic cognitive tools through which we manage our psychological engagement with the world. The means for organizing thought and forging and expressing experiential and imaginal constructions derive from our attunement to relational practices, the most conspicuous being conversation.

The primary theoretical strength of social constructionism is that it provides a plausible account of the way in which individual psychology arises and initially becomes organized. The emphasis on the pivotal role of ordinary conversation and other relational practices in the genesis of psychological phenomena helps to demystify the source of emergent, agentic individuality, requiring nothing more in the way of biological assumptions than a set of primitive neurophysiological potentials to move about in the world of experience, and to perceive and remember some of what is experienced.

In contrast, cognitive constructivism, owing to the works of individuals such as Bartlett (1932), Piaget (1954), and Kelly (1955) presupposes a more atomistic view of psychological change. As a cognitive perspective, constructivism ascribes primacy to the role of the individual in learning and psychological development. Constructivists conceive of hypothetical learning mechanisms, or processes, intrinsic to the nature of human individuals. These mechanisms or processes are believed to preside over the individual's development, serving to construct, manipulate, transform, and append the various mental representations and organizations that comprise the individual's cognitive architecture. While it is not unusual for contemporary cognitive constructivists (e.g., Mahoney, 1990) to acknowledge the importance of social influences on individuals' development, they persist in maintaining a strong separation between the individual and the social, construing individual psychological development as taking place against broader patterns of

interpersonal, social, and cultural interaction, but not as constituted of such patterns and forms. The focus is on the individual and how she or he learns to negotiate individual needs and purposes in sociocultural contexts.

A major theoretical conundrum for cognitive constructivism concerns the matter of how individual minds comprehend or affect other minds, a question of obvious importance when considering any kind of psychological or educational intervention. This difficulty lies in the failure of an individually sovereign process of cognitive construction to explain how human beings are able to share so much socially, to interpret, understand, influence, and coordinate their activities with one another. How is the intricate coordination and systematization plainly ostensible in human social interaction possible, given an isolated, self-contained, individualistic picture of the process of cognitive construction? Moreover, there is the developmental question of how on one's own, without the resources of those discursive practices we employ reflexively to partition experience, an individual could come to develop a sense of self. Without such resources, it is difficult to understand how one could take up practices such as labeling experiences as one's own, and recollecting one's experiences in autobiographical fashion.

Social constructionism deals with these difficulties by revealing common social foundations for our psychological development and processes of thought. Individual psychology is grounded in, and enabled by, a shared sociality of conversational and interrelational practices. These practices are continuously reproduced and promoted by members of a culture. They constitute a form of life. We are thrust into this collectivity from birth, and we are constrained in many ways to develop within the discursive and relational context it provides. In this light, human psychology is shown to be much less sovereign, isolated, subjective, and individually relativistic than cognitive constructivism would imply.

However, social constructionism presents its own obstacle, one that holds fundamental importance for any investigation into the transformative aspects of human development and psychology, such as those central to psychological therapy and education. The knot is, assuming the constraint of extant sociocultural practices on what human beings can think and become, what accounts for variation or transformation in individual understanding, knowledge, and behavior? How is transcendence of conventional socially-embedded, and realized wisdom possible? Neither the strong possibility that the forms of our psychology are derived from conversation and other relational practices, nor the likelihood that such practices are essential to the collective evaluation and negotiation of new ideas as these are introduced to the public realm, answers the question of where new ideas come from in the first place. While social constructionism provides a convincing explanation for how we become *informed* with experience, understanding, and knowledge,

it is wanting with respect to explaining how we are able to *transform* experience, understanding, and knowledge.

Indeed, a strong social constructionist reading (e.g., Derrida, 1967/1973; Gergen, 1991) would see human psychology as completely constrained by the kinds of conversation and social relation found in social experience. As merely a manifestation of conversations and social relations, especially as captured in language systems, individual agents dissolve into the dialogue and social roles in which they supposedly are created and compelled to participate. There is little of human agency here, only social relational, linguistic structures that by themselves seem to cause phenomena that give only the appearance of being psychological. In this light, the transformative and agentic capacity of individuals appears of little relevance.

It is, however, extremely doubtful that individual agency can be made to disappear so easily. The problem is that this sort of poststructural social constructionism begs the question of what it is that social influences are acting to constrain. What is happening here is a fundamental confusion about the relation between social structures and human agency. Human agents are not merely the invention and expression of social structures. Further, social and linguistic structures are very much the invention and expression of human agents. These structures constrain the expression of human agency, but only by virtue of the fact that human agents apply their understanding of social conventions to assess the merits of their intentions and behavior. The power of social and linguistic structures and conventions derives not from their manipulation of passive human organisms, but from their use by human agents who actively adopt and interpret them in light of their own lives and circumstances.

It is true that the methodological individualism of cognitive constructivism occludes the sociocultural origins of human psychology. Consequently, cognitive constructivism misconstrues the largely social origins of psychological development. However, cognitive constructivism does recognize the importance of an active agent intimately involved in the figuring of its own psychology. While we exist in a sociocultural world of persons, a distinguishing characteristic of personhood is the possession of an individual agentic consciousness.

Individualism and selfhood are drawing a great deal of critique these days throughout the humanities and social sciences (e.g., Sampson, 1989). However, an important distinction needs to be drawn. Much critique of this kind attacks, probably rightly, an invidious sort of individualism that slights or ignores the collective aspects of human existence, severing us from an essential part of ourselves and undermining any genuine sense of community. Nonetheless, the danger here is that such critiques might lead us to ignore the very real, unique sensibilities and understandings we develop as individuals in

sociocultural engagement with others. It is difficult to imagine any form of psychological theorizing that ignores the ineluctable phenomenal sense of agency and individualism in human experience. What is required is a consideration of this kind of individual experience within the broader context of human development, including the conditions of possibility and constraint that mediate the essential interplay between the individual and society.

A Sketch of a Developmental Bridge

We turn now to an introductory sketch of our developmental, bridging theory in which we attempt to link together some of the major strengths we perceive in social constructionist and cognitive constructivist thought, while simultaneously overcoming the kinds of weaknesses that accompany these positions. Once again, our basic thesis is that our individual psychology arises from the social but is not wholly determined by it. The ways in which we learn to construct and interpret our experiences as human agents have their origins in our status as social entities, as persons in interaction with others. Forms for human psychological constructions are available in sociocultural practices. Human constructivism is constrained, but not completely determined by these practices. This is so because the ways in which we become instantiations of what our cultures conceive to be persons are subject to our own unique experiences as individuals, and how we come to interpret and integrate these experiences as self-understanding agents. Human beings develop the capacity to exercise genuine reflexivity and some degree of self-determination. In so doing, the ontological status of human psychology shifts, and human psychology can be said to be underdetermined by sociocultural conventions and structures. The personal theories we come to hold about ourselves, others, and our circumstances are underdetermined by experiential data accumulated during our lifetimes. The transformative capacity in human psychology, and the mutability of individual human agents — our ability to learn, to change, and to innovate — are made possible by this underdetermination.

Our theory thus concerns the emergence and development of human psychology. It makes a very small number of assumptions about the basic biological and existential requirements for the kind of human psychological development we envision, and discerns three major features of human psychology. With respect to the former, we hold that the development of mind and psychology requires a basic biology and neurophysiology, itself a product of evolutionary adaptation, that equips individuals with basic, primitive capacities for movement, perception, and memory. We further assume that the initial manner in which such basic biological givens enable human psychological development is captured best in existential terms that immedi-

ately place the human organism thus equipped into the preexisting physical and sociocultural world. In terms similar to those used by Heidegger (1927/1962), we literally are thrown into the sociocultural and physical worlds we inhabit until our deaths. Our acting and interacting in these worlds occurs not with the benefit of detached, preexisting minds and selves able to pick and choose those social experiences most facilitative of our personal growth and development. Rather, our minds and selves develop as our existential condition unfolds and evolves. We exist first as embodied biological entities equipped with primitive capacities to move, perceive, and remember, all marshaled initially in aid of survival. The active, functional engagement that ensues is what enables psychological development (cf. Merleau–Ponty, 1962).

Having thus clarified our assumptions concerning biological and existential givens of human psychological development, we continue now with a sketch of the three major features of human psychology that dominate the theory we advance. First, there is an acceptance of the fundamental social constructionist premise. The forms for organizing thought and enabling meaningful cognitive constructions of our experiences, our selves, and others, are embedded in, and appropriated from, *conversational and interrelational practices*. These symbolic practices are an essential condition for psychological development. They constitute a common developmental space, or medium of expression, for both the individual and the social. Acting as a conduit through which public–social and private–cognitive domains can intermingle, they provide the possibility for the reflexive consciousness that is characteristic of individual psychology. Individual human psychology obtains its reflexive character from the appropriation and internalization of conversations and other symbolic relational practices. However, these same practices also constrain individual psychology by licensing the ways in which human agents can talk and relate to one another. Such constraints derive from our condition as social and individual beings, and are moral and ethical, as well as linguistic.

A second feature of human psychology that we emphasize concerns the various symbolic and relational tools that individuals accumulate through their appropriation of sociocultural practices and conventions. These tools enable and constrain the *personal theories* individuals construct and hold about their experiences, themselves, and others. The knowledge, beliefs, and valuations that we extract from our experiences are interpreted and integrated into our self-understanding in terms of personal theories. In fact, our very experience of "self" is conceived as the application of a kind of theory. Self is a theory applied to the understanding of personal experience in much the same way as a theory of gravity is applied to a scientific understanding of the way certain forces are exerted by and on objects. In somewhat the same

fashion as scientific theories are developed to help scientists organize, antici-
pate, explain, predict, and control phenomena of interest, personal theories
are developed to assist persons in organizing, anticipating, understanding,
and acting on occurrences in their own lives.

The forms of the theories we develop of our selves and aspects of our indi-
vidual lives, are fashioned from our appropriations of interactions in the
social, cultural world. In developing our theories about ourselves, we identify
with certain socially supported conceptions of personhood, and are drawn to
act in some ways more so than others. Conceiving of ourselves as certain
sorts of persons imposes limitations on the possibilities open to us. Thus,
socially countenanced theories of what it is to be a person act to constrain
the shape our personal interpretations, values, and beliefs can take.
Nonetheless, the substantive content and constellation of interpretations,
values, and beliefs held by an individual, is something of a unique construc-
tion. Because of this underdetermination of personal theories by their socio-
cultural origins, there is a great deal of latitude in the way each individual
uses a theory of self, or ideal of personhood, to reference a unique experien-
tial history and reflect on past, present, and future intentions, expectations,
and actions.

The third major feature of human psychology highlighted in our theory
concerns our capacities for *imagining and remembering*. These capabilities
enable our appropriations of elements of conversations and interrelational
practices, and our constructions of possibilities for ourselves that are
grounded in these appropriations. Only by remembering and imagining ele-
ments of the conversations in which we participate are we furnished with
the symbolic and relational tools we require to consider past experiences and
previous learnings, and to entertain future possibilities. Imagination and
memory allow us to grasp and reconstruct the significance of our past and
present, and to project ourselves into the future. They afford us a spatiotem-
poral fluidity of mind that is capable of operating outside of the more rigid
spatial and temporal constraints that exist in the physical and sociocultural
worlds. Imagination and memory also enable a kind of sympathy with which
to interpret the intentions and experiences of others. They are essential parts
of our interpretive and reflective practice as human agents.

Interpreting and reflecting are concerned with comprehending the signifi-
cance of our remembrances, current circumstances, and imagined possibili-
ties. Our ability to grasp such significances by interpreting the present in
terms of the past, or weighing the merits of alternatives by reflecting on the
present in terms of the future, is furnished by imagination and memory.
Imagination and memory thus serve a mediational role, providing the means
for navigating between our experiences in conversations and practices, and
the theories we develop about our selves, our lives, and our world. The mem-

ories we construct of the past, of the present, and of imagined possibilities, can be instantiated in our personal theories and employed to support current and future interpretations, understandings, and intentional actions. Our remembrances of episodes in our lives and our imaginings are saturated with personal meanings, beliefs, and valuations, and are strongly associated with our conceptions of ourselves and our ongoing identity projects.

Learning, psychological change, and creativity are connected intimately with our personal theories, identities, and the sense we have of ourselves. By making it possible for us to bring to mind what is presently absent, remembering and imagining lend some stability to our knowledge and understanding across time. Without this fluid capacity to collapse and extend experience across time and space, every experience would be unfamiliar, no matter how many times an event or object previously had been encountered. Memory and imagination are the gateposts that open to the wealth of accumulated past experience in one direction, and to the call of future possibility in the other. The spatiotemporal fluidity afforded by memory and imagination contributes significantly to the underdetermination of our psychologies by our sociocultural experiences.

As reflexive human agents, we continuously attempt to discern the significance of things, and to forge meanings and understandings relevant to our particular existential purposes and projects. The ways in which we learn to discern significances and to construct and interpret our experiences spring from our status as social entities in the company of others. The symbolic and relational tools we come to possess through our participation in sociocultural milieus allow us to interpret and integrate our experiences meaningfully and to gain some understanding of our circumstances. However, our interpretations also are made from within the bounds of our unique individual histories, recollections of which provide much of the substance for our personal theories of self.

In attempting to discern significances and to construct meanings, we look for familiarity and relevance between the present and the past. As adults, in most of our daily endeavors we do not expend a great deal of conscious effort in grasping the significance or meaning of events. Significance and meaning are given more or less instantaneously by the prereflective understandings that constitute much of our capacity for engaged agency. However, we frequently are presented with the unfamiliar, or with inconsistencies between what we discern of the present and the prereflective understandings immediately given to the present by our pasts. In becoming conscious of such discrepancies, we implicitly or explicitly acknowledge that the repertoire of understandings on which we draw automatically, is in some way insufficient. This sense of insufficiency in our understanding, incited by irreconcilable features of the present situation and our previous experience, is the impetus

for us to engage in conscious interpretation. The movement from under-standing to interpretation is the seed for the development of the reflexive consciousness required for more sophisticated forms of learning, psychologi-cal change, and innovation.

During the course of development, we learn to instruct ourselves in deal-ing with these sorts of discrepancy, in manners similar to those in which others previously have instructed us. Early in our development, others point things out to us, draw our attention to matters of significance, ask us ques-tions, prompt us to bring forward or project our remembrances, and suggest possibilities for us to imagine by posing tropes, models, analogies, or descrip-tive scenarios with which to clarify things, to bridge the unfamiliar with the familiar, the relevant with the inconsistent. Appropriating and internalizing these strategies and ideas, we come to instruct ourselves. Presented with unfamiliarity or inconsistency, we learn to engage in movements of interpre-tation in which we attempt to understand the significance of the present and future by projecting forward our experiential recollections and imaginings. We learn to clarify things for ourselves, finding or contriving our own gener-ative strategies and means.

In these circular interpretive maneuvers, the present, the past, and the future are brought together in reflexive consciousness as a flux of memories and imaginings across time. When meeting with unfamiliarity and inconsis-tency, such interpretative maneuvers not only can lead to an elaboration or transformation of our understanding of past experience, but also, to transfor-mations in our understanding of present circumstances. Learning, psycholog-ical change, and creativity arise from this fusing of horizons — of present, past, and future; of the familiar and the unfamiliar; and of the relevant and the inconsistent. Throughout the course of our lives, new conceptions are required to deal with the emergent significances we sense in our experiences and our understanding of our lives. With the passage of time, there are changes of many kinds to which we must adjust. As we age, there are changes in the nature of our personal relationships to others, in the broader domain of sociocultural belief and practice, and in our personal physical, intellectual, emotional, and spiritual needs and purposes. The mutable and transformative nature of human psychology can be seen as a fusion of hori-zons that occurs when past understandings give way to, or are recast in the light of, new ones, as we attempt to deal actively with dynamically emerging significances in our purposes and experiences.

The three foundational features of human psychology we have been describing — conversations and interrelational practices, personal theories, and memory and imagination — are integral components of our theoretical account of the conditions of possibility and constraint that mediate our capacity for learning, psychological change, and creative innovation. Our

thesis of the underdetermination of the psychological by the sociocultural, aided and abetted by the emergent spatiotemporal fluidity that accompanies this complex transition from the latter to the former, is the key proposition in the developmental bridging theory we have sketched. It is this more than anything else that enables the bridging of social constructionist and cognitive constructivist aspects of our account.

Many readers will recognize the influence of a wide range of thinkers on the kind of theoretical perspective we are offering — Vygotsky (1934/1986), Mead (1934), Bakhtin (1986), Merleau–Ponty (1962), Gadamer (1960/1975), Harré (1984), Greenwood (1991), and many others. Space does not permit a close inspection of the many similarities and differences between our account and these related perspectives. What we generally share with these scholars, and what we believe they share with each other, is a general view that psychology traditionally has maintained too rigid a bifurcation of the private–individual and public–social domains of human existence, a bifurcation that has dichotomized psychology into individualist and collectivist camps. Social constructionism and cognitive constructivism have fixated on distinct but potentially complementary features of the broader context of human development. In bridging important insights of these positions, our theory attempts to exorcise the Cartesian ghost of radical dualism that appears still to be haunting and bedeviling much current debate about the nature of psychological phenomena. We believe the possible uniqueness, and hopefully the importance of our work, lies in our articulation of the bridge between social constructionism and cognitive constructionism, a bridge made possible through the underdetermination of the psychological by its sociocultural origins in the context of human development.

The Underdetermination Thesis

Our underdetermination thesis, one part of our theoretical perspective that we believe is most original, now can be articulated more fully and formally. We hold that self and other personal theories arise from but are underdetermined by human experience in sociocultural contexts. The theories that we hold about ourselves, others, and our circumstances originate in our lifetime experiences as participants in conversations and other sociocultural practices. However, once formed, these theories evolve in unpredictable ways that are not entirely determined by those experiences. This is because the various forms and content that we extract from our experiences are combined, edited, and revised in a never-ending, dynamic manner as material appropriated from more recent experiences interacts with that of more long-standing appropriation, as we recollect the past, anticipate and imagine the future, and act in the present. Of particular relevance to such underdetermi-

nation are ongoing modifications to our theories of self, made possible through the mediation of emergent, developing, and increasingly sophisticated memorial and imaginal capabilities.

Our minds and selves emerge gradually within the developmental context as our original existential condition of "throwness" (Heidegger, 1927/1962) unfolds and evolves. From nothing more than basic, primitive capacities to move about, perceive, and remember some of what is experienced, more differentiated and sophisticated capacities for memory (increasingly and gradually more episodic and autobiographical) and imagination (increasingly and gradually more abstracted and projective) mediate and enable a more fully dialogical sense of self as subject. Our emergent capabilities of recollecting and imagining, while developed in, and shaped by, sociocultural conversations and relations, evolve in ways that are not isomorphic with acquired conversational and conceptual forms and structures.

The fact that people become able to generate images and ideations of actual and imagined experiences constitutes an incontestable phenomenological truism. These images and ideations initially take their meanings and significance from what is appropriated and internalized from sociocultural settings. However, once emergent, the private–individual experience of episodic memories and imagined scenarios are *sui generis* psychological events. They become distinct from the meanings and significance with which they are endowed, or that we discern or interpret to be residing in them. Whatever knowledge or understanding comes of remembering and imagining experiences is not constitutive of the memory or imagined ideation per se.

The knowledge and understanding gleaned from actual and imagined experience rests on the ability to recognize kinds of things, to categorize features, and to mark them as meaningful or significant. As we develop, this ability is most often manifest as something learned rather than something remembered. In order for an experience to count as a full-fledged episodic memory, there must be reflexive consciousness of the distinction between past and present experience. We must be able to distinguish between a "me now" and a "me then." In using a learned skill, consciousness of the temporal distinction between when we first appropriated the skill and our using it now, disintegrates.

For example, we commonly remark that we remember how to do certain things like read or write. However, it is uncommon for us to recollect accurately what it was like for us to be unable to read or write. In such cases, what we are doing is inferring the memory as opposed to actually experiencing it. It is only in those instances when we are able to recall an actual experience in which we learned something, or when we interpret meaning and significance in the course of examining a recollected or imagined experience, that episodic memory and learning are ostensibly connected. In such

instances, our memory and imagination serve to mediate learning. On these influential occasions, our developmentally emergent capacities of episodic memory and imagination act as mediational vehicles that enable interaction between specific experiences (actual and hypothetical) and the personal theories (systems of beliefs, knowledge, skills, and attitudes) that we acquire and continuously revise through appropriating and internalizing our experiences in sociocultural settings, including our theories of self.

Our self-descriptions are refined over a lifetime of experience through a complex capacity for reflexively finding and creating meaning. In this way, experiences are woven into semi-coherent autobiographies (Bruner, 1986; Taylor, 1989). While this ever-evolving capacity for the creation of meaning is constrained by past and current sociocultural experience, it enables the creative melding of fragments of actual and imagined experience into possibilities for action. Such possibilities are generally consistent with currently emergent plans and intentions that themselves are grounded in extant personal theories. The complexity, unpredictability, and inevitable imperfection (e.g., the variability of recollection in light of changing purposes and contexts) of these dynamic processes places their exact results, at any given moment, beyond our epistemic reach (in both practice and principle), as individuals and as psychologists.

Thus, our theories and actions are determined by our experiences, but are not reducible to them. Personal theories and the possibilities they contain are constrained, but underdetermined by experiential data, just as scientific theories are constrained, yet underdetermined by relevant empirical data (cf. Greenwood, 1989). However, unlike the objects of physical science, humans are reflexive, intentional construers of past, present, and future episodes and possibilities. Both the content of our personal theories, and our attempts to know them, are functions of complex indeterminate experiential histories and dynamic processes of reflexive construction that elude highly deterministic analysis. This is not to say that we can have no useful knowledge of our personal theories, including theories we hold about ourselves, or that these theories arise mysteriously. It is simply that the complexities and dynamics of socioculturally spawned personal theories, through the mediation of our emergent, reflexive capabilities of intentional remembering and imagining, make complete knowledge of our personal theories and the actions they support impossible with respect to their specific determinants. Our theories of self are constitutive of the social, public and emergent cognitive, private backgrounds from which we form our theoretical descriptions, and through which our reflexive capabilities develop. These backgrounds and capabilities defy complete articulation.

Perhaps ironically, the foregoing characteristics of personal theories and reflexivity, and their experiential underdetermination, enable human

change, innovation, and creativity, even as they prevent comprehensive, deterministic understandings of them. Through our developmentally emergent, constantly evolving theories, memories, and imaginings, we humans are able to transcend our biological, experiential, sociocultural origins through creative, innovative constructions that, while constrained by these origins, are not reducible to them. This is true at both individual and collective levels of human development.

Shifting Ontology of the Psychological

In our account of psychological development, we have postulated developmentally emergent, increasingly sophisticated memorial and imaginal capabilities that mediate between sociocultural possibilities and constraints, and reflexive intentionality and selfhood that transcend and cannot be reduced to their biological and sociocultural origins. Pre-reflexive intentional consciousness is part of our embodied agency, our existentially-mandated acting toward objects. Reflexive intentional consciousness is not. For human subjectivity to acquire its reflexive form, for we humans to conceive of ourselves as subjects, or selves, we must be transformed by our sociocultural experiences. This metamorphosis occurs when we take up communal conversations and practices as psychological tools with which to think dialogically and responsively. It is in this way that the psychological emerges from the sociocultural but is not reducible to it. The critical metaphysical point we wish to make in this regard is that our theory assumes a shifting, emergent ontological status for the psychological, one that develops and changes as the individual gradually develops and emerges, as reflective forms of human agency come to transcend the basic existential condition of "throwness" (Heidegger, 1927/1962) into pre-existing physical and sociocultural worlds.

In our view, the seemingly intractable epistemological dualisms that have plagued philosophers and psychologists from the time of Descartes arise because the human mind, and other decidedly psychological entities, have been assumed to have a fixed nature. Classic and contemporary difficulties in explaining how internal mental representations of an external world might be validated have arisen from the acceptance of a fixed, unchanging ontological categorization of the mind and the physical and sociocultural world as distinct and opposed. Consequently, the philosophical search for a foundational epistemology has teetered between subjective, rational (i.e., internal) and objective, empirical (i.e., external) domains. Our conception of the psychological denies this radical dualism. We claim that, within a small number of basic biological and existential givens, the psychological is cut initially from the same cloth as the physical and sociocultural, but gradually emerges and develops beyond these origins. Possibilities for human reflexive inten-

tionality initially arise from the inevitable underdetermination of mediational capacities for increasingly sophisticated feats of memory and imagination. However, once in place, such capacities carry the seeds of full-fledged reflexivity and selfhood, seeds that develop into reflexive forms of consciousness and awareness that enable the construction of hypothetical and projective possibilities for both individuals and the societies they inhabit. In this way, the psychological possesses a dynamic nature that grows out of, but eventually transcends the biological, physical, and sociocultural. The psychological possesses an emergent ontology, one that shifts and unfolds in the developmental context.

Our original thesis concerning the shifting ontological status of individual psychology, within the developmental context, provides a new and dynamic psychological metaphysics, one with metatheoretical implications permissive of the kind of bridging theory we have presented. From this perspective, the static, radical dualism of Descartes (1637/1960, 1641/1960) represents a profound failure to grasp the fundamental developmental truth about human psychological life — that human psychology is not pre-given, but emerges within pre-existing biological, physical, and sociocultural orders. With the emergence of genuinely reflexive capabilities associated with an evolving theory of self, psychology is made possible through the acquisition of a subject who experiences and acts in a reflective manner. The prereflective embodied agent is transformed into a subject with reflexive intentionality, genuine autobiography, and a spatiotemporal fluidity of mind that can be exercised through heretofore unknown feats of memory and imagination.

Implications of an Applied Psychology of Human Possibility and Constraint

The primary general implication that flows from the theoretical bridging of social constructionism and cognitive constructivism is that human development, learning, and change exhibit a kind of constrained or limited possibility. The underdetermination thesis allows for the innovative emergence of new ways of thinking and acting, but the general sociocultural origins of these phenomena constrain these emergent possibilities. Our ability to learn from our encounters with previously unexperienced practices and forms of knowing always is imperfectly determined by our experiential pasts and what we have taken from them. Gadamer's (1960/1975) metaphor of fused horizons is apt here. In this sense, human learning and change might be viewed as the emergence of new horizons of understanding and/or being. These horizons are somewhat different from both the practices and forms resident in novel sociocultural experiences and those practices and forms resident in the individual's previous modes of understanding and being drawn from past experience. The constantly emergent individual is thus entangled

in an ongoing dynamic process of fusion, caught up in the unfolding panorama of practical and epistemic sources potentially available in lived experience, and those already taken from such experience.

Psychotherapy

For the most part, theories of psychotherapeutic practice have emphasized conceptual foundations more similar to those held by cognitive constructivists than to those promoted by social constructionists. Given that psychotherapy attempts to induce change in clients' ways of experiencing, living, problem-solving, and coping, it makes sense that psychotherapeutic theories of practice tend to focus on the capacities of individuals for changing, coping with, and resolving their problems and difficulties. This emphasis on individualistic forms of change and development also is consistent with the standard form of psychotherapy as practiced in Western cultures, consisting primarily of conversational interaction between an individual psychotherapist and an individual client. Thus while certainly concerned with happenings in clients' life experiences outside of the therapeutic hour, Freud (1914/1966) devoted most of his theory and practice to the uncovering of supposedly repressed memories, claiming that the therapeutic reenactment and reexperiencing of events symbolized in those memories resulted in the amelioration of clients' dysfunctional symptoms and lifestyles.

Only during the 1920s to the 1960s was psychotherapy cast as a process of social construction, and then only by a minority of theorists and practitioners of psychotherapy who identified with very narrow, reductionistic versions of behavioral psychology (e.g., Watson, 1924; Wolpe, 1969). For the most part, these approaches to psychology and to psychotherapy bore little resemblance to the kind of social constructionist thinking described and discussed here. Where the behaviorists were concerned primarily with habitual forms of experiencing, thinking and acting — supposedly tied directly to specific environmental triggers — true social constructionism suggests that knowledge does not reside exclusively either in the minds of individuals or in the environment but rather in the social processes of symbolic interaction and exchange.

More recently, there are indications that more *bona fide* forms of social constructionist thought are beginning to find their way into the thinking and theorizing of some scholars and practitioners of psychotherapy. This is most notable in the work of Gergen (see Gergen and Gergen, 1991; McNamee and Gergen, 1992) and others who have advocated a postmodern variant of social constructionism that

> draws attention to the manner in which conventions of language and other social processes (negotiation, persuasion, power, etc.) influence the accounts rendered of the "objective" world. The emphasis is thus not on the individual mind but on the mean-

ings of people as they collectively generate descriptions and explanations in language. (Gergen and Gergen, 1991, p. 78)

Such postmodern forms of social constructionism (also see Lather, 1992; Sampson, 1989) move away from the traditional emphasis of psychotherapy theorists on the individual self, sometimes going so far as to talk about the death of the self, which implies a dissolution of any conception of individuality as a unitary entity distinguishable from activity within the sociocultural milieu. Such deconstructionist scholarship celebrates the demise of the sovereign individual and its replacement by more anonymous forms of ongoing social exchange. As Sass (1992) observes,

Instead of the old pathos of distance . . . the condition of an inner self cut off from some unattainable reality — we enter into a universe devoid of both objects and selves: where there is only a swarming of "selfobjects," images and simulacra filling us without resistance. (p. 176)

However, as already noted, the presence of truly social constructionist, self-less psychologies is mostly absent in the area of psychotherapy theory and practice. Perhaps more so than in any other area of applied psychology, psychotherapeutic theories of practice have tended to embrace cognitive constructivist views. Clearly, such perspectives are naturally friendly to the institution of Western psychotherapy. Following Neimeyer (1995), most extensions of constructivistic thought in the area of psychotherapy may be subsumed under five basic metaphors: (a) therapy as personal science, (b) therapy as the development of self, (c) therapy as conceptual revision, (d) therapy as a kind of narrative reconstruction, and (e) therapy as conversational elaboration. For the most part, mainstream cognitive and cognitive–behavioral psychologies, including contemporary work in the area of social cognition and cognitive development, have contributed heavily to notions of therapy as self development and as reconstruction of personal schema or conceptual frameworks. While cognitive constructivist work has been extremely influential in psychotherapy theory, research, and practice, several of these metaphors, especially the final metaphor of therapy as conversational elaboration, entertain components of social constructionist thought that remain, for the most part, underdeveloped.

Few attempts exist to integrate social constructionist and cognitive constructivist thought in an understanding of psychotherapy practice. One exception is the work of Lyddon (1995). Lyddon attempts to analyze the divergent philosophical bases of the various constructivist metaphors and theories that exist in the area of psychotherapy. In particular, he employs assumptions associated with Pepper's (1942) taxonomy of world hypotheses to differentiate the different forms of psychological constructivism he finds

in psychotherapeutic theorizing. He concludes that while differences among these various forms of constructivist psychology may be somewhat unsettling, they all reflect viable accounts of different aspects of human knowing. A full understanding of the constructive nature of human knowing may require input from all such metaphors.

Consistent with Lyddon's general approach, but also incorporating more decidedly social constructionist views, Martin (1994) attempted to conceptualize psychotherapeutic change in a manner generally consistent with the kind of bridging of social constructionism and cognitive constructivism discussed herein. On this view, psychotherapy itself is conceived as a somewhat unique, socially sanctioned interpersonal activity devoted to assisting individual members of a society to change.

Like Martin (1994), we believe that psychotherapy best can be understood as occurring within the broader context of human experience. Human experience occurs in the context of cultural, social, interpersonal and personal conversations and other relational practices. Human thought and forms of understanding are appropriated from these conversations and practices and internalized in individuals' memories and emergent understandings. Indeed, memories of past experience in conversations and relational practices act as primary mediational vehicles for the internalization of forms of thought and understanding. Personal theories emerge as systems of belief based on these forms. Such theories about self, others, the world, and one's circumstances support perceptual, experiential, affective, motivational, and cognitive processes on which human actions are based. When individuals' current theories and the actions they support do not permit the attainment of personal goals, acceptable resolutions to personal problems/concerns, or acceptable levels of personal coping, individuals suffer emotional upset and seek change.

As we already have indicated, psychotherapy is a unique form of social conversation and interpersonal activity that attempts to help individuals to alter personal theories so as to permit more effective goal attainment, problem resolution, or personal coping. Psychotherapists work collaboratively with clients to elaborate their current theories by facilitating memory-mediated recall, interpretation, and analysis of past and current experiences and understandings in the therapeutic conversation. Psychotherapists also work collaboratively with clients to help clients revise their theories once these have been elaborated. Such revision is achieved by clients' internalization of the therapeutic conversations and activities through which their theories have been elaborated, interpreted, and analyzed. Ultimately, clients who have benefited from psychotherapeutic conversations and practices are potentially capable of acting in, and contributing to extratherapeutic contexts in ways that alter these conversations, practices, and clients' experiences in them.

Having provided this summary of psychotherapeutic change, we want to stress that the constructive dynamics of such change do not differ in kind from the more general constructive dynamics that enable all human psychological development and change. We also want to stress that the quality and quantity of therapeutic change in any given case inevitably will depend on the nature (variety, depth, breadth, and so forth) of the lived experiences afforded to an individual client prior to, during, and subsequent to experience in the psychotherapeutic context.

More generally, psychotherapy might best be understood as a human creation grounded in the historical and contemporary renderings that we give it by virtue of our cultural, social, and personal notions of psychological health and healing. Psychotherapy is part of our own sociocultural tradition of conversation and practice, one by which we attempt to alter our personal theories about ourselves and our lives. These are theories we have extracted from our life-long participation in our families, our friendships and relationships, our societies, and our cultures, but which currently do not serve us well in assisting us to reach our goals, resolve our problems, or cope with current life situations. In this sense, psychotherapy is simply a professionalized version of our ongoing quest to extract more meaningful understandings of ourselves and our world from our interactions in the physical and sociocultural worlds that, consistent with our general theory of psychological development, we occupy and to which we contribute.

Education

Unlike theories of practice in psychotherapy, theories of educational development and practice display a fairly even balance of social constructionist and cognitive constructivist thought. Perhaps because of educators' joint concerns with the transmission of human cultural accomplishment and wisdom, and with the nurturing and realization of individual capacities for critical thought and self-fulfillment, most educational theories emphasize appropriate immersion in accepted forms and content of knowledge and processes of knowing in ways intended to stimulate individual and collective capacities for remembering, understanding, and creating. Nonetheless, relative differences in emphasis on sociocultural versus individual processes and phenomena frequently erupt in heated disputation among educators, students, and others affected by educational policies and practices. Classic and continuing debates between advocates of student-centered versus teacher or curriculum-centered teaching, direct versus indirect instruction, the teaching of knowledge and content versus the teaching of processes of thinking and knowing, all reflect such underlying tension.

It is relatively easy to imagine a set of specific propositions, similar to those we previously offered as a description and explanation of psycho-

therapy and psychotherapeutic change, intended to illuminate specific pro-
cesses of education and educational development consistent with our general
theory of human psychological development. Such propositions obviously
would include attention to the ways in which memory and imagination
develop out of appropriate immersion and participation in relevant domains
of knowledge, and serve to mediate further acquisition and development of
increasingly sophisticated forms and processes of knowledge and knowledge
construction. However, we suspect that, by this time, readers are quite famil-
iar with our developmental template and various instantiations of it. Instead,
we want to turn briefly to contemporary debates within education between
advocates of sociocultural and radically constructivistic views of teaching
and learning to demonstrate how the kind of theorizing we have been advo-
cating has escaped serious consideration in most such debates. In so doing,
we hope to illustrate the relevance of our theory of human psychological
development for moving beyond much contemporary debate concerning
appropriate means and ways of fostering the intellectual and moral develop-
ment of learners in educational contexts.

The cognitive constructivist view of education is that students actively
construct their ways of knowing as they strive to maintain coherence in their
personal theories of the world (von Glasersfeld, 1987, 1989, 1992). Empirical
support for this constructivist viewpoint comes from studies that document
significant qualitative differences in the understandings that different stu-
dents develop in the same educational setting, understandings that fre-
quently differ in important ways from those the teacher intended to convey
(e.g., Confrey, 1990; Hiebert and Carpenter, 1992).

Opposed to the constructivist view is a sociocultural position that empha-
sizes the situated nature of intellectual activity and learning. Socioculturalist
theorists eschew purely cognitive levels of analysis in an attempt to combat
what they perceive as an unwarranted individualistic emphasis in construc-
tivist theories of education (e.g., Brown, Collins, and Duguid, 1989).
Socioculturalists claim empirical support from studies demonstrating that
individuals' learning and intellectual activity are affected dramatically by
their participation in cultural practices as varied as completing assignments
in school and shopping in malls (e.g., Greeno, 1991).

Both sociocultural and constructivist theorists of education highlight the
importance of activity in human learning and development. However, socio-
cultural theorists focus on students' participation in culturally sanctioned
classroom and extracurricular practices, whereas constructivists attend
mostly to individual students' perceptual and conceptual processes.
Constructivists analyze thought in terms of processes located in the individ-
ual. Sociocultural theorists adopt the individual-in-social-action as their
focal unit.

A major difficulty facing educational constructivists is how to account for learners' internalizations from the social realm to the cognitive realm. The difficulty springs from the fact that the interpersonal relations that are to be internalized are located outside the learner. From this point of view, the problem of explaining how relations that are real for the detached observer get into the experiential world of the child, appears intractable. The underlying assumption is that material to be learned somehow is brought across a barrier into the mind of the child. However, how this is done is not specified and constitutes a deep problem for constructivist theorists of education.

On the other hand, a significant problem encountered by sociocultural theorists of education is how to account for human learning that displays creative advance that goes beyond anything available currently in the sociocultural practices and ways of knowing in which a learner has participated. While truly creative accomplishments probably are rare, their existence and importance are undeniable, and the failure of sociocultural accounts to offer any convincing explanation of them constitutes a significant difficulty.

Constructivists argue that sociocultural theorists do not adequately account for the process of learning that entails the possibility of creative advance. Sociocultural theorists retort that constructivists fail to explain the production and reproduction of the practices of schooling and the social order. "The challenge of relating actively constructing students, the local microculture [of classrooms and schools], and the established practices of the broader community requires that adherents to each perspective acknowledge the potential positive contributions of the other perspective" (Cobb, 1994, p. 18). Thus, the overarching theoretical challenge is one of coherent integration.

It is precisely in its ability to respond to this kind of challenge that we believe our theory of human psychological development makes a potentially powerful contribution to educational theory and practice. By clarifying possible ways in which socioculturally developed and spawned capabilities for memory and imagination can mediate learners' acquisition of forms and ways of knowing, our theory resolves the difficulty experienced by existing cognitivist theories of education in explaining how knowledge and processes of learning become incorporated into students' developing minds. At the same time, our underdetermination and shifting ontology theses, aided by our conception of relative spatio-temporal differences between sociocultural practices and the activities of mind, permit an understanding of creative aspects of learning that goes beyond anything available in past and current sociocultural educational practices.

There is a close connection between our view and that advanced initially by John Dewey (1929, 1931/1964), and developed more recently by individuals like Prawat (1993, 1995). Prawat interprets Dewey's views on education as a kind of "idea-based social constructivism" (1993, p. 5). Idea-based social

constructivism assigns a high priority in education to important ideas developed within established intellectual and academic traditions. The teacher's task, according to this view, is to create communities of discourse in which students participate to figure out and apply these big ideas. Ideally, the classroom is a center of lively discussion and interaction where learners and teacher engage in animated conversations about important intellectual matters. In such a setting, "teacher and student form a learning community, keeping one eye on the discipline, and the other on the real world phenomena [ideas] they seek to understand" (Prawat, 1995, p. 20). The instantiation of our theory of human psychological development within this general neo-Deweyan viewpoint helps to understand how the two-way street described by Prawat is possible. In fact, there are two major aspects to this process. The first is sociocultural and occurs as teachers and learners discuss ideas in the social context of the classroom. The second involves students' appropriation of these discussions and ideas through the mediation of their own memory and imagination, eventually using these ideas as tools with which to describe, understand, and explain phenomena that otherwise might remain hidden or mysterious to them and possibly to others as well.

The grand view of education that follows from our bridging of social constructionism and cognitive constructivism is one in which an individual's sociocultural experiences are expanded and placed within a larger horizon. Through education, familiarity and interest are cultivated in issues, problems, perspectives, and in ways of life that might be quite distant from one's own. In all of this, there is and must be a genuine attempt to understand one's place within a larger world community, and to come to understand and care for the very best it has produced in the way of moral, cultural, social, and epistemic accomplishments throughout its history. Such a conception is intended to maximize possibilities for human learning and creativity, while reducing unnecessarily narrow sociocultural, experiential constraints on human innovation and change.

As in Gadamer's (1960/1975) rendering of the concept of *Bildung*, the idea of self-formation contained in such a view of education is decentered from an isolated, psychological ego. To the extent to which individuals educated in this sense can integrate their understanding of others within their own self-understanding, they develop a wider, more differentiated view, one typified by sensitivity, subtlety, and a capacity for discrimination. In this process of becoming more broadly cultured, we acquire the ability to engender more and varied opportunities for continued and sustained development, as well as a set of largely tacit but critical capacities for such things as tact, taste, and judgment. These are not merely cognitive ways of knowing and behaving, but are embodied forms of knowing, built up over time into a set of habits that reflects a person's transcendence of individual ego, and a self-formation

genuinely tied to the shared values, goals, accomplishments, and visions of wider communities.

Lave and Wenger (1991) recently have described education and learning in terms of a learner's initially peripheral, and gradually more and more central entry into, and eventual full participation in, communities of practice. This kind of graduated participation, membership, and eventual possibility for forging innovation in relevant communities, is quite consistent with the general educational implications with which we are concerned. However, if one views education as a gradual and graduated participation into the practices and forms of multifaceted intellectual life per se, greater emphasis probably should be given to the development of a kind of progressively emergent capacity for critical reflection. Learners (from kindergarten to university) should be expected initially to enter into, and participate with, established practices and forms, and gradually should be helped to challenge, elaborate, and revise such positions in light of an ever expanding array of other possibilities and considerations, all within a genuine spirit of caring for the activities, practices, criticisms, and transformations that define intellectual life.

Considered in this way, a major challenge for institutions and practices like psychotherapy and education is to foster appropriately graduated participation of individuals (clients, learners) in relevant communities in ways that ensure required immersion into the practices of these communities, but also in ways intended to promote the evolution and progressive change in these communal practices through their eventual full, critical, and innovative participation as mature individuals with full community membership. When put in this way, the challenges of individual educational and therapeutic development are revealed as developmental challenges facing our educational, therapeutic, and broader communities. Clearly, we cannot educate successfully in schools and other contexts where critical, intellectual life is largely absent, nor can we therapize successfully in contexts in which regard for individuals and their rights and responsibilities is abrogated. The general and particular relations that pertain between our sociocultural practices and individual development and learning, demand that we see ourselves in the communities we inhabit, and that we work consistently to improve that vision.

Conclusion

The theory of psychological development we have been discussing and illustrating is an attempt to explain how human action and experience undergo and display change, learning, and creative innovation. We envision an ongoing, dynamic process simultaneously constrained by sociocultural participation and experience, and made possible by emergent and developing capacities for memory and imagination. These capacities, because of their

underdetermination by their largely sociocultural origins and because of their spatio-temporal fluidity, enable a transcendence beyond the participations and experiences of the present and the past. In framing and articulating this theory, we have assumed nothing more than primitive biological capacities to move about in preexisting physical and sociocultural worlds and to perceive and remember something of the embodied experience that inevitably unfolds as a consequence of this basic existential situation.

In developing our theoretical perspective, we have drawn from the works of many individuals, attempting to forge what we have taken from these works into a coherent developmental perspective that endorses a mild form of emergent dualism, while dismissing more radical forms of dualism common in most psychological accounts. Our assumptions concerning existential givens of human existence and experience borrowed heavily from the work of Merleau–Ponty (1962), especially his ideas about emergent embodied agency, built upon more primitive forms of active perception. Accounts by individuals like Vygotsky (1978) and Bakhtin (1986) helped us in our discussion of the ways in which conversational and other social relational practices and forms are appropriated and internalized as functional psychological tools in the developmental context. The works of individuals like Mead (1934), Harré (1984, 1986), and Taylor (1989) assisted us in our description of the emergence of self and other personal theories based on such appropriations and internalizations. Finally, the constructive possibilities for memory and imagination made possible by an evolving sense and awareness of self were realized with the assistance of theorists such as Kelly (1955), Tulving (1983), Bartlett (1932), Markus (Markus, 1983; Markus and Nurius, 1986), and numerous other contemporary contributors (e.g., Warnock, 1994).

The underdetermination and shifting ontology theses, of which we make so much and which are so central to our attempt to build a coherent bridge across social constructionist thought and more radically constructivistic thought, are essentially our own. We have used these theses, in combination with a sampling of what we take to be the most useful current thinking with respect to human memory and imagination, to forge a plausible understanding of how these predominant constructive and mediational features and functions of mind carry human individuals beyond their biological and sociocultural origins.

We believe that the kinds of theoretical bridges we have constructed have been possible because of our rejection of radical dualism. We have insisted that human innovation and change, and the general capacity to go beyond past experience and accomplishment are not mysterious or inexplicable. Yet, we also have insisted that these creative possibilities cannot be reduced inappropriately to tight determinisms that essentially deny these very same accomplishments. Our compromise is a mild form of emergent, developmen-

tal dualism in which psychological development, change, and creativity (and indeed, the psychological itself) are seen as products of our functional engagement with the pre-existing physical and sociocultural worlds into which we are thrown, but by which we ultimately are not entirely constrained because of our emergent capacities for memory and imagination. These capacities exist in a state of constant, dynamic flux that carries the seeds of human reflexive intentionality, creativity, and change.

We end by reiterating distinction we have taken from Merleau–Ponty (1962) and Charles Taylor (1989), one that highlights the shifting, emergent psychological ontology we have assumed in our work. Intentional consciousness, the ineluctable fact that our experience always is of or about something, is a natural endowment of our embodied agency. Reflexive intentional consciousness is not. For human subjectivity to take its reflexive form, that is, for we human agents to conceive of ourselves as subjects or selves, we must be capable of being transformed by our experiences in sociocultural settings. This developmental metamorphosis consists largely in taking up communal conversations and practices as psychological tools with which to think dialogically and responsively. The richer we can make these communal resources, the greater the possibility for productive learning, innovation, and change that builds constructively on both the successes and failures of the past.

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