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PRAGMATISM AND COMMUNICATION RESEARCH
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Pragmatism as a Way of Inquiring With Special Reference to a Theory of Communication and the General Form of Pragmatic Social Theory

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Pragmatism places communication at the center of human concerns. In 1916, John Dewey wrote, "Society not only continues to exist by transmission, by communication, but may be fairly said to exist in transmission, in communication" (1916/1944, p. 4). This chapter concerns inquiry and, for pragmatism, human inquiry is a communication process. It also discusses the ways that pragmatist ideas about inquiry can inform communication research, theory, and practice. Because of our long involvement with the tradition of pragmatism, we cannot easily sort out its most important aspects for us. We are reminded of a story set in the mythical town of Chelm, where all inhabitants are either crazy or fools.

Early one morning a resident of Chelm frantically knocked at the door of the rabbi's house. "Rabbi, you must help me!" The rabbi, half-asleep, let the man in. "Rabbi! My house has caught fire! Everything I own is in there, money, furniture, food for the winter, clothing, everything! What should I do?" Groggy with sleep, the rabbi said: "Hmmm, a fire? Let me remember what to do. Ah, take a stick and draw a circle around your house. Pace off four paces beyond that and draw another circle around the first." "Yes rabbi, what else?" "Next," said the rabbi, "Stand outside the outer circle looking toward Jerusalem and pray." "Thank you rabbi," said the man as he rushed out. The rabbi, now more awake, opened the door of his house and shouted to the man, "Wait! I think there is one more thing. What was it? Oh, yes, water! That's what I forgot! Before you draw the circles and pray, put lots and lots of water on the fire until it goes out!"

What follows is our effort to remember the water as we consider what aspects of American pragmatic thought have most importantly informed our work. That work goes under the title of Coordinated Management of Meaning (CMM), a theory of communication (Cronen, 1994, 1995a; Cronen, Pearce, & Xi, 1989/1990; Pearce, 1989; Pearce & Cronen, 1980). In this chapter, we use this theory to illustrate how ideas from the tradition of American pragmatism were given form in theoretical and practical work.

We do not claim that CMM is the only theory of communication that could be developed in the tradition of pragmatism. Certainly that tradition informs other work in communication, as shown in this volume. We focus on CMM for two reasons. First, we illustrate how ideas from the pragmatic tradition can take specific form in a theory of communication. Second, we offer, for those already familiar with CMM, a more complete account of its theoretical background. Readers can examine our account of pragmatism and inquiry for its own sake, however, without concern for CMM.

Although no consensus exists concerning which authors to include in the tradition of philosophical pragmatism, those with the most importance for us include Charles Sanders Peirce, William James, John Dewey, and George Herbert Mead.¹ In this chapter, we draw primarily from their writings. Even within this limited set of contributors, the reader with a background in pragmatism can infer from what we have said here that we agree with Dewey, who described pragmatism primarily as a view of inquiry rather than as a theory of truth.

The chapter features three parts. In the first, we develop claims about the natural and social world into which we inquire. There we emphasize pragmatism's deep debt to evolutionary biology. In the second part, we discuss pragmatism's naturalized view of inquiry and the position of the inquirer in the process of inquiry. Finally, we extend the pragmatic tradition with our notion of Practical Social Theory.

THE NATURAL AND THE SOCIAL WORLD

In an exchange, Dewey (1939, 1941) rejected Russell's (1939, 1940) demand that he provide an account of the world prior to inquiry. Russell insisted that Dewey offer a metaphysical argument as a foundation for the

¹Gunn (1987), for example, includes Kenneth Burke in the pragmatist pantheon, although Burke did not claim to be a pragmatist, to our knowledge. Self-proclaimed pragmatist Richard Rorty, although clearly in the tradition as a critic of foundationalist/structuralist philosophy, has little in common with Dewey's development of intellectual tools for inquiry. Thus, we think of his contributions as related but not central to the tradition. See especially his *Contingency, Irony and Solidarity* (1989).

ideas about inquiry developed in Dewey's (1938) *Logic: The Theory of Inquiry*. Dewey refused, saying that it is absurd to demand an account of reality prior to inquiry into it. As Burke (1994) said, however, Dewey did provide important statements about the world prior to any particular episode of inquiry. That account was not metaphysical, however. Instead his naturalized description rejected a firm line between philosophy and science.² Before discussing Dewey's ideas about formal processes of inquiry, we need to make some points about the natural and social world into which a communication researcher or practitioner inquires.

Realism and Social Construction

The inquirer in the pragmatic tradition is a realist but not an objectivist. Dewey (1922) said that philosophy and psychology too often treat social creations as natural objects. For example, he criticized the treatment of women and mental illness in Freudian psychology this way:

... it flagrantly exhibits both the consequences of artificial simplification and the transformation of social results into psychic causes. Writers, usually male, hold forth on the psychology of woman, as if they were dealing with a Platonic universal entity, although they habitually treat men as individuals. . . . They treat phenomena that are peculiarly symptoms of the West at the present time as if they were the necessary effects of fixed native impulses of human nature. Romantic love as it exists today, with all the varying perturbations it occasions, is definitely a sign of specific historic conditions as are big battle ships with turbines, internal combustion engines, and electrically driven machines. (p. 153)

In the same book, however, Dewey acknowledged that impulses possessed by all persons enter into social creations. Without human physiology, including our hormonal systems, there would be no romantic love,

²Although Santayana (1925) correctly described naturalistic metaphysics as a contradiction in terms, Dewey's position makes sense. Dewey (1920/1948) described metaphysics as a mistaken path in Western philosophy. In the context of his debate with Santayana, he used naturalistic metaphysics to say that the only terms concerning human action that can ever act as foundational will emerge from inquiry into the existence of any cross-cultural, transhistorical features of embodied human life in this world. For example, it may be claimed that certain conditions of suffering—such as the experience of pain or the sadness over losing a loved one—have some common features across culture and time, although culture and institutions mark these experiences. Dewey said that a quest for fundamentals in experience should not be a matter of reasoning out universal terms needed for a complete, coherent account of the world, but rather an investigation. It would examine the "large and constant features of human sufferings, enjoyments, trials, failures and successes together with the institutions of art, science, technology, politics, and religion which mark them, communicate genuine features of the world within which man lives" (Dewey, 1927/1988, p. 75).

courtly love, impulsive love, Korean forms of marital bonding after marriage, or any other kind. Our physiology does not determine the kinds of love we may create, but we cannot account for love without it.

The inquirer with a pragmatist orientation to communication can neither ignore the physicality of the world nor reduce social phenomena to physical or psychological causes. In CMM theory, we do not follow extreme social constructionism and treat cancer, for example, as an action chosen to create particular relationships in a family.³ Nor do we follow Kenneth Gergen's idea that the effects of modern medicine are just a set of stories no better than faith healing. We do explore the stories that can be constructed about disease and treatment. In Dewey's (1938) conception of inquiry, a researcher creates a fact during inquiry. However, he (1910) clearly said that facts are neither wholly objective, untouched by human minds, nor entirely a matter of linguistic creation outside our connections to the material world (pp. 10–13).

Continuity and the Rejection of Dualism

In evolutionary–biological terms, the distinction between one species of living things and another is a branching process. Thus, all forms of life possess commonality as well as difference. Advances in contemporary evolutionary biology have shown that life is not a substance that differs from the other materials of the world. Rather, it resulted from chemical combinations that occurred when the earth's atmosphere was different than now. Margulis (1998) closed the gap between bacterial and nucleated forms of life, showing nucleated cells to be an outcome of parasitic relationships among the former. Darwin argued that morality—a natural possibility created when creatures that survive by cooperation evolve a sufficiently complex brain—is continuous with evolution.

Like James before him, Dewey saw clearly the implications of moving from duality to continuity as a way of understanding. Earlier we discussed Dewey's position that experience is neither a purely psychological matter nor the simple recording of brute nature on the mind. Dewey recognized that this original Cartesian dualism of outer objects of knowledge and inner thought entailed a whole range of other dualisms. These include pitting theory against practice, individuality against sociality, researcher against practitioner, intellect against emotion, and the artistic against the instrumental.

Replacing dualistic thinking with an evolutionary–pragmatic sensibility takes us to a different way of making distinctions. The latter has several

³We have heard therapists do this. Nonetheless, systemic therapists have largely moved away from this extreme position. In one case some years ago, a client said: "I see. I got cancer so that I could reduce the dependence of my family on me."

important features. First, it recognizes that a distinction arises from the intersection of the researcher's or practitioner's experience, methods, and the phenomena studied. No distinction is wholly objective or entirely psychological. Second, it considers both continuities and differences in any act of distinguishing. For example, one can distinguish a chimp and a human, but we do have 98% of our DNA in common. Similarly, we can distinguish one person's conversational comments from those of another. We need not lose sight, however, of how one utterance contributes to the formation of the next utterance. If one makes evolutionary–pragmatic distinctions, one never neglects the temporal dimension of actions. Indeed, it is intrinsic to any distinction made. An event is not simply located at a static point along a ribbon of time, nor are temporal continuities limited to how the past creates the present. A distinguished event or object projects into the future, opening and closing possibilities for both the observer and the observed (James, 1912/1996).

Rejection of dualism is highly important to CMM because it opens a number of new ways to understand and act into social activity. For example, we do not separate the artistic and instrumental dimensions of social life into different domains. Instead, following Dewey (1934a), we look for the aesthetic dimension of everyday life. When our work focuses on a personal relationship, we are concerned with the ability of the couple to create beautiful moments together (Cronen, 1995a). In an organization, for example, we examine the opportunities that employees have to co-construct moments of excitement during work and moments when outcomes and joint actions attain an aesthetic fit. Dewey (1938) aptly identified the humdrum, rather than the aesthetic, as the enemy of science.

Persons, Selves, and Communication

Modern philosophical dualism originated in Descartes' notion that mind and body consist of different substances. Pragmatists reject this explicitly. They offer no place for mind, except as a summary term for what human brains do. Pragmatism also rejects the separation of thinking and acting. Instead, thinking is an aspect of action. In solitude, it amounts to a kind of action. We do not think and then do. After thinking in solitude, we then may engage in another action in which thinking is continuous with various body movements.

Humans are special kinds of creatures in many ways. Like certain other species, we depend on cooperation for survival. We do not exist as individual beings and then try to figure out how to communicate. The species would not have survived that way (Dewey, 1925/1958). We survive by interacting, and we have a special way of doing that using language. Thus, we can form distinctive kinds of association called *community*.

As humans, our specific kind of embodiment provides certain possibilities and closes off others under particular circumstances. Embodiment, however, does not determine the kinds of social selves we will be. That, Dewey (1916/1944, 1922, 1925/1958, 1934b) argued, emerges from communication. Individuality is never ignored; it is recognized as a wonderful social achievement. Dewey (1934b) worried that participation in particular kinds of institutional life can result in uniformity and a reduced range of interests and sympathies.

Mead's (1934) best known work—*Mind, Self, and Society*—extended the pragmatist point of view. He gave more explicit emphasis to the detailed, temporal process of gesture exchange from which selfhood continually forms. His “I” and “me” distinction avoided the paradox of self-consciousness created by what Wittgenstein might call the *language game* of individual psychology. If we think of consciousness in traditional ways, we encounter a problem. How can the self know the self if the self that knows is the same self as the object of knowing? Mead's differentiation of the “I” and “me” comes from the view that knowing is a kind of acting. To say “I know x” is not to posit an internal eye that must examine itself. Rather, in Mead's work, the pronoun “I” refers to an embodied being actively doing something. “I know” is an avowal, not a report (Harré, 1984). That “I” uses past experience in the creation of new experience with others. The new experience is formed not only by past experience, but also by the conditions created by the other. Thus, “I” can tell about the adventures, successes, desires, and sorrows that are “me” stories. This move wonderfully demystifies the process. To tell a story about ourselves is very much like telling a story about anything else. From our experience in the world, we learn how to tell such stories and use this ability in communication.

Cronen and Pearce (1989/1990) further explained the use CMM makes of Mead's ideas about the self. CMM provides a way to examine the communication patterns in which selfhood is formed. This takes us away from essentializing individuality. It also opens a variety of cultural questions about communication patterns, especially with children who are learning how to tell identity stories. The contributions of Dewey and Mead also lead us to think about the importance of institutional life for the existence of individuality. Differences between persons will always exist because no two persons, even identical twins, occupy the same temporal and physical place in patterns of conversation (Cronen, 1995a). Various kinds of differences have to be selected for attention and fostered. If we prize individuality, we cannot take it as something natural. Instead, we must look carefully at the vitality of the processes in which it develops.

CMM extends Mead's work by developing the idea that selfhood stories can be understood by how they are organized as part of one's grammatical ability for a particular moment of action. The authors' recent work for a

police department provides one example. Data suggest that supervising officers organized autobiographical stories in important ways around common understandings about authority, honor, respect, and hierarchy. When used at work, these stories of selfhood depended on higher order stories about respect in the department and how top management shows respect. CMM also develops Mead's ideas by providing some detailed ways of examining episodes of what we call *situated identifying*. These express selfhood stories for the self and/or others in real material circumstances (Cronen & Pearce, 1989/1990).

The Connection of Things Natural and Social

In a living system, the logic of functioning evolves with the emergence of new forms of life. That process is coherent but not neatly predictable. Consider the logic by which flowering plants evolved. The dinosaurs that liked certain plants created an opportunity for the evolution of flowers (Gould, 1989). The logic of these developments was created inside the process of evolution. No prior determinant logic led to our rich array of flowering plant, and neither nature nor dinosaurs had any desire to produce them.

Evolutionary biology contributed greatly to pragmatism by introducing the idea of coherence made from within a process—coherence that is neither formal nor deterministic. No truth table can assess the formal acceptability of moves within the evolutionary logic. This understanding enriches the study of communication, moving it away from Aristotle's idea that coherence in human affairs (contingent subject matter) approximates formal logic. CMM theory extends this same idea by treating the logic of action as created in the course of conjoint action. Formal logics can be useful tools for some kinds of inquiry. However, the choice of one or another formal system cannot be justified by a higher order formal procedure, only by the success of its use in action. CMM's heuristic models direct the inquirer to consider moral operators such as *obligatory*, *legitimate*, *caused*, and *prohibited* as ways to describe the experience of actors at particular moments of communication. For example, a manager's stories about the performance of a subordinate and her own responsibilities could lead her to treat micromanaging as not merely legitimate, but obligatory. Of course, we are also interested in how the conjoint actions of manager and subordinate reflexively reproduce both the manager's and subordinate's stories.

The Social World as Continuous With the Natural World. Distinctively human abilities and achievements such as language and culture are not set in opposition to the physical world, but are treated as evolutionary extensions of it. Language and the forms of art and culture that humans can

achieve with it require a human brain and the rest of human physiology. In *Democracy and Education*, Dewey (1916/1944) offered an account of human development illustrating how biological inheritance is socially fashioned into ways of living. The social fashioning is not *added on*. We live by means of constructing social ways of living together. Our rational operations are not prewired like those of an insect, nor even so strongly informed by genetics as those of a dog or cat. Our rational abilities, made possible by our brains, grow out of our human activities (Dewey, 1938). It would thus be inconsistent with pragmatism and evolutionary biology to think this justifies biological determinism. To think that way assumes that earlier events fully determine future ones. That is not how evolution works. Past events create future possibilities. Dewey (1910) explicitly rejected what is now called *biological determinism*. The principles needed to explain life processes in a simple organism like a sponge, for example, obviously will not explain how nutrition works in a mammal.

The Coherence of Social Action: Forming Coordinations. Dewey (1896) introduced the idea of *forming coordination* to replace the reflex-arc. Later Dewey (1922) used the term *habit* to indicate the creation of coherent connections in action. He chose it because habits, unlike instincts, are socially created. These habits need not persist in time, however. Forming coordinations integrate habits. Habits, like Wittgenstein's (1953) *rules*, function normatively, but they can form in one moment of social action and be changed or eliminated in the next. In CMM, we use Wittgenstein's term *rule* because we think tools for analysis that are associated with that term extend Dewey's ideas in useful ways. These ideas all depict rationality as an emergent, unfinished achievement within the process of communication.

In light of what a lioness does when she hunts, consider Dewey's talk about forming coordinations and the *continuity* of action. Imagine that she first observed the prey, then observed the position of the other lionesses, then selected a moment to move, and then responded to each of the prey's moves one by one. If so, she, her cubs, and the rest of the pride would starve. The lioness' way of observing is an aspect of an integrated pattern of coordinations. She observes the way she does because she runs and leaps the way she does. She anticipates how the prey will move and acts in response to the anticipations. As Mead (1938/1972) said, "A perception has in it, therefore, all the elements of an act—the stimulation, the response represented by an attitude, the ultimate experience which flows upon the reaction, represented by the imagery arising out of past reactions" (p. 1). If a perception contains the elements of an act, what can we make of the notion *cause*? Dewey earlier observed that *cause* does not describe a separate event different in quality from an effect. Rather, it is a

temporal term useful for describing moments in integrated sequences (Dewey, 1910).⁴

These ideas contain many important implications for communication theory. First, consider the importance of treating the coherence of life as made in communication practices. One way to use this idea is to think about inquiry in social life as connecting with the grammar⁵ (Dewey would say *organized habits*) of the participants. By that we mean finding a way to interview and observe that will allow us to find out how those we study construct coherence in action (Cronen & Lang, 1994).⁶

Let us apply this way of thinking to a communication event. When a father responds to his daughter's failure to eat her food, he is creating forming coordinations for dinner table talk with her and other family members. We use the analytic models of CMM to express forming coordinations (see Fig. 2.1). Perhaps this father has a story about his daughter and the possibility that she has an eating disorder. He may also have a story about his obligations as a father. He observes and feels the way he does in the context of these stories. The father also has a pattern of recall focused on what she has eaten in the past. All this relates to how he next speaks to her and what he expects and desires in response.

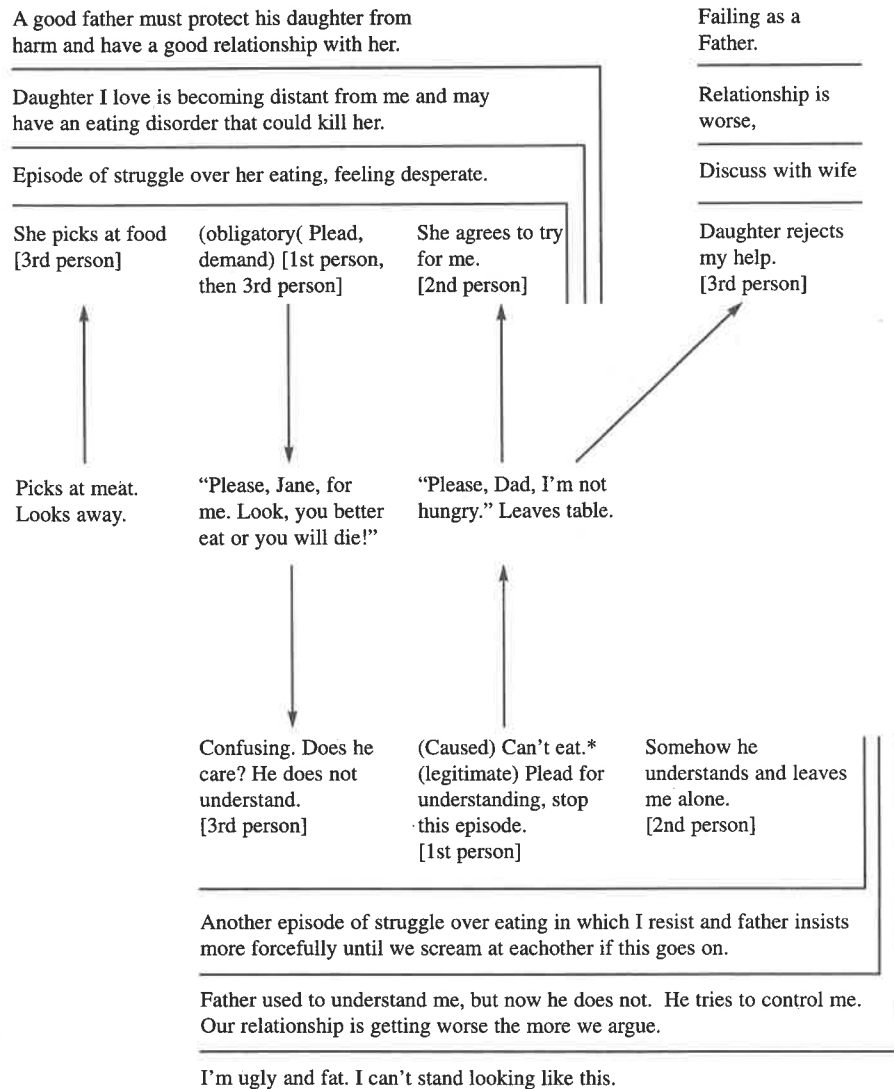
A forming coordination also guides the daughter. It may include her careful avoidance of eye contact and her anticipation of what will happen next, as well as stories about weight, attractiveness, and her relationship to her father. Together father and daughter constitute each other's ways of feeling, recalling, observing, and responding. The CMM analytic models uniquely work out Dewey's idea of forming coordinations. These coordinations are forming in conjoint action, not static. CMM models refer the researcher not only to the prefigurative and practical force of factors informing an act, but also to the reflexive needs and effects of action on those contextual factors, as shown in Fig. 2.2.

A practitioner using CMM or related systemic ideas does not refer to a universal account of the *mental disease* anorexia in a case like the foregoing. The therapist's goal is to find ways to enter into the grammars of action in ways that allow the family to discover new ways to live. Thus, anorexia is not taken as simply a disease. It does have a general cultural stability, but it must be learned and created in concrete situations. Anorexia is a way of living that is created in action.

⁴The reader familiar with family systems will notice how well this idea fits with Bateson's (1972) notion of *punctuation*.

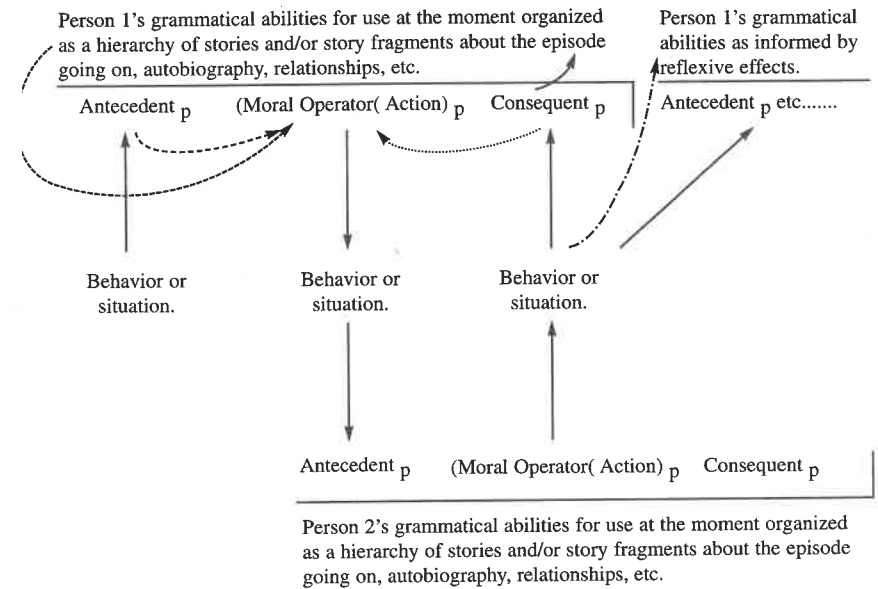
⁵Here we use the term *grammar* as Wittgenstein (1953) did. It is a collective term for the rules persons use to coordinate language games. The rules are not limited to matters of language and include the organization of movement, feeling, and so on.

⁶The reader interested in how interviews are used to enter into the grammar of others guided by CMM should consult Cronen and Lang (1994).



* The moral operator "caused" as used here does not mean daughter's behavior is physiologically determined. It is only reflects her past reports that it is beyond her control.

FIG. 2.1. Sample CMM heuristic model.



Where:

- Antecedent = Person's account of an event/utterance
- p = Position from which person acts or observes such as 1st person directly engage, 3rd person detached, or 3rd person conduit from another source.
- _____ = Indicates levels of context
- Moral Operator = Indicates person's felt logical force upon own action. In CMM these are: Legitimate, Obligatory, Prohibited, Unknown, Caused, Probable, Blocked, and Random.
- Action = Person's account of what they are doing.
- Consequent = Expected and/or desired response from the other.
- = Prefigurative force. The influence of antecedent and other levels of context on person's actions.
- = Practical force. The articulation of a person's action to a desired response.
- _____ = Reflexive needs. How much a person feels the need for a certain response to change or sustain a contextual story.
- = Reflexive effects. The effects of responses one gets on contextual stories.

FIG. 2.2. Fundamental features of CMM heuristic models.

The pragmatist orientation to time and the relatedness of events has important implications for interventions into communicative action.⁷ CMM's analytic models incorporate a triad of antecedent conditions, action, and consequent as shown in Fig. 2.2. These direct the consultant or therapist to the temporal details of action and to the way one action

⁷The kind of interviewing used with CMM is an adaptation of "circular questions." See Tomm (1985) and Cronen and Lang (1995).

informs another. A client typically reports events in this form: "If 'x' happens, then I can/must/must not do 'y.' If I do 'y,' then I expect or desire 'z' to occur." We do not theoretically think of the events x, y, and z as discrete, however.⁸ What the client does ("y") evolved along with a way of observing that constitutes "x." Actions and anticipated consequents develop together not as wholly distinct units. Thus, we may recommend interviewing in a way that opens new possibilities by altering the temporal sequence. For example, we might suggest asking, "If you were the sort of father who did not comment about his daughter's eating [action], what would a father like that notice about his daughter's actions at the table [antecedent]?" In an organization, we might ask, "If a manager was not concerned with getting his employee to respond by agreeing immediately [consequent], what would that manager notice about the employee's comments [antecedent]?"⁹

Language as Action, Meaning as Use. Dewey's ideas about language and meaning developed from those of Peirce and James. Early in the century, Peirce (1905; cited in Burke, 1994) argued that all description is action. He contributed one sort of dynamism to understanding language by offering a semiotic that emphasized how a sign mediates between the interpretant and its object. Peirce's development of a semiotic is more dynamic than Saussure's (1969). For Peirce, *mediation* consisted of a mutually informing relationship in that the sign is not simply understood by an interpretant, but also develops the abilities of that interpreter (Hookway, 1985). James' treatment of language introduced a more strongly temporal dynamic. James (1912/1996) observed that an utterance always points into the future, thus giving all language (indeed, all action) an intentional quality. Further development of meaning as action pointing into the future came with Dewey's treatments of thinking and communication. Dewey's (1911/1933) book, *How We Think*, included his first assertion that meaning is use. He agreed with James about the temporality of meaning. As Dewey said, "meanings are self-moving into new cases" (p. 188). His description of meaning as use in context extended James' position, however. Dewey (1925/1958) explained the implications of his idea that meaning is use in contrast to dualistic ideas. Speech is not the outer expression of an inner state (p. 169). Instead, any inner world of experience must depend on language—a social product (p. 173). Language becomes meaningful

⁸CMM heuristic models employ an "if . . . then . . ." symbol as a shorthand for what is thought to be implied in a conversant's report.

⁹In CMM-oriented interviews, we ask "circular questions." For a description, see Tomm (1985) and Cronen and Lang (1995). We want to recognize the influence of the Kensington Consultation Centre, London, and especially Peter Lang, Susan Lang, and Elspeth McAdams for illuminating for us the importance of future-oriented questions. For the use of future-oriented questions in brief therapy, see DeShazer (1985).

when a child and adult use it in conjoint action. Thus, "meaning is not, indeed, a psychic existence; it is primarily a property of experience and secondarily a property of objects" (p. 179).¹⁰

Treating human association as critical and distinctive, Dewey (1925/1958, pp. 178–179) discussed meaning as dependent on coordinated interaction in a temporal sequence. To fail to understand, he said, is to "fail to come into agreement in action; to misunderstand is to set up action at cross purposes" (p. 179).¹¹ The ability to engage in such coordination did not result from some miracle of language. It is the evolutionary development of interactive abilities (p. 176).

Dewey (1925/1958) developed the idea that intelligence and intention are created via communication. Rationality is tested and created within interaction processes (p. 188).¹² He observed the way that Person A requests Person B to bring something (e.g., a flower), to which A points (p. 178). B learns a coordinated action—to follow A's gaze and to coordinate with A. The responsive action makes intelligent meaning, not simply the other way around. Here we also see more fully Dewey's rejection of dualism. Language is not a self-contained system of signs distinct from other features of lived experience. Not only are gaze, movement, intention, anticipation, and recall aspects of meaningful action, but so also are feelings and aesthetic consummations. Dewey (1925/1958, 1934a) depicted speech as consummatory as well as instrumental. Mystery and poetry are achievements in the course of interaction, achievements without which human life would have little value.

The pragmatic view of language, meaning, and intelligence makes a dramatic difference in the way we look at communication. We ignore the pseudoproblem of how one mind can know another. Instead we look at the patterns of interaction in front of us to see how meanings are made and remade. All of this is consistent with Wittgenstein's later philosophy. However, Wittgenstein (1953) avoided detailed talk about any aspects of the communication process that are not immediately available for inspection. CMM follows Dewey's (1925/1958) and Mead's (1934) positions. It provides a way to inquire into the organization of persons' abilities as emergent contextualizing stories. Feeling, movement, and recollection are organized in and by these stories.

¹⁰Cognitivists should come to terms with these arguments rather than assuming cognition obviously is something internal. Davidson (1974/1984) argued Dewey's position, which rejects all such ideas as internal mental states and cognitive schemas, more recently and in more detail, but without any significant difference from Dewey's position.

¹¹Many readers will at once notice the similarity of this to Wittgenstein's (1953) notion of language games and nonsense.

¹²Wittgenstein came to the same position independently a little less than three decades later. But then, who reads American philosophy?

Communication as a Special Kind of Interaction. For Dewey (1925/1958), "everything that exists in as far as it is known and knowable is in interaction with other things" (p. 175). Nonetheless, all interaction is not communication (Dewey, 1934a). Dewey located the difference in the distinctiveness of human discourse. He (1925/1958) first considered language. Of course, he did not make language disjunct from either behavior or thought. Language, however, permits various distinctively human forms of thoughtful action.

Language allows for multiple ways of acting that are more "amenable to management, more permanent, and more accommodating, than events in their first estate" (Dewey, 1925/1958, p. 167). It makes possible reflective thought, in which new ways of understanding and acting can be considered. Even the *dumb pang of an ache* can become an object of contemplation. Although reflective intelligence is important, Dewey warned that "the soliloquy is the product and reflection of converse with others. If we had not talked with others, we should never talk to or with ourselves" (p. 170). Thus, Dewey cautioned against the modern tendency to describe the world on the model of personal soliloquizing.

Dewey's emphasis on language should not deceive us into thinking that communication is limited to language. Dewey believed that communication has two dimensions—one instrumental and the other artistic. Artistic expressions are distinctively human forms of communication because they also provide flexibility in experience, opening new ways to act into the future (Dewey, 1934a).¹³ Just as all meaningful language is "self moving into the future" (Dewey, 1925/1958, p. 188), art gives us a "quickened expansion of experience." Art "departs from what is understood and ends in wonder" (Dewey, 1934a, p. 270). Art becomes religion, Dewey (1934a) said, when consummatory experience has far-reaching consequences for our orientation to the world.

The Mosaic View of Connections and Punctuated Equilibria

We have sketched a view of the world as a system in which natural persons create a coherence inside communication processes. Now we need to distinguish this evolutionary view from a holistic one. A distinction is important because much talk describes systemic thinking as holistic. That is problematic. Russell (1939) missed the distinction in his critique of Dewey's (1938) work on inquiry. Russell argued that Dewey's view, based on evolutionary biology, logically required that nothing can change be-

¹³The reader interested in the art of emotional creativity should consult the work of Averill and Nunley (1992).

cause every element was held in place by every other element. If change did somehow occur, any small change must affect every other element in the system. Moreover, to understand any aspect would require the analysis of every element of the system. Russell had in mind something akin to Hegelian or Marxist holism. Both differ from Dewey's mature view (Burke, 1994; Westbrook, 1991).¹⁴

Dewey's ideas about change relied on a principle of biology we today call *mosaic evolution*. According to the mosaic principle, one element of a system may change without seriously affecting other elements for periods of time.¹⁵ Elements are related so that the relatively stable condition of some facilitates variation in another (Gould, 1989). Consider, for example, the earth's atmosphere after the rapid spread of plants. It became a relatively stable aspect of the context in which multiple forms of animal life then evolved. The evolution of oxygen-breathing animals living interdependently with carbon dioxide-breathing plants, each relying on what the other exhales, created the environment our planet had, at least until the industrial age. We do not claim that evolution of new forms of animal life did not affect the atmosphere. Rather, dramatically greater changes occurred in species than in the atmosphere.

The importance of the mosaic principle is better understood in light of another principle, *punctuated equilibria*. According to it, evolutionary change is not constant. Periods of relative equilibrium occur, punctuated by rapid changes. Rapid change seems to happen either when environmental conditions drastically change and/or when members of some species are cut off from their usual contacts. The isolated species move to the periphery. Change there can take place quite rapidly (see Gould, 1989).

Consider what practitioners in the systemic tradition do by moving naturally interacting groups to the periphery of everyday activities and working with them in workshop or clinical setting. This may help open new ways of interacting, whereas the rest of the system the clients belong to remains relatively stable. Afterward the clients will have to create further connections between what they learn with the professional and aspects of everyday life when they are not working in the clinical periphery. That is why systemic professionals, including those who use CMM, do not see a family or individual three or four times a week as a Freudian does. The clients need to find ways to live the changes in the larger world of experience—in the activities of everyday family, organization, or community life.

¹⁴We are much indebted to Burke's treatment of the distinction between holism and Dewey's naturalistic view. The interested reader should consult it.

¹⁵Dewey (1938) used the term *situation* in a specialized way for those elements of a system that came into a problematic relationship. Other elements in the system made possible that problematic relationship, but those other elements did not determine the situation and did not require change to fix the problem.

They may find that some of their new learning is useful. Inevitably, they will extend and adapt learning in ways that the professional did not anticipate. New learning must be woven into other evolving patterns of new practice.

AN ORIENTATION TO INQUIRY

Dewey (1938) said that formal inquiry is an extension of the natural process of living. In Dewey's view, a garden flower engages in inquiry, which is primarily a matter of achieving the mutual accommodations and adaptations that make life possible. In the morning, the flower still faces west, as it did at sundown. When the sun appears on the horizon, the flower must move to put itself into a better relationship to sunlight. Its roots grow to better link with water and nutrients in the soil. The flower also drops leaves and changes the soil. It emits oxygen, maintaining the atmosphere and thus its sunlight filter. Inquiry, then, involves adjusting the relationships between or among organisms and between organisms and their environment. When a communication scholar inquires into social practices, he or she attempts to attain a better relationship of persons to each other and to their world. In the natural world, the possibilities for adaptation and accommodation are always influenced by evolutionary history. The flower cannot develop feet and accommodate to dry conditions by walking away to a different garden. Human social adaptation can be more rapid, but it too is influenced by the history of developed abilities with which people confront new circumstances.

Dewey's Definition of Inquiry

We inquire into situations. For Dewey, a *situation* involves a breakdown or disturbance in the functioning of certain related elements of a system as it operates in time and space. Because of mosaic organization, disintegration or dysfunction does not necessarily affect all related elements of a living system (Burke, 1994). This well fits CMM and any systemic approach in which an inquirer must decide empirically what persons and episodes to include. Once made, such decisions are not fixed or final. An inquirer may revise them as work proceeds.

Formal theoretical background provides an evolving guide to how we might usefully proceed when inquiring into a situation. It informs our abilities without exhausting them. Some learning occurs tacitly and is not neatly reducible to language. Indeed, Dewey (1938) recognized that human learning extends the nonlinguistic learning abilities of other animals. Theory guides our ability to decide what to call things as well as where and how to look for relationships. For example, an interviewer using CMM

hears some responses and thinks, "This may be part of an important autobiographical story." Later the interviewer thinks: "This bit is the client's story about how problematic episodes progress. I wonder how the autobiographical story is related to the story of the episode?" Here, in Dewey's terms, the controlled process of interviewing or observing is making an indeterminate situation determinate. It becomes determinate for both the consultant and the clients.¹⁶ Assume that the interviewer asks, "Can you tell me a little more about what happens when you talk with your manager?" or "What happens that first gives you the idea that the talk has turned into an argument?" The client is hereby focused on making conversation determinate in a particular way, organizing conversation by episodes, and looking at temporal details. Part of the determination is the conjoint exploration and creation of coherence in the inquiry process.

CMM resembles other systemic orientations because it treats interviewing as a process of making connections.¹⁷ As the interviewer proceeds, she or he begins to ask questions. One might be, "Is it typically after one of your subordinates is allowed to go over your head directly to upper management that you have coffee with other supervisors and talk about the 'old days' of dignity and respect?" Here the interviewer forms connections between an autobiographical story of threatened dignity or lost respect and stories about the organization's past. The interviewer also in so doing identifies particular events that seem to threaten dignity and thereby threaten glorification of the past. The interviewer does this because CMM's heuristic models direct him or her to sort out stories that conversants might use to formulate coherent utterances. They also direct the interviewer to find out how episodes are organized temporally.

In all of these activities, the inquirer weaves elements into a unified view. That matches Dewey's (1938) formal definition of *inquiry*: "Inquiry is the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole" (pp. 104–105). Next we look more closely at the determination process and the place of the inquirer in it.

The Position of the Inquirer

The idea of inquiry as a universal, natural process helps us situate the inquirer as engaged in processes of social life that concern him or her.

¹⁶This is a point that Dewey does not stress because his examples come largely from the physical sciences, but we find it quite consistent with Dewey's orientation because participants are inquirers too.

¹⁷This also holds for work on texts. The inquirer is making connections to find connections in the text.

Inside the Process With an "Attitude." If we take seriously the analogy of the inquirer to that of a flower attempting to attain a better relationship to other features of the world, then we understand the impossibility of a fully objective orientation. As systemic therapists put it, we cannot be outside the system. Dewey (1922) argued that the worst thing that happened in Western philosophy was the quest for certainty. Socrates and Plato started it in response to Athenian political failures. Descartes continued it with his effort to put knowledge on a foundation beyond doubt. From a pragmatic point of view, the inquirer is always part of the world of phenomena. Thus, human intelligence touches all knowledge. For this reason, just as no knowledge is objective, none is subjective either. That is because, as discussed earlier, intelligence is formed in the process of interaction/communication with others and with things in the world.

Although Dewey argued against the quest for certainty, he strongly endorsed what he called the *experimental attitude*. Dewey did not try to do social inquiry in the laboratory, although he did want science classes to spend more time in laboratories and less memorizing texts. By the *experimental attitude*, he meant the willingness to act in the world so as to make a difference and to take into account the effects our actions have. A communication consultant who derives principles from lived practice as well as from personal experience and academic sources, and who assesses those principles, modifying them as needed, exemplifies the experimental attitude. A consultant who takes a standard road show from one organization or community to another without engaging the details of participants' lived experience does not have such an attitude.

Avoiding the Psychology Fallacy. Social processes are always in motion. That does not mean ignoring ritualized activities. It means that persons must work to maintain stabilities. Sometimes the stories we have about the stability of practices do not reflect the change that must occur with new conditions and with the experience of having done the same thing before. These stories about stability do influence change, however. They may, for example, highlight continuity over creativity. They could then inform the practice of disattending to novel actions and of telling stories about what is repeated.

Although all life is in process, when we use reflective intelligence to examine any activity, we must in some way hold some aspect of it before us. That need not mean committing what James (1890/1950) called the "psychologist's fallacy" (p. 196). James' point was that psychologists tend to err by thinking that principles adequate to describe a finished product can explain satisfactorily the processes that led to its creation. For example, when studying a family, one could look at its communication pattern and report finding a coalition between father and son and another between

mother and daughter. Perhaps one could say that the coalitions conflict. From this could come principles familiar to structural analysis, such as, "Cross-generational coalitions based on gender endanger the husband-wife relationship."

Now consider what the foregoing analysis misses: What was happening when the coalitions began to form? When were the coalitions enacted? In what kind of episodes? How is the action within an episode of coalition enactment done? What forms of action maintain the coalitions within and across episodes? Who feels most secure¹⁸ when the coalition activity is enacted? When in the course of the action does someone begin to feel protected or threatened?¹⁹ These questions help us and the clients understand how the logic of family practice was created in action. They also help the family see that other forms of coherence were and are possible.

Understanding the Inquiry Process as Action in the World

For traditionalists, Dewey (1938) seemed to invert most notions of logic and inquiry in an almost perverse way. The title of his book, *Logic: The Theory of Inquiry*, seems wrongheaded. Is not logic a self-contained subject of philosophy? Dewey said no. Action is the orienting conception, and logic is a tool integral to other aspects of inquiry. The logic of inquiry is an emergent creation in inquiry. One cannot separate it from how we attend, perceive, name, recall, state propositions, and act. If action is primary, then inquiry concerns the consequences that our judgments have. Inquiry is not only about supporting propositions. That is one possible activity in the inquiry process. Inquiry is about getting things done.

A person or persons identify elements of imbalance or discord in experience. The part of experience judged to be involved in the discord is studied so that the inquirer understands it in a particular way. Thus, in light of the inquirer's relationship to it, it becomes a *determinate situation*. The inquirer attempts to make (predicate) a *judgment* about that whole situation. That judgment implicates concrete lines of action with observable consequences, which should improve the situation.

The inquirer attempts to warrant the assertion of judgments. Doing so requires specifying features of the situation, ways of acting in it, and the consequents of action. These are not objectively given as this or that. No

¹⁸This kind of question comes from the idea that so long as the system exists at all, some features of it will serve to maintain it.

¹⁹A structural therapist with a systemic orientation might very well investigate some or all of these matters. Unlike a systemic therapist, however, the kind of change he or she would attempt to produce would be in the service of creating structure that conforms to universal structural principles.

observation is simply objective or subjective. They are created at the intersection of persons and phenomena. Picking out this or that as a relevant feature in inquiry is a matter of forming percepts in the course of engagement. Percepts can be temporarily stabilized for specific purposes as determinate objects of inquiry. In this process of making determinations, formulating propositions can be helpful. Propositions do many things. They can consist of hypotheses, the tests of which guide us toward warranted judgments. They can be theoretical descriptions that help us form percepts and objects. They organize relationships among objects. They add specificity of a kind to the consequences putting judgments into action.

This process is not linear. Emerging percepts influence the propositions that can be formed, just as propositions guide the formation of percepts as stable objects. Propositions as hypotheses emerge from observations, and they direct us to observe in certain ways. The consequences of our actions guided by these propositions can influence the way a situation is later specified, leading to new propositions, tests, and judgments. In other words, inquiry is a continual spiraling process of adaptation–adjustment. Our effort to *unpack* aspects of the foregoing sketch follows.

Determination of a Situation as the “Subject” of Inquiry. Someone engages in a process of inquiry to improve a situation. To do so, she or he acts to make the flow of raw sensory data determinate for her or his purposes. All living creatures do this all the time. When we identify a situation as needing improvement, we select and relate particular features of experience. It becomes, in Dewey’s terminology, the *subject* of inquiry. Based on the mosaic principle of organizations, the inquirer need not study everything. Instead he or she must consider what features need to be included as part of the determinate situation. The subject of inquiry may evolve as it proceeds. To make a situation determinate, the inquirer constitutes particular phenomena as worthy of attention, as this or that feature of the subject.

The Limitations of Concepts and Variables in Making Determinations. Early in this century, James (1909/1996) called for *thick description* to replace the *thinness* of *concepts*. *Concepts*, he argued, are glosses that ignore the rich detail of life as lived. Just because you call someone an equestrian, James said, does not mean that person never walks. This reduction to concepts partly explains James’ anger at *vicious intellectualism* in philosophy. Critical Cultural Studies of the Marxist sort well exemplifies just how reduction to concepts can reduce social analysis first to formula and category and then to impersonal hatred. Sets of people are often categorized as *working class* or *bourgeois* on the basis of their relationship to the means of production. In some perturbations, they may be categorized by their

identity as gay or straight, male or female, colonized or colonialist. The details of family traditions and practices, personal talents, loves, hates, triumphs, cruelties, kindnesses, tragedies, accomplishments, and the like disappear. James (1909/1996) observed that this is how we set group against group.²⁰

The critique of concepts leads directly to a critique of variable analysis. A *variable* is typically defined as a concept that can take different values. If the researcher recognizes what he or she is doing, there is nothing, in principle, wrong with using the logic of variable analysis for some aspects of inquiry. Quantitative work can be an excellent way to identify areas of inquiry. For example, quantitative findings about family violence not only focused qualitative inquiry on the problem, but also directed it away from the assumption that such violence is largely confined to the working class and undereducated people.

From a pragmatist’s perspective, the tools of variable analysis can provide only a starting place for a detailed understanding of social action. First, this is because variables as concepts provide thin description. In addition, the assumptions of variable analysis do not closely match the ideas about language, coherence, and social order advanced by pragmatism’s biological–evolutionary ideas. The logic of variable analysis requires each observation to be independent of others. In contrast, elements of a system do not just affect other elements. They are part of the formation of other elements.

Consider how, using CMM, we attempt to understand a man’s statement that he must fight when someone insults a female family member or acquaintance. Quantitative research showing a probability beyond chance for a fight to occur following such an insult in a particular cultural setting may have sparked our interest. To understand these events, we would find out how stories of responsibility, responding to insult, family obligations, and so on integrally form the story of being a respected man. The fight response to insult is not a correlate of manhood. In some cultures, it is integral to the story of being a man.

“Percepts” and Definitions. How can we get along without concepts and variables? Don’t we have to define matters such as a cultural view of manhood? Isn’t definition a matter of connecting here the concept *man* to concepts such as *protector*? Peirce (1905; cited in Burke, 1994) proposed the idea of *percepts* to replace or augment definitions. Although that term

²⁰Nothing in pragmatism obviates considering matters such as modes of production, gender, colonialism, and so on. Indeed, Dewey wrote strong criticisms of capitalism, sexism, and colonialism. He did not, however, simply categorize persons or traditions without examination of the details of a person’s practice or reduce social processes a priori to simple conflicts of the progressive elements and enemies of the people.

has lost currency, it can provide a richer way to think about elements in a statement.

Identifying something must include sensations, which are meaningless in isolation. They become meaningful when contingent on our actions and when they point us toward future actions. Sensations are only important as consequences of actions performed (Dewey, 1929/1960). Peirce regarded all inquiry as action. Dewey (1938, 1939) followed Peirce's revolutionary ideas about definitions that come from that insight.

Peirce used lithium to explain his *percept* notion. A textbook definition will give its atomic weight. An experienced scientist will tell you that, to find it among other elements, you must look for those with various properties. Peirce then offered examples of results expected from a number of scientific procedures using lithium. According to Peirce (1902):

The peculiarity of this definition—or rather this precept that is more serviceable than a definition—is that it tells you what the word lithium denotes by prescribing what you are to do in order to gain a perceptual acquaintance with the object of the word. (cited in Burke, 1994, p.11)

All living creatures (within the scope of their neurophysiological possibilities) make identifications like this—they form percepts useful in action. In this way, raw sensory data are made determinate. In human inquiry, the process of making objects determinate often employs language. Notice that this Peirce–Dewey view differs from simple operationalism. The latter uses measurement operations to define objects for a particular study. In the pragmatic tradition, percepts continue to evolve in the course of experience. Indeed, our *feel for how to go on* (Wittgenstein's phrase) with a percept must go beyond what we can put into words. Polanyi (1958) called this *feel* the tacit dimension of inquiry.

The idea of *percepts* is equally useful when considering theoretical statements. Notice what happens to the relationship between a written definition of a term such as *context* that we use in CMM and the percept of context that inquirers develop employing CMM. We do not feel obliged finally to reduce the percept to a fixed definition of context. In a pragmatist way of working, inquiry consists of open-ended, continuous action in a changing world. The definitions we offer should help inquirers further develop their percepts and reflect on what they are doing at moments when this seems useful. If the theoretical line of work is useful, it will lead to successive enrichments and modifications of definitions.

CMM has been criticized for definitional imprecision. It does not have the clean, unchanging operational definitions found in theories with a different philosophical heritage (Griffin, 1999). Guilty as charged. CMM relies on case reports as well as descriptions and definitions to show how

ideas such as context are used in this and that situation. As work develops, the descriptions of our terms should evolve in richness and become more useful tools.

Determining “Objects” That Point into the Future. Evolving percepts lead to the forming of determinant objects at moments in the process of inquiry. We say, for example, “What we have just heard is an effort to terminate the episode.” We have expressed it in language to facilitate reflection at a particular phase of inquiry. In that way, we have constituted it as a determinate object. The objects of inquiry are not given in nature and discovered by inquiry (Dewey, 1929/1960, 1938, 1941). As we work, percepts and their partial objectifications can change. A determination can never exhaust the percept that gives rise to it. We may usefully point to a constructed object such as *an episode termination move*, and we may have a definition for such observations. However, our percept includes the feel we have for the variety of such behaviors, their multiple possibilities, our way of listening for them, and much more.

Dewey used the term *object* to include a physical thing such as a table or bottle as well as an abstraction such as *context*, *act*, or *logical operator*. Dewey's concern with objects as they function to create a particular process of inquiry permits this expansion of usage. When we constitute objects, we create a way to continue working with them. They point us into the future. When a high school student asks a friend, “Want to get a Coke?”, a can of soda may be constituted as a feature used in a pattern of social interaction. If a pragmatism-informed inquirer studied this interaction, the Coke would be constituted as a complex object. The inquirer would not ignore its relationship to capital and production, but she or he would not assume those relationships are the most important. Instead, the Coke would be constituted as an object within the details of the lives lived by the persons involved: Did they have a Coke together when they met? What are they feeling when drinking it? How do they communicate with the Coke in hand? How does the Coke relate them to other teenagers? As we study the place of Coke in various forms of interaction, we are continually forming a percept of Coke that we can treat as a particular stable object at a moment of inquiry.

Consider a different kind of object, such as the way a manager addresses subordinates. Using CMM, we constitute the manager's talk as a different object of study than would a traditional psychologist. We would constitute the talk as the conjoint action of the manager and her underlings. A traditional psychologist might constitute it as a symptom of a mental state. How the talk is constituted as an object of inquiry has obvious consequences for how inquiry is conducted. Notice also that theoretical objects such as contexts, conjoint action, and the like are also determinate

pothesis guides work with the organization as we seek to act in ways leading to observations that we find consistent or inconsistent with it. Support for it is compared to that of other hypotheses. Typically we develop new hypotheses, modifying and discarding old ones in our ongoing work. This is consistent with most systemic practice and is not limited to CMM.

Judgments. According to Dewey (1938, 1941), we do not form judgments about propositions. We make judgments about the subject of inquiry. In the prior example, a belief that the systemic hypothesis stated earlier is better supported than are others would lead us to a judgment. The judgment might be, "The organization is caught in a strange loop of repeated crises from which it can't presently escape without change in its actions and stories." Such a judgment, according to Dewey, is the attribution of a determinate predicate to a determinate subject. That seems like traditional analytic logic talk, attributing predicates to subjects. However, *subject* has Dewey's specialized meaning here (a situation made determinate), and *predicate*, Dewey said, implies action. Judgment directs that a course of action should be predicated of the subject.

Why is predication fundamentally action? To understand, we need to return to pragmatist ideas about language. Dewey (1911/1933) argued that the verbal sounds around a child become meaningful in the contexts of activity, in patterns including objects and acts. "A child associates hat with putting something on the head when going out doors" (p. 144). The word *hat* attains meaning by its use in similar contexts. If we think about this activity in the abstract in philosophical terms, we can say that the action "putting-on-the-head" is the predicate of hat. Thus, predications are originally actions because meaning is use.

Actions and Consequences. Judgments such as the previous one imply material actions. In the foregoing example, a consultant might act in various ways. For example, he or she might lead organization members to explore the higher order creativity story. A reformulated story might not require the absence of any coordination. Another course of action might be to explore ways other than cycles of crisis production by which members show commitment to creativity and the organization. Many other possibilities exist. The inquirer must then look at the consequences of such actions. In other words, how has the problematic situation changed? Of course, consequences are percepts. Such percepts may need to be made determinate objects to facilitate reflection on the work.

If the inquirer is doing critical or interpretive rather than interventive work, a similar process occurs. Now the situation consists of an interpreter in a problematic condition with respect to understanding the text. Working with the text, the same hypothesis and others could be formulated. The hypotheses now guide the interrogation of the text. The judg-

ment would be an overall account of the text that makes it a determinate whole. The resulting action implied is that it is useful to go on using CMM or other means in the critical enterprise, and that the ideas developing with the guidance of the theory facilitate carrying the work forward.

Warranted Assertability and Consequences

Warranted assertability replaces truth in Dewey's mature philosophy (Tiles, 1988; Westbrook, 1991). The support obtained for determinations—including theoretical objects, objects in the situation, and hypotheses—warrant a judgment. Most important, however, are the consequences obtained by actions stemming from a judgment. Judgments involve the connections between means and consequents (Dewey, 1938).

Dewey (1938) described his work on inquiry as a correspondence theory, but not correspondence between a propositional map and reality. Correspondence for him occurs between actions (means) based on judgments and the consequences brought about by those actions. What, then, makes for a powerful warrant? The answer is useful consequents of our judgments. Warranted assertability is not simply a claim by a particular inquirer. Dewey was very much aware of the role played by the community of inquirers in reaching agreement on ways to constitute objects, state propositions, and assess consequences. In this, he predated Kuhn (1962) by almost 25 years. In our organizational-crisis cycles example, the warranting of judgment occurs in several ways. First, it is done by showing how we established objects of inquiry, such as the story of creativity. It also occurs by appeal to the viability of the theoretical statements that guided us in our inquiry, including any modifications that took place as we proceeded. We appeal to the coherence of our chosen actions with the judgment. Finally, we examine the changes that occurred in the organization and the evidence that the changes had something to do with the details of our practice. For example, we diagram the strange loop hypothesis and also begin exploring new ways to be creative in a workshop or interview setting. Suppose weeks later we hear the report that when persons have not talked together about their work in several days, one person says to another, "Haven't heard from you, are you going strange 'loopy' on us?" This would be an unusually clear, but not unprecedented, indication of connections among judgments, means, and consequences.²²

²²Usually the support is less obvious. Nonetheless, The Kensington Consultation Centre, London, reports a case of a quarreling couple that asked to take a diagram of a strange loop home with them. They put it up in their bathroom. At their next session, when they began to repeat their old pattern, one of them said, "It's the loop in the loo again." Both laughed and the pattern stopped. They said that this has happened several times at home and it stopped the pattern every time.

Dewey's idea of consequences needs further elaboration. When Charles Sanders Peirce was asked why he did not call his theory *practicalism*, he responded that such a name implied a narrow, shortsighted view of consequence (Hookway, 1985). Dewey criticized James' (1897/1956) famous book *The Will to Believe* because he thought it amounted to saying that a belief that makes an individual feel good is thereby justified (Westbrook, 1991). Dewey (1922) based his view of consequences on his evolutionary-biological understanding. He argued that no action exists in isolation. It will connect with many other acts and thus will have multiple consequences. Establishing means-consequence relationships therefore requires a careful examination of those consequences. Indeed, they very well could extend beyond the original determination of the situation. In our organizational example, we must not only assess whether crises produce less stress, but also should examine whether creative work continues. If not, members no longer may value the organization. In an inquiry concerning labor-management problems, the inquirer might want to assess consequences in terms of the long-term welfare of workers and not just whether reduced conflict occurs.

The Evolving Ends of Inquiry. In our example above, we found that assessing the consequences of action, like other moves in the inquiry process, can lead to a redefinition of the situation and thus to a different idea about the ends of our inquiry. For Dewey, (1925/1958) ends are always *ends in view*. They are constituted in the process of action. Research that claims to be practical but limits its scope to observing the way participants pursue preestablished goals, such as how a group solves a problem given to it, is not fully relevant to the world of experience.

TAKING DEWEY'S UNDERSTANDING OF INQUIRY SERIOUSLY: ADVANTAGES, LIMITATIONS, AND EXTENSIONS

A strange disjunction of emphasis appears in Dewey's work on inquiry. Dewey was heavily involved in social issues including women's rights, minority rights, the rights of working people, limiting the power of capital, educational reform, fostering grass roots democracy, and the proper treatment of China (Westbrook, 1991). However, in his discussion of inquiry, he mostly examined physical and natural sciences. Science works by careful observation, manipulation, and assessment of consequences. In so doing, it attained much more success than philosophy and social disciplines. Dewey thought the latter overemphasized detached speculation, instead of treating ideas as part of action in the world. Science presents a

good model for the social disciplines if we consider the way scientists really work, as opposed to scientists' reconstructed reports (Dewey, 1938). Nonetheless, Dewey (1938) recognized that the world of human action is not amenable to the controlled studies of laboratory science. We think it is useful to reconsider Dewey's contributions from a more contemporary perspective. His naturalized view of inquiry offers the promise of enriching the way we do social inquiry with qualitative methods. In much of what follows, we are guided by the present work of systemic therapists and consultants.

New Forms of Research Reports

Making the account of inquiry closer to lived practice has the advantage of focusing the inquirer and the teacher of inquiry on crucial features that research reports typically treat as background and fail to discuss explicitly. A research report following Dewey's account would specifically include determination of the situation. To do this, a researcher should respect Dewey's understanding of the inquirer as an engaged participant. This would guide researchers in clarifying their relationship to what they study. They would have to go beyond identifying a topic and more specifically identify what is studied. For example, when working with a text,²³ the situation is not the conditions that the text describes. The inquirer can only work with, but cannot change, the text. The *situation* refers to a relationship between the text and the inquirer in which the inquirer needs a richer or more coherent understanding of the materials. In interventive work, *situation* (or some more felicitous term) refers to the relationships among the persons desiring consultation and their association with the inquirer.

The idea of the researcher as engaged participant leads to posing research questions, hypotheses, and other instrumentalities in view of the evolving relationship between the inquirer and participants or texts. If we follow Dewey, the literature review would conclude with research questions. However, a researcher typically would mark stated hypotheses as *provisional hypotheses*. The methods section would remain traditional, but a researcher might divide it into *initial methods* and *evolved methods*. This would clarify the choices a scholar made at the start of inquiry and what additional methods might be added as work progressed. On Dewey's model, the introduction of additional methods may accompany formulation of new hypotheses as tools if these methods remain consistent with other features of practice.

²³We are using *texts* here broadly to refer to any fabrications such as transcripts, video tapes, and so on.

The report of data and interpretation would appear sequentially. It would include the creation of successive hypotheses and new descriptions, as well as the evolution of percepts and objects.²⁴ For example, in a study of a multicultural organization, Chong (1998) relied on excerpts from various interviews. These showed how she developed her own percept of what American salesmen considered "Korean Management Style" to be and how the salesmen developed their percept across very different contexts. This is much more useful than simply stating a definition. From her work, we share a bit of the feel for the percept as an emergent factor.

In CMM research, interpretation can include the role of the inquirer in the process of interactions with others. In some clinical studies, hypotheses about the relationship of the therapist to the client at a particular moment are crucial. That relationship can be part of the intervention (see Cronen, Pearce, & Tomm, 1985). In a nonclinical study, Marsh, Rosser, and Harré (1978) formulated hypotheses about how participants in disorder at English football games successively would adjust their accounts in light of their relationship to establishment professors. As new understanding of a situation emerges, and as the situation changes during inquiry, practitioners would report why new hypotheses are formulated and how those guided work.

A section entitled "Judgment and Consequences" would follow the discussion of findings and interpretations. This is more than a cosmetic move. It would refer to the overall impact of the work on the situation, much as a "Discussion" section does now. Labeling the section this way, however, alerts the reader and author(s) to the fact that judgments possess moral dimensions. Making a judgment about a situation involves more than weaving data and interpretations together. Use of the concept of judgment occurs because a claim is being made about how a current or changed situation contributes to a good life. Last would be a section entitled "Implications for Future Action" rather than "Conclusion." Here the author(s) discusses the implications for inquiry much as is done today. The fact that Deweyan inquirers view new principles as instrumentalities, not as maps of an underlying essence, suggests the need for the different label. Regarding the results of inquiry this way, however, requires a different view of generality.

Generality Based on the Case Law Analogue

Qualitative researchers in the tradition of pragmatism often are questioned about the generalizability of their work. If understandings are par-

²⁴An excellent example of this kind of research report is Hernandez' (1999) dissertation study of the consequences of displacement due to political violence in Colombia.

ticular to situated interaction and are not considered representations of an unchanging foundational reality, what are they worth?²⁵ Dewey's contention that all propositions are instrumentalities to be used and modified in the process of inquiring implies the answer. Kvale (1996) discussed a form of generalization drawn from case law based on ideas first presented by Kennedy (1979). A new principle of law is derived from a specific case. One assesses its applicability to a future case by examining evidence and developing arguments for its applicability. In communication research, we can employ an additional kind of rigor as we investigate how well the principles developed in prior research guide us in new work.²⁶ As in case law, we would not expect the principle typically to be affirmed or rejected in whole, although that could happen. More frequently, it would develop as it is used in new cases.

Restricting the Term *Proposition* and Recognizing Other Forms

Much philosophical criticism claims that Dewey's ideas about propositions are not developed sufficiently (Burke, 1994). We think that he used the term too broadly. He obscured the distinctive functions of instrumentalities that are not propositional in form. Dewey treated descriptions, case references, and models as fundamentally propositions. We find it more useful to think of descriptions, extended case examples, and models as distinctive instrumentalities. For example, qualitative inquirers who study situated communication, particularly those who are practitioners, often appeal to prior cases. These references are very helpful for developing percepts because they deal with similar phenomena in various contexts while retaining the details of those contexts. In a similar way, prior case references guide the formation of hypotheses. Descriptions complement formal definitions because they are more open ended. They can be enriched and extended. Sometimes definitions mislead because they are thin. These do lend themselves to reflection and recall so long as we recognize their limits. They serve a useful, but different, function. In the pragmatist view of language, different function amounts to different meaning as discussed earlier in this chapter.

Models allow the inquirer to relate aspects of theory in ways other than the deductive form for which propositions are well suited (Harré, 1970).

²⁵This argument that an unchanging reality must exist for knowledge to be possible started with Parmenides in the 6th century B.C.E. Dewey's response to it has much in common with Aristotle's account of the arts of *praxis* in his *Nicomachean Ethics*.

²⁶When legal principles evolve in a way that seem to have bad social consequences, legislative action is required to change the direction in which case law is developing.

The relationships in Fig. 2.1 do not guide the inquirer through a series of deductions. We could restate Fig. 2.1 as a set of propositions, but that would obscure the way it guides inquiry by displaying multiple, changeable relationships. In this way, it encourages an inquirer to consider possible connections among phenomena to explore. Baker and Hacker (1984) have shown that forcing other kinds of statements into propositional form does not extract a propositional core; it changes the meaning.

Using propositions to cover many kind of instrumentalities also obscures the important role of analogues in the development of theory. Harré (1986) described how theory families develop using analytic analogues and source analogues. An analytic analogue provides guidance for where and how to look at the world. Darwin's work is one of Harré's crucial examples. Darwin seems to have looked at nature with "the eye of a country gentleman . . . seeing lines of descent, blood ties, etc., where another observer (Captain Fitzroy, for instance) might see the manifestation of God's munificence" (Harré, 1986, p. 202). Darwin's work in the natural world informed Dewey about how to look at the social world. CMM, in turn, uses Darwin's work for its analytic analogue. We consider social phenomena to be aspects of systems coevolving in situated action as described in the first part of this chapter. For example, persons' autobiographical stories are explored with a view to how they may be coevolving with stories about relationships and stories about particular episodes of action (Harré, 1986).

Source analogues provide ways to think about how one act, such as an expression of love, is consequential for a responsive act, and how those acts inform and are informed by stories of relationships and episodes. In CMM, we do not reduce social coherence to Darwinian causal principles. Evolution has produced distinctive ways of making social coherence. The CMM uses as its source analogue an encounter that Barnett Pearce had years ago. In that encounter, he and a passerby cobbled together a conversation about motorcycles that was useful in multiple ways, although they brought to the conversation very different cultural background, education, and communication styles (personal communication, 1976). In such encounters, persons cocreate what Dewey called *habits* and Wittgenstein called *rules*. This source analogue orients us to a dynamic conception of rules and away from treating formalized episodes as paradigmatic.

Going Beyond Homeostatic Explanations of Change

Our most serious criticism of Dewey's work is that it is far too homeostatic for a contemporary understanding of systems. He limited inquiry to situations of disequilibrium and breakdown. This is too constrained an understanding of evolution. Evolution does not merely respond to unfavorable

conditions. If it did, how could we explain the human ability to sing opera (Gould, 1980)? Every evolutionary move opens new future possibilities. In institutional practice, those informed by ideas such as Senge's (1990) notion of the *learning organization* recognize this. Increasingly, consultants are being asked not only to help deal with problems, but also to inquire into organizational processes to improve their ability to act into the future. Another limitation occurs when some situations are problematic exactly because they *are* determinate for the participants, not because they are confusing. These may be so structured that they trap participants in unwanted, repeated patterns that they know and can describe very well (Bateson, 1972). Thus, a productive intervention may involve making the situation less determinate for the participants and creating new evolutionary possibilities.

A Revised Definition of Inquiry. A two-sided view of inquiry for the social disciplines is called for if we abandon a strictly homeostatic orientation and recognize, with Dewey, that all involved are inquirers. The term *two-sided* refers to the perspective of the professional inquirer and to that of the other participants, who also are inquirers. We propose the following definition specific to social inquiry:

Social inquiry is a process in which: (1) The practical specialist, using controlled investigation, engages with others making his or her relationship to a situation determinate for the purpose of facilitating new and productive affordances and constraints in future conjoint action. (2) Other participants in the situation engage to change the situation, making it less determinate and/or making new determinations, for the purpose of creating new and productive affordances and constraints in future conjoint action.

An Expanded View of Change in Human Systems. Dewey's homeostatic view led him to the idea that major changes in human affairs occur because of discontinuity between native impulses and social obligations.²⁷ This is even a limited a view of homeostasis. Although we do not doubt that conflicts of native impulse and social expectations sometimes are constructed, we do not think they are the primary engines of major social change. All sorts of socially constructed ways of living can become problematic for reasons other than imbalance between impulse and social expectation.

²⁷This sounds quite Freudian, but Dewey was not following Freud on this point. Freud thought that such conflict of social expectation and impulse was the constant and natural condition of human life. Dewey believed that discontinuity was the unusual result of social action.

Responding to the Danger of Self-Sealing Warrantability

Dewey was well aware that the consequences crucial to warranting a judgment must be understood in terms of the procedures used to determine them. This problem is not limited to Dewey's pragmatism and is as old as Plato's *Meno* dialogue. We think that pragmatist philosophy has more resources for responding to it than Dewey spelled out, however. At least three answers exist to the charge of solipsism intrinsic to pragmatism.

The first answer is that avoiding solipsism in this kind of work depends on the ability of a theory and those who use it to generate a number of alternative hypotheses. It also relies on their ability to reformulate hypotheses as percepts evolve through detailed engagement. This avoids a premature rush to interjudge consensus. The second answer is that a social theory should be learned in a wide educational context. We find it consistent with Dewey's ideas to observe that the value of a theory cannot be independent of the larger cultural and institutional practices in which it is embedded. If we want inquirers who can decide whether consequences fail to support their judgments and whether instrumentalities of their theory helpfully inform judgments, they need exposure to alternative ways of understanding not bound by one theory. That does not mean every program that provides training must train in alternative theories. Typically graduate students come to systemic programs with prior training in other kinds of work and a good liberal education.

The third answer is based on realism. Although reality does not mandate fully how we determine objects, propositions, or consequences, it plays a role. The character Linus from the comic strip "Peanuts" says, "No matter how hard you try, you cannot bounce a potato chip." We can ensure that the social world can speak to us if we develop theory based in large measure on data coming from inquirers' engagement with the complex lives of real persons who do things together. The third response to the prospect of solipsism leads us to the final topic in this chapter.

IMPLICATIONS FOR A DISTINCTIVE PRAGMATIST DEFINITION OF THEORY

We think the pragmatist understanding of inquiry suggests a distinctive kind of communication theory. CMM is one exemplar of what Cronen (1995b) identified as *practical theory* as distinct from *applied theory*. Applied theory retains the dichotomy of theory and practice. It simply means that theory, of whatever sort and however developed, can be applied in the world. Practical theory specifically rejects the distinction between theory and practice.

Dewey (1929/1960) strongly opposed the theory–practice dualism. Consistent with his view, practitioners who do interventive research and others who engage with the complexities of persons' lived experience become central to the inquiry process. By contrast, experimental laboratory research, with its emphasis on variable analysis and control, loses ecological validity for complex social systems that construct their own ends in view. As we have observed, distinctions emergent in natural and social evolution are not a good match for variable analysis. Moreover, the control of extraneous variables by random assignment of subjects typically used in that approach precludes investigating what in the system changes when an interventive move is made.

Historical, critical, and interpretive research can avoid those problems and make very important contributions. Interpretive and critical research that is based on bounded texts redefines the situation as a relationship between materials and the inquirer, however. This limits the positions from which inquiry can be conducted. Interventive research mandates acting so as to change the situation. This is Cronen's (1998, 2000) definition of *practical theory*: "A Practical Theory informs a coherent grammar, consistent with data, that facilitates professionals' ability to join with others in the co-creation of new affordances and constraints in social action." This definition does not map a newly discovered category *out there* in reality. It is an instrument intended to point inquiry in particular directions. The term *grammar* here refers to an inquirer's understanding of the communication process (theory) that guides engagement in the process of inquiry. A grammar consists of a set of abilities for responding to others that makes sense rather than nonsense, integrating the actions of observing, understanding, recalling speaking, manipulating, and moving. A practical theory provides a set of formal instrumentalities that inform the rules that inquirers use when joining with others. Of course, more than just theory informs a practitioner's grammar of practices. The past experiences of inquirers, their unique abilities, the conjoint action within a particular episode of inquiry, the specific methods used, and other factors also condition it. Consistent with what has been said, the data supporting a practical theory must come in important measure from the detailed engagement of practice. A consequence of immersion in practice is that practical theory principles evolve as they are used in new contexts of inquiry.

A practical theory is overtly a heuristic device rather than a map to be proved true. In CMM, for example, our main emphasis is not whether it is true that some stories provide context for others, although we do possess some traditional evidence for that. The most important evidence for that theoretical description is its instrumental value in working with particular situations. We might ask roommates from different countries, "How would things be different between you and your roommate if he did not cook un-

usual food in the room?" Here we would explore the relationship between stories about cooking episodes and stories about the relationship. Are the episodes about cooking the higher order ones within which the relationship story is forming? Is it the other way around? This has been a productive kind of question, and the consequences of its use support that aspect of the theory.

The definition of *practical theory* also directs attention to the way learning depends on the patterns that communication professionals and others conjointly produce. Change in patterns of communication is a co-construction, so the assessment of practical theories should include consequences for the professional as well as other participants. Work should show the continuing enrichment of principles and the development of tacit knowledge for all concerned. Professional inquirers should find that, by using a particular practical theory, they are developing a feel for how to act, just as a client should get a better feel for how to work with others.

Practical theories are not confined in their application to interventive work. The grammars they offer can be and are useful in doing interpretive and critical work. Critical and interpretive work can inform interventive practice reciprocally. Doing something that changes a situation is the fundamental form of inquiry for all life, however.

A FINAL NOTE

We offer the foregoing not as a final statement on what pragmatist inquiry really is, but as our way to engage the reader in thinking about how pragmatist ideas can be used to develop communication theory and research. For many years, communication has been treated as a questionable addition to the family of liberal arts disciplines. After all, its very name invites a grammar of action that culture and philosophy traditionally have set against a grammar of reflection. We do not say we have spent the last hour *psychologizing* or *anthropoligizing*. That sounds like nonsense. However, to say we have been communicating makes sense. Here we see Wittgenstein's point about a cloud of philosophy in a pinch of sentence-level grammar. Pragmatic tradition radically objects to the reflection-action duality. For a pragmatist, a grammar of action provides a sensible, naturalistic context within which features of inquiry may be understood. In pragmatism, communication is just the right sort of name for a discipline. It embraces the coherent continuity, the value of incompleteness, the spiraling quality of change and discovery, and the art and mystery in all human action.

We also offer the ideas developed herein with the hope that the reader will consider how this naturalistic understanding of inquiry might change the way we think about a number of important matters. These include the generality of findings, the criteria for evaluating theories, the role of defi-

nitions, the assessment of research outcomes, and the way scholars present research reports. In other words, we hope that, for our readers' ends in view, that we have not forgotten the water.

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