

CHAPTER 19

THE EXPERIENCE OF THEORIZING SENSEMAKING AS TOPIC AND RESOURCE

KARL E. WEICK

THE experience of theorizing is much like the experience of sensemaking. Both consist of actions that are explicative, evocative, equivocality reducing, exegetical, transient, narrative, embedded in paradigms, and meaningful. It is this correspondence that supplies both the topic and the resources for this chapter. And it is respect for this correspondence that is characteristic of the actual process of theory development that will be described. This correspondence is noteworthy since it is often neglected in polished prescriptions for steps to follow when trying to develop theory (e.g., Donaldson, 2003). The result of this neglect is theories that have less impact than they could have because authors hold back from digging deeper into their own experience and intuitions for ideas that matter. I discuss these issues in the following manner. First, I discuss the phenomenon of sensemaking, sampling heavily some properties that have a direct bearing on theory development. Second, I reverse the emphasis and take a closer look at the nature of the theorizing that

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drives the ongoing elaboration of ideas about sensemaking. Third, these discussions of sensemaking and theorizing are converted into guidelines for theory development.

19.1 ON SENSEMAKING

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Sensemaking, viewed as central both to the process of theorizing and to the conduct of everyday organizational life, is a sprawling collection of ongoing interpretive actions. To define this “sprawl” is to walk a thin line between trying to put plausible boundaries around a diverse set of actions that seem to cohere, while also trying to include enough properties so that the coherence is seen as distinctive and significant but something less than the totality of the human condition. This bounding is a crucial move in theory construction. It starts early, but it never stops. Theorizing involves continuously resetting the boundaries of the phenomenon and continuously rejustifying what has newly been included and excluded. In theorizing, as in everyday life, meanings always seem to become clear a little too late. Accounts, cognitions, and categories all lie in the path of earlier action, which means that definitions and theories tend to be retrospective summaries of ongoing inquiring rather than definitive constraints on future inquiring. These complications are evident in efforts to define sensemaking.

Some portraits of sensemaking suggest that it resembles an evolutionary process of blind variation and selective retention. “An evolutionary epistemology is implicit in organizational sensemaking, which consists of retrospective interpretations built during interaction” (Weick 1995*b*: 67). Here we see sensemaking being aligned with the insight that “a system can respond adaptively to its environment by mimicking inside itself the basic dynamics of evolutionary processes” (Warglien, 2002: 110), an insight that is tied directly to theory development when theorizing is described as “disciplined imagination” (Weick, 1989).

Some portraits of sensemaking suggest that it consists of activities that construct reality. For example the concept of sensemaking

focuses attention upon the idea that reality of everyday life must be seen as an ongoing “accomplishment”, which takes particular shape and form as individuals attempt to create order and make retrospective sense of the situations in which they find themselves. . . . The sensemaking metaphor encourages an analytical focus upon the processes through which individuals create and use symbols; it focuses attention upon the study of symbolic processes through which reality is created and sustained. Individuals are not seen as living *in*, and acting out their lives in relation *to*, a wider reality, so much as creating and sustaining images of a wider reality, in part to rationalize what they are doing. They realize

their reality, by “reading into” their situation patterns of significant meaning. (Morgan, Frost, and Pondy, 1983: 24)

Here, we see even more clearly the affinity between theorizing and sensemaking. When people make sense in any setting they use symbols to make meaning, remain sensitive to changes in ongoing events, and locate recurrent patterns that establish order in those changes.

Still other portraits of sensemaking emphasize its close ties to surprise and that which is equivocal (e.g., Mills, 2003: 35). For example, Magala (1997: 324) suggests that sensemaking means basically “inventing a new meaning (interpretation) for something that has already occurred during the organizing process, *but does not yet have a name* (italics in original), has never been recognized as a separate autonomous process, object, event.” Naming, interpreting, and inventing meanings are actions that lie at the core of theorizing. When this theorizing is directed at the phenomenon of organizational sensemaking theorists ask the question, “How does something come to be an event for organizational members?” When organizational actors face similar contexts of surprise and equivocality, they ask an equivalent question, “What’s the story here?” Their sensemaking doesn’t stop when they get an answer because all they’ve done so far is bring an event into existence. They face the further question, “If that’s the story, what should we do?” Now the problem is to bring a meaning into existence, a meaning that will stabilize continued acting but remain sensitive to the continuing flow of potentially new stories.

There are some portraits of sensemaking that are mischievous and can be misleading. For example, there is mischief in the title of my 1995 book that summarizes key ideas about sensemaking (Weick, 1995*b*). The book is titled *Sensemaking in Organizations*, which implies that if sensemaking stops the organization goes on. It doesn’t. That’s the point of the article on the collapse of sensemaking at Mann Gulch (Weick, 1993*a*). As sensemaking began to deteriorate so too did the organization of the firefighting crew. Weakening of one weakened the other. Sensemaking and organizing have been described as mutually constitutive almost from the beginning (e.g., Weick, 1969). But as my own lapse makes clear, that unity is easy to forget.

And speaking of unity, there is further mischief in the innocent punctuation mark called a hyphen. Hyphens are used to signify that two separate words such as sense-making, are to be read as a compounded single unit. I hyphenated sense-making in 1979, but dropped the hyphen in favor of the single word sensemaking in 1995. Why? The hyphenated word sense-making is still read as a compound process, assembled from at least two parts that remain parts with no clear rules for their assembling. If you do away with the hyphen then you do away with such distracting issues as what is sensing, what is making, and how and under what conditions do the two combine? Those are not my issues. Instead, I want to understand how the conditions of interdependency associated with organizing affect how people deal

with situations where there are too many or too few meanings. When people encounter such situations, they are already engaged in “absorbed coping” or as Heidegger called it, a *ready-to-hand* mode of engagement. Their actions are not compounds. Instead, people are aware of the world holistically as a network of interrelated projects, possible tasks, and “thwarted potentialities” (Packer, 1985: 1083. If an ongoing project is interrupted, then experience changes into an *unready-to-hand* mode, but it still isn’t a compound. “Particular aspects of the whole situation stand out but only against a background provided by the project we are engaged in and the interests and involvements guiding it” (Packer, 1985: 1084). What persists despite these interruptions are projects and routines for explaining, interpreting, and recovery (Weick, Sutcliffe, and Obstfeld, 1999). Compounds do not appear until people adopt a *present-at-hand* detached mode of engagement. To hyphenate sensemaking as it weaves in and out of everyday life is to carve that process at places other than at its joints.

Diverse as these portraits are they share a presumption that sensemaking is a complex process (Patriotta, 2003; Mills, 2003) involving evolution (Campbell, 1965; Warglien, 2002), interpretations (Lant, 2002), action (Laroche, 1995), and interaction (Taylor and Van Every, 2000). We can keep all of these in play if, for the duration of this chapter, we define sensemaking as the ongoing retrospective development of plausible images that rationalize what people are doing. This definition reminds us that retrospect, plausibility, images, reasons, identity, and most of all ongoing action are crucial in sensemaking, as they are also in theory development.

Sensemaking is defined not just by words that summarize its properties but also by its outcroppings. Any theorizing is dependent on the quality and extent of the details that ground it. To ground sensemaking is to study, for example, people such as incident commanders who have to size up chaotic streams of events. “By definition an emergency or crisis occurs suddenly and unpredictably; these incidents are characterized by their unfamiliarity, scale, and speed of escalation . . . The challenge for the incident commander is to continually make sense of the unexpected and often dynamic situation in order to deploy the available resources most efficiently” (Flin, 1996: 105). Problems in incident command, as in theory development, may occur when people neglect seven properties that have an important effect on sensemaking (Weick, 1995b: 17–62. These seven include (1) social context, (2) identity, (3) retrospect, (4) salient cues, (5) ongoing projects, (6) plausibility, and (7) enactment. These seven can be retained by means of the acronym, SIR COPE. They are important because they affect the extent to which people will update and develop their sense of the situation. These properties, in other words, have an effect on the willingness of people to disengage from their initial story and adopt a newer story that is more sensitive to the particulars of the present context. Faced with a confused world, a world not unlike that which puzzles the theorist, it is important not to view this confusion solely as a problem in decision making.

The necessity for moving beyond decision making is made clear by the late Paul Gleason, reputed to be one of the five best wildland firefighters in the world. Gleason said that when fighting fires, he was in a more mindful position as leader if he viewed his efforts at leadership as sensemaking rather than decision making. In his words, "If I make a decision it is a possession, I take pride in it, I tend to defend it and not listen to those who question it. If I make sense, then this is more dynamic and I listen and I can change it. A decision is something you polish. Sensemaking is a direction for the next period" (Personal communication, June 13, 1995). When Gleason perceives himself as making a decision, he reports that he postpones action so he can get the decision "right" and that after he makes the decision, he finds himself defending it rather than revising it to suit changing circumstances. Both polishing and defending eat up valuable time and encourage blind spots. If, instead, Gleason sees himself as making sense of an unfolding fire, then he gives his crew a direction for some indefinite period, a direction that by definition is dynamic, open to revision at any time, self-correcting, responsive, with its rationale being transparent.

Similar agility in theorizing occurs when that activity is also treated as a direction that is subject to revision, rather than as a decision that invokes selective attention in the service of justification. Other things being equal sensemaking is more fruitful in a context that allows for more interactions, clearer identities, more use of elapsed action as a guide, unobstructed access to a wider range of cues, closer attention to the ways in which the ongoing situation is changing, the replacement of less plausible stories of what is happening with those that incorporate even more observations than the stories they replace, and deeper acceptance of the reality that people act while thinking, which means they don't reach single decision points so much as they shape what they will next think about, act upon, and bring into existence.

My own grounding of the phenomenon of sensemaking sprawls almost as much as do my accounts of what is a common pattern across those outcroppings. Among the outcroppings of sensemaking that I have tried to understand are college students making sense of unexpected reward contingencies (Weick, 1964; Weick and Prestholdt, 1968), jazz musicians making sense of new music and imperfect performance (Weick, Gilfillan, and Keith, 1973; Weick, 1995*a*), soldiers trying to make sense of chaotic battlefields (Weick, 1985), air traffic controllers trying to make sense of a non-standard communiqué from a moving aircraft (Weick, 1990), therapy patients trying to make sense of unwelcome overtures from therapists (Weick, 1992*b*), smokejumpers making sense of a small fire that suddenly turns explosive (Weick, 1993*a*), flight operations personnel on an aircraft carrier trying to make sense of communiqués from pilots in trouble (Weick and Roberts, 1993), firefighters trying to make sense of the frightening order to drop their tools and run (Weick, 1996*a*, 2001), and medical practitioners trying to make sense of unexpected adverse medical events (Weick, 2002; Weick and Sutcliffe, 2003).

Some of these examples are more compelling than others. That has a subtle effect on theorizing. A compelling example animates the theorist to dig into that example deeply. But the resulting explanation tends to contract and to fit the example more tightly but everything else more loosely. Given the impossibility of drafting explanations that are simultaneously general, accurate, and simple (Thorngate, 1976) and given the probability that a compelling example compels one toward accuracy, the result is either an accurate explanation that struggles to be general and loses all hope of simplicity or an accurate explanation that struggles for simplicity and loses all hope of generality. In the case of the Mann Gulch disaster, arguably the most compelling instance of sensemaking I've worked with, there is an interesting twist in the fact that some readers see it is a blend of generality and accuracy and other readers see it as a blend of generality and simplicity. Mann Gulch is accurate-general when read as "a general theory of how organizations unravel, what the social conditions of such unraveling are, and how organizations can be made more resilient" (Dougherty, 2002: 852). Mann Gulch is accurate-simple when read as a depiction of leadership in a disintegrating organization that proposes four ways in which organizations can be made less vulnerable to interruptions in sensemaking (Gililand and Day, 2000: 335).

There are two lessons here with respect to outcroppings and theorizing. First, no one theorist can have it all, "all" being an explanation that is general, accurate, and simple. To develop a theory that falls short on one of these three dimensions is not a sign of incompetence but a sign of the intransigence of the task itself. Second, what is impossible for one theorist is often possible for a collection of theorists. A set of people, each with a different pattern of tradeoffs, can spread the weaknesses among them and collectively triangulate a set of ideas that survives as a robust general, simple, accurate account.

Hypothetically, a single theorist could do the same thing by drafting multiple versions of an explanation, each version trying to implement a different set of tradeoffs. I suspect this solution may be more common than we expect. Over the course of a career, people may start with accurate explanations. They know one thing really well, the object that was studied for their dissertation research. They move from this accurate explanation to efforts to generalize it, which means that their explanations grow more complex and less simple. As they continue to work with complex general explanations, they begin to see themes and patterns that are key triggers, drivers, and moments that were hard to see in all the general complexity. Once they articulate some of these simplicities they may then return to the place from which they started, and now actually see it for the first time. Whether the lone theorist moves from accurate to general to simple, or from accurate to simple to general, it is likely that the progression will be one that moves from superficial simplicity through confused complexity to profound simplicity (Schutz, 1979: 68–69). The trick is not to get cocky with one's superficial simplicities or disheartened by one's confused complexity.

Additional insight into the process of theory development viewed as an instance of sensemaking are found if we take a closer look at talking in order to think, and retrospectively elapsed experience.

19.1.1 Seeing What I Say

The signature of sensemaking theory is a question: “how can I know what I think until I see what I say?” People talk and examine their talk to see what they are thinking and what their talk might mean. The words they use in talking, the paradigms they impose while seeing, the images they carry forward from earlier episodes of sensemaking, all influence meaning. These words and paradigms are socialized and shaped by culture, institutions, projects, habits, assumptions, and identity. That doesn’t exclude much. The surprise, therefore, is the stubbornness with which a handful of meanings often persist and produce fixation, confirmation bias, selective perception, and the dogmatic true believer. Clearly, seeing what I say is neither as open-ended nor as creative as we might hope for. Organizations count on that very stability and inertia but theorists renounce it. They do so in ways such as writing *in order to* think, experimenting with different ways of seeing, and most of all by trying different words when they say things.

Vocabulary and the deployment of words are a big deal in my view of sensemaking (e.g., Weick, 1995a: ch. 5) and in my work as a theorist (see discussion of theory as glossing in Weick, 1981). For example, the phrase “cognitive dissonance” (Festinger, 1957) was a new term in 1957, it resonated in its joint emphasis on cognition and interruption, and it has been sufficiently foundational to serve as a part of my saying ever since (e.g., Weick, 1995b: 11–13). My attempt to theorize the interconnection between organizing and sensemaking is summarized in a list of thirty-six terms (Weick, 1979: 241) that define the results of the interconnecting. The list serves to introduce novel distinctions, form the beginnings of a language to say and see organizing, and to link sensemaking to other literatures. To theorize about organizing is partly to craft a vocabulary and a grammar for organizational description. When that grammar is imposed on events, one’s thinking tends to be channeled in directions that embody the relationships highlighted in the language of the theory. Thus, people who talk the language of organizing, literally talk organization into existence. In doing so they are thereby enabled to think for the moment as if organizing mattered in ways defined in the theory. That thinking may prove useful. It may not. But that’s no different than the outcome of any episode of sensemaking.

In my own theorizing I often try to say things without using the verb form “to be.” This tactic, known as e-prime (Kellogg, 1987), means that I’m not allowed

to say “Reuben *is* a formidable competitor.” Instead, I’m forced to be explicit about the actions that went into the prohibited summary judgment. Now I say things like, “Reuben works with smaller margins, gets new products to market faster, does more manufacturing offshore, provides larger kickbacks, etc”. When I’m forced to forego the verb form “to be” I pay more attention to particulars, context, and the situation. I also tend to see more clearly what I am not in a position to say. If I say that Reuben operates on smaller margins, that may or may not mean that he is a competitor. It all depends on other explicit descriptions about how he behaves.

The larger point about e-prime is that it helps the theorist move closer to the territory that is being mapped. Part of my fascination with “saying” is summarized in one of Robert Irwin’s favorite maxims: “to see is to forget the name of the thing one sees” (Weschler, 1982: 203). In Irwin’s view sensemaking starts with perception of undifferentiated sensations. These sensations gradually take on meaning when they are named, systematized, and formalized. Essentially, when people engage in sensemaking, they invoke more and more abstractions, which means they move farther and farther away from their initial impressions. This transformation is necessary in order to share and coordinate perceptions, but people pay a price for it. As social complexity increases, people shift from perceptually based knowing to categorically based knowing in the interest of coordination (Baron and Misovich, 1999). As demands for coordination increase, concepts become simpler and more general in the interest of transmission. While these changes facilitate coordination, they do so at the potential cost of greater intellectual and emotional distance from the phenomena picked up by direct perception.

Thus, in a reversal of Robert Irwin’s maxim, people who succeed at coordination may fail at perception. They fail because they remember the name but not the substance of the originating experience. This means that whenever events occur that are beyond the reach of the labels that people do share, they will be the *last* to know about those events. If a coordinated group seldom reworks its labels, then there is a higher probability that it will be overwhelmed by changes that have been incubating unnoticed. That’s what happened when NASA engineers kept labeling the burn marks on O-rings, “within mission parameters” (Vaughan, 1996) and when, more recently, they labeled repeated foam shedding on the Columbia shuttle as an “in family” event meaning that it was well understood (Gehman, 2003). It wasn’t. Coordinated theorizing can produce similar lapses in accuracy as has been argued by Weick (1983) and Campbell (1979) in discussions of a cohesion–accuracy tradeoff in communities of scholars. Research groups that are more cohesive and tightly knit tend to develop less adequate theories than do those groups that are more loosely coupled. Tight coupling tends to produce more redundancy and more internal dependencies among sensors, which means that the sensors register less of what is being observed (Heider, 1959).

19.1.2 Retrospecting Elapsed Experience

Seeing what I say is not just an issue of words, conversation, and grammar. It is also an issue of retrospect. My focus on retrospect is part of a more pervasive tendency to be interested in reactive phenomena, literally phenomena where the action is less internally motivated and more a response or reaction to actions and contexts that originate elsewhere. People often enact their environments as we saw earlier. But what is crucial is that we also note that this means that they are the authors of that which constrains them. A pervasive focus on reactive phenomena is evident in my work on disasters, resilience, improvisation, recovery, adaptation, retrospect, firefighting. For example, consider the question, “What will be the next AIDS?” That’s not a question that interests me. What interests me is the impossibility of answering it and how people cope with that impossibility.

You can’t do much until the first wave of human infection occurs. You can’t prevent the next epidemic. Furthermore, signs get buried among other diseases. If you find a new virus, you don’t know whether it is significant or not until a human episode occurs. The trouble is that by the time you do establish that it is significant, the virus has already settled into hosts, reservoirs, and vectors and is being amplified. Edwin Kilbourne, a microbiologist at Mt. Sinai hospital states the reactive quality of diagnosis: “I think in a sense we have to be prepared to do what the Centers for Disease Control does so very well, and that is *put out fire*. . . . It’s not intellectually very satisfying to wait to react to a situation, but I think there’s only so much preliminary planning you can do. I think the preliminary planning has to focus on what you do when the emergency happens: Is your fire company well drilled? Are they ready to act, or are they sitting around the station house for months.” (Henig, 1993: 193–194)

The picture is one of perennially playing catch up. Geertz is sensitive to the reactive quality of living when he comments on “The after-the-fact, *ex post*, life-trailing nature of consciousness generally—occurrence first, formulation later on. . . . [Theorists make] a continual effort to devise systems of discourse that can keep up, more or less, with what, perhaps, is going on” (Geertz, 1995: 19).

There is a clear tension here, one that is prevalent in theorizing. When we look back over outcomes or data to see how they cohere and what they might mean, we are often looking at outcomes that were enacted by our own efforts (Weick, 2003a). Thus, retrospect and agency coexist, but it is often hard to reconcile proactive enactment and reactive retrospect. Furthermore, it is hard to separate that which we are able to will and enact from that which we can’t. In my own writing I tend to overattribute agency rather than underestimate it. Institutionalists and critical theorists tend to roll their eyes when I depict organizational actors as people who invent, improvise, create, conceive, enact, construct, transform, originate, make, and generate small wins that have large consequences. These attributions of agency obviously are overdetermined. They stem from such things as my fascination with small structures that have large consequences (Weick, 1993b), socialization into macro psychology and social psychology, efforts to offset an INTJ Myers-Briggs

bias in my own sensemaking (Weick, 1992a), skepticism that a linear stimulus–response unit of analysis is useful theorizing (Dewey, 1998), and equal skepticism that the monolith of “the” external environment is any more useful as a construct to explain human functioning.

One way to convert all of this into a lesson for theorizing is to borrow Adam Phillips’ counsel to those who craft psychoanalytic theory and apply it to organizational studies. Phillips said that psychoanalysis “does not need any more abstruse or sentimental abstractions—any new paradigms or radical revisions—it just needs more good sentences” (Phillips, 2001: xvi). Later on in his book, he cites just such a good sentence crafted by Leslie Farber. I quote this sentence for two reasons. First, it shows how words can bracket and improve thinking. Second, the content of this quotation is a perfect description of existence that is simultaneously enactive and reactive. The sentence is a welcome caution when I’m tempted to be carried away by enactive imagery. People have a

recurring temptation to apply the will . . . to those portions of life that not only will not comply, but that will become distorted under such coercion. Let me give a few examples: I can will knowledge, but not wisdom; going to bed, but not sleeping; eating but not hunger; meekness, but not humility; scrupulosity but not virtue; self-assertion or bravado, but not courage; lust, but not love; commiseration, but not sympathy; congratulations, but not admiration; religiosity, but not faith; reading, but not understanding . . . I can will speech or silence, but not conversation. (Phillips, 2001: 318–319)

19.1.3 Sensemaking as *Zeitgeist*

All theorizing begins somewhere, but since living is ongoing and overdetermined with people being thrown into events that are already underway, the nomination of beginnings and formative influences can seldom be stated with any certainty. But what is certain is that theorizing reflects the times, even if the theorist is the last person to notice this. Let me illustrate that by discussing a comment about the “origins” of sensemaking that took me by complete surprise. Everything that I’ve said about sensemaking bears an imprint of contemporary western society and its values. We all know that the times influence our inquiries, although some acknowledge this more readily than others (Kenneth Gergen has been remarkably lucid on this point. The idea of sensemaking certainly reflects the times. The idea has a historical, generational legacy but I didn’t spot it, Magala did (1997). He argued that two core ideas in sensemaking are the idea that each individual sensemaker is a “parliament of selves” (individuals have multiple identities) and that organizations are “negotiation parlors” where diverse views are reviewed. When combined, these two ideas allow “for a more egalitarian approach toward organizational processes and for a more democratic review of subjective meanings and intersubjective

negotiation procedures than would otherwise be the case” (Magala, 1997: 333). The historical generational twist to this condensed core is that

Weick’s concept of organizing as sensemaking [drafted in the late 1960s and published in 1969] can thus be considered a theoretical equivalent of the political anti-authoritarian movements of protest of the late sixties and early seventies (very much as Hegel’s philosophy of history was a theoretical equivalent of the political experiences labeled “the French Revolution”) . . . One wonders if a public debate with Weick, Cohn-Bendit, and Wallerstein on the one hand, and Fukuyama, Senge, Porter on the other might reveal this hidden “cluster” of generational experiences of protest as a major dividing line in modern social science. (Magala, 1997: 333)

While the ideas of sensemaking have previously been situated in terms of prominent social science theories of the 1960s such as cognitive dissonance theory and ethnomethodology (Weick 1995*b*: 10–12) and prominent philosophical positions such as pragmatism and existentialism, Magala’s speculation is the first time that ideas about sensemaking have been situated in larger cultural and societal forces. Magala argues that experiences of the 1960s such as Vietnam produced a changed concept of agency and a less authoritarian approach to generating a larger variety of choices in formulating organizational alternatives. These shifts refocused attention away from decisions (e.g. should we increase troop strength in Vietnam) toward the “background and software of choices” (Magala, 1997: 333) (e.g., how did it come to pass that we find ourselves in a position where troop strength is a matter we feel needs to be decided. One version of Magala’s “software of choices” is the phenomenon of sensemaking, which occurs when agents, acting as parliaments of selves, interact in “negotiation parlors” to generate courses of collective action.

Positioned this way, sensemaking is not just an individual-level, subjective phenomenon that is naive about the conflict-laden, power-driven, interest-derived character of the organized “real” world. Instead, sensemaking, like all social science positions, is a situated description in social science terminology of less visible context-sensitive dynamics in social life. In many ways, translating those dynamics into the language of sensemaking was and remains an affirmation that small interventions can have larger consequences. That translation may endure. What is more likely to change are ideas about just what happens during those formative moments of intervention.

To take a closer look at just how such changes in ideas materialize, we turn to the topic of theorizing.

19.2 ON THEORIZING

So far sensemaking has been figure and theorizing has been ground. In this section we reverse that relationship and focus on the qualities of theory that were implicit

in the preceding analysis. The implications for theory and the activity of theorizing are subtle and not nearly as tidy or simple as one would hope.

The meaning of “theory” that best fits the preceding discussion is Reber’s statement that theory is “a general principle or a collection of interrelated general principles that is put forward as an explanation of a set of known facts and empirical findings . . . (T)he term is “awarded to almost any honest attempt to provide an explanation of some body of fact or data” (Reber, 1995: 793–794).

This definition fits what I’ve said so far in several ways. It doesn’t talk about axioms, theorems, or variables. These characteristics are commonly mentioned in the canon of theory construction though they are rare in actual theory building. For example, despite all the talk about “variables” in theory development, the claim that the universe can be abstracted into variables that can be meaningfully manipulated at the behest of the actor is shaky (Guba, 1990: 373). Variables are not the only medium that conveys an explanation. Relevant media also include “principles,” connected ideas, images, patterns, metaphors, even allegories (Van Maanen, 1995).

The “known facts” and “empirical findings” that theories “explain” can precede theory construction or follow it. The fact that theory construction is a form of retrospective sensemaking, does not decouple it from facts. Rather, it means that facticity is often an achievement. Having first said something, theorists discover what they have been thinking about when they look more closely at that talk. A close look at the talk often suggests that the talk is about examples, experiences, and stories that had previously been understood though not articulated. The talk enacts facts because it makes that understanding visible, explicit, and available for reflective thinking, but the talk doesn’t create the understanding. Instead, it articulates the understanding by converting “know how” into “know that.” Sensemaking, with its insistence on retrospective sensemaking, is a valuable standpoint for theorizing because it preserves the proper order for understanding and explanation (understanding precedes explanation: Sandelands, 1990: 241–247). It reminds the investigator to keep saying and writing so that he or she can have something to see in order then to think theoretically.

When theorizing is portrayed this way, what now becomes much more important are “stop rules.” Continuous saying and thinking sooner or later articulates an explanation that matters in a seriously plausible way. But how does one spot that moment? If people stumble onto theory when they see what they say, how do they know that they have found theory rather than nonsense? Again, there are no hard and fast rules. But any of the following help:

1. Someone tells them that they have a theory.
2. The saying resembles other theories that they’ve seen.
3. The saying explains events not used in its construction.
4. The saying depicts abstract, conceptual, generalizable patterns.

5. The saying fits one of Merton's four categories of approximations to theory (see below)
6. The saying is a useful guide to what one can expect to see in a future event.
7. The saying serves as a higher order frame for a lower order cue to which it can be connected.
8. The author claims that it is a theory and others subject that claim to their own truth tests.
9. The author ignores the question "is it a theory or not" and simply uses it.

This is not as haphazard as it sounds. Instead, these stop rules for theory simply recognize that theories are coherent orientations to events, sets of abstractions, consensually validated explanations and embodiments of aphoristic thinking.

Reber's definition is also intriguing because it talks about theory as a label that is "awarded" to almost any *honest* attempt at explanation. Here we get a hint that theory is a continuum and an approximation. The image of theory as continuum comes from Runkel.

Theory belongs to the family of words that includes *guess, speculation, supposition, conjecture, proposition, hypothesis, conception, explanation, model*. The dictionaries permit us to use *theory* for anything from "guess" to a system of assumptions... (Social scientists) will naturally want to underpin their *theories* with more empirical data than they need for a *speculation*. They will naturally want a *theory* to incorporate more than one *hypothesis*. We plead only that they do not save *theory* to label their ultimate triumph, but use it as well to label their interim struggles. (Runkel and Runkel, 1984: 130)

As we have seen, most products that are labeled theory actually approximate theory. Robert Merton (1967: 143–149) was sensitive to this point and suggested that there were at least four ways in which theory was approximated. These were (1) general orientation in which broad frameworks specify types of variables people should take into account without any specification of relationships among these variables (e.g., Scott, 1998 analyzes rational, natural, and open systems); (2) analysis of concepts in which concepts are specified but not interrelated (Perrow, 1984 analyzes the concept of normal accident); (3) post factum interpretation in which ad hoc hypotheses are derived from a single observation, with no effort to explore new observations or alternative explanations (e.g., Weick, 1990 analyzes behavioral regression in the Tenerife air disaster); and (4) empirical generalization in which an isolated proposition summarizes the relationship between two variables, but further interrelations are not attempted (e.g., Pfeffer and Salancik, 1977) analyze how power flows to those who reduce significant uncertainties.

Reber's use of the phrase "any *honest* attempt at explanation" deserves comment because it underscores the social dimension of theory development. This dimension was mentioned earlier in the discussion of cohesion–accuracy tradeoffs. Implicit in that earlier discussion was the issue of assigning relative weights to one's personal experience and to reports on the experience of others (e.g., models,

vicarious learning, social influence). The question is what weights do people give to their own vs. others' perceptions when these modes are in conflict and need to be combined in a net decision about inclusions, exclusions, and connections in theory construction? Donald Campbell calls this question "the rationality aspect of the conformity problem." He means that in many instances, "so-called conformity behavior is an intelligent part of a rational search for valid knowledge about a fallibly and indirectly known world rather than merely an interest in being like other persons whether or not they are correct" (Campbell, 1961: 108). Campbell later notes that "collective knowledge is maximized when each person so behaves as to be in his turn a valid dependable model for others. Each acts as both model and observer" (p. 123). This means that for collectively valid theory construction, one must both report honestly so that others can depend on his/her report, and also be respectful of others' reports as a source of information about the world. While doing this one must also reconcile these often disparate inputs in a manner that maintains self-respect, preserves credibility, and enables triangulation that produces valid perception, effective performance, and group survival.

It is the centrality of trustworthiness in the theorizing process that lies behind our insistence that experience and intuitions be treated as valued inputs. People trust first-hand experience, and if they are to be trustworthy contributors to theory development, they need to build on that experience. Dennis Gioia's (1992) development of script theory based on his experience as Ford's recall coordinator at the time of the Pinto fires, is the best example I know of on this point. Whatever one's reaction to Gioia's analysis or to his actions as recall coordinator, no one questions the account of the experience. Gioia acts like a trustworthy informant, others trust his account and provide their own trustworthy accounts, and differences of opinion are met with neither rejection nor surrender.

A pragmatic sense of what I mean by theory is also implied in my other writing about theory. For example, in the paper "Amendments to organizational theorizing" (Weick, 1974) the tacit message is that theory work consists of continuous theorizing that amends existing work. The message of this essay is compact and unconventional: "if you want to improve organizational theory, quit studying organizations" (p. 487). The argument is that organizational functioning is opaque, and equivalent functioning elsewhere is less opaque (e.g., collective sensemaking in a fire crew of strangers. Said differently, the advice is to theorize about units and events that you can understand. Once you understand, summarize that understanding in mechanisms, and generalize (perhaps shamelessly) those mechanisms to other settings. That's what people do in everyday sensemaking when they extract lessons from a vivid experience, and then treat subsequent experiences as moments of recognition.

The "Amendment" essay is also representative of another crucial point in theory development. There is a fragmentary quality to this essay in the sense that theorists are urged to pay closer attention to such diverse settings as everyday events,

everyday places, everyday questions, micro-organizations, and absurd organizations, as well as to such diverse objects as escalators, car radios, memorials, bribes, auctions, graphics of life histories, bands, and banks. That assortment looks a lot like a garage sale or an arcade (Benjamin, 1999). But there is more going on here than merely constructing a scrapbook using whatever is at hand. Exhibits that seem to be fragments, may nevertheless be connected since they were collected and positioned by a single intelligence. The connections may be elusive, they may stretch the categories one has ready-to-hand, but those connections don't disappear. Instead, they are there waiting to be written into existence as principles and explanations. Loosely connected fragments, you will recall, are good media capable of registering subtle complex events.

My other discussions of theory suggest that the theorizing associated with sensemaking is middle range theory that glosses and integrates the work of predecessors, in ways that are intended to have impact on practice (Weick, 2003*b*). This is a fairly standard litany in discussions of theory development. But my point is that these are portions of that litany, which are readily practiced, at least in my case.

It is challenging and precarious to try turning the complexity of sensemaking and theorizing into a set of guidelines for practice. To further complicate matters, my experience is that whenever I craft what seem like concrete guidelines to me, those same guidelines seem like incomprehensible "road kill" to others (see Weick, 1996*b*, where a student at the University of Utah described running into my work as similar to running into something on the road at night: "you know you hit something but you don't know what the hell it was.") With that truth in advertising disclaimer in place, here are ways to approach the form of sensemaking called theory development more mindfully and more richly:

1. View theorizing, as a direction to update, not a decision to polish. Since fixation slows updating, hold ideas lightly and be prepared to drop tools that foster fixation.
2. Keep talking and keep variety in your talk to encourage updating and enrichment. Theorizing is as much about authoring an environment as it is about discovering a ready-made structure.
3. Get off your analytic hands and do something. You won't know what you've understood until you do something and draw inferences from what you do and say. Theorists act their way into meaningful categories.
4. Treat boundaries of your phenomenon as transient limits that are subject to rejustification and redefinition.
5. It's okay to interpret, to make it up as you go along, to be in the dark until it is too late, to second guess, and to feel thrown, because those are givens of the human condition that aren't suspended just because you're doing theory.
6. Pay close attention to surprise, interruption, and breakdown because these are your best opportunities for sensemaking and theorizing.

7. Engage in truth-making rather than truth-seeking since truth is something one authors, imposes, and negotiates rather than discovers.
8. Mimic processes of evolution in your theorizing.
9. Name phenomena with care and forget the names you inherit so that you can see the referent more richly.
10. Design the context for theoretical sensemaking so that it provides the supports for sensemaking that are summarized in the acronym SIR COPE.
11. Craft your explanations with different tradeoffs among generality, simplicity, and accuracy.
12. Moderate your demands that people agree with your definitions so that they register more nuances in the phenomenon being conceptualized.
13. Theorize about what you already understand by saying aloud your stream of consciousness, and then seeing what you already knew. There's your theory.
14. Aim for good sentences.

These guidelines don't sound much like the usual fare in a methods cookbook. Can they really help a beleaguered doctoral student writing endless dissertation proposals in his or her head, an anxious un-tenured researcher searching for impact, a confirmed positivist searching for certainty, or a frustrated author poised over a revise and resubmit? That's for them to decide. The above has worked for me, a judgment that may be specific to the topic on which I have worked, sensemaking. That judgment is also silent about a million other moments that probably were worked out by and worked into my continuous theorizing. Nevertheless, if readers see what I have said as a way of working that holds possibilities for renewal somewhere down the line, if readers cherry-picked these ideas anew at different career milestones, if readers used these ideas merely as a foil to contrast and sharpen other ideas that they really believed and wanted to convey, if the spirit of independent breaching displayed here informed identities being developed elsewhere, if somewhere in here there was a phrase or a reference that triggered a thought, if anything like these possibilities materialized, then this nudge to better theory development would have worked. And besides, since all I can do is control inputs rather than outcomes, this is the best I can do anyway.

19.3 CONCLUSION

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If nothing else, this chapter should have made clear that organizational theorizing and sensemaking are a lot more complicated than simply putting variables together. That's not surprising since organization itself is elusive. Organization never actually

exists as an identifiable entity. What exists instead is organizing, “an ongoing process of mediation in which the objective world where we live and interact both frames what we do and supplies us with the material for our own reconstruction of it. What we think of as organization is what is left over as a trace or memory of yesterday’s organizing . . . (B)y the time we recognize the organization it is no longer there. What is there is our transformation of it; what makes it recognizable—re-cognizable—is precisely its no longer existing” (Taylor and Van Every, 2000: 163). When researchers quiz participants about the organization, its norms, or its culture, the participants’ have in mind yesterday’s organization and their experience of it. However, that organization no longer exists. Yesterday’s organizing, viewed in hindsight, is all the tangible social reality we’re likely to have to live with and theorize about.

When people theorize about any facet of organizing, including sensemaking, they focus on conceptual properties that are thought to be crucial. While their conclusions could be called “findings,” that label fits only in the sense that when investigators look for something like the deployment of retrospect, or the reconciliation of competing frames, or the responses to ambiguity, they are more or less surprised by what they “find” given what they were looking for. Surprise under these conditions amounts to soft falsification, since the theory-based hunches were found to be insufficient rather than wrong. Steady cumulating of highlighted cases whose insufficiencies are heterogeneous can lead to growing confidence that sensemaking is a viable moment in organizational life. Sooner or later (and sometimes never) the case for sensemaking as an economical, useful set of ideas feels persuasive. Validity under these conditions boils down as much to a matter of feeling and intuition as it does to a matter of apprehension. What makes that feeling matter is that it is shared. Shared feeling is a form of “consensual validation,” which, as Ruth Munroe puts it, amounts to “common sense of a high order—the things people agree upon because their common sensual apparatus and deeply common interpersonal experiences make them seem objectively so” (Weick, 1979: 3). Theorizing and sensemaking both have a big dose of higher order common sense when done right. And to do sensemaking and theorizing “right” means to appreciate their affinity.

REFERENCES

- BARON, R. M., and MISOVICH, S. J. (1999). On the relationship between social and cognitive modes of organization. In S. Chaiken and Y. Trope (eds.), *Dual-Process Theories in Social Psychology*: 586–605. New York: Guilford.
- BENJAMIN, W. (1999). *The Arcades Project*. Cambridge, Mass.: Belknap Press.
- CAMPBELL, D. T. (1961). Conformity in psychology’s theories of acquired behavioral dispositions. In I. A. Berg and B. M. Bass (eds.), *Conformity and Deviation*: 101–142. New York: Harper.

- (1965). Variation and selective retention in socio-cultural evolution. In H. R. Barringer, G. I. Blanksten, and R. Mack (eds.), *Social Change in Developing Areas*: 19–49. Cambridge, Mass.: Schenkman.
- (1979). A tribal model of the social system vehicle carrying scientific knowledge. *Knowledge: Creation, Diffusion, Utilization*, 1(2): 181–201.
- DEWEY, J. (1998). The reflex arc concept in psychology. In L. A. Hickman and T. M. Alexander (eds.), *The Essential Dewey: Ethics, Logic, Psychology*, vol. 2: 3–10. Bloomington, Indiana: Indiana University Press.
- DONALDSON, L. (2003). Organization theory as positive science. In H. Tsoukas and C. Knudsen (eds.), *The Oxford Handbook of Organization Theory*: 39–62. Oxford: Oxford University Press.
- DOUGHERTY, D. (2002). Grounded theory research methods. In J. A. C. Baum (ed.), *The Blackwell Companion to Organizations*: 849–866. Oxford: Blackwell.
- FESTINGER, L. (1957). *A Theory of Cognitive Dissonance*. Stanford: Stanford University Press.
- FLIN, R. H. (1996). *Sitting in the Hot Seat: Leaders and Teams for Critical Incident Management*. New York: John Wiley.
- GEERTZ, C. (1995). *After the Fact*. Cambridge, Mass.: Harvard University.
- GEHMAN JR., H. W. (2003). *Columbia Accident Investigation Board: Report, Volume One*. Washington, DC: U.S. Government.
- GILILAND, S. W., and DAY, D. V. (2000). Business management. In F. T. Durso (ed.), *Handbook of Applied Cognition*: 315–342. New York: Wiley.
- GIOIA, D. A. (1992). Pinto fires and personal ethics: A script analysis of missed opportunities. *Journal of Business Ethics*, 11: 379–389.
- GUBA, E. G. (1990). *The Paradigm Dialog*. Newbury Park, Calif.: Sage.
- HEIDER, F. (1959). On perception and event structure and the psychological environment. *Psychological Issues*, 1(3): 1–124.
- HENIG, R. M. (1993). *A Dancing Matrix: How Science Confronts Emerging Viruses*. New York: Vintage.
- KELLOGG, E. W. (1987). Speaking in e-prime: An experimental method for integrating general semantics into daily life. *ETC*, 44(2): 118–128.
- LANT, T. K. (2002). Organizational cognition and interpretation. In J. A. C. Baum (ed.), *The Blackwell Companion to Organizations*: 344–362. Oxford: Blackwell.
- LAROCHE, H. (1995). From decision to action in organizations' decision-making as a social representation. *Organization Science*, 6(1): 62–75.
- MAGALA, S. J. (1997). The making and unmaking of sense. *Organization Studies*, 18(2): 317–338.
- MERTON, R. K. (1967). *On Theoretical Sociology*. New York: Free Press.
- MILLS, J. H. (2003). *Making Sense of Organizational Change*. New York: Routledge.
- MORGAN, G., FROST, P. M., and PONDY, L. R. (1983). Organizational symbolism. In L. R. Pondy, P. J. Frost, G. Morgan, and T. C. Dandridge (eds.), *Organizational Symbolism*: 3–35. Greenwich, Conn.: JAI.
- PACKER, M. J. (1985). Hermeneutic inquiry in the study of human conduct. *American Psychologist*, 40: 1081–1093.
- PATRIOTTA, G. (2003). Sensemaking on the shop floor: Narratives of knowledge in organizations. *Journal of Management Studies*, 40(2): 349–376.
- PERROW, C. (1984). *Normal Accidents*. New York: Basic.

- PFEFFER, J., and SALANCIK, G. R. (1977). Organizational design: The case for a coalition model of organizations. *Organizational Dynamics*, Autumn.
- PHILLIPS, A. (2001). *Promises, Promises*. New York: Basic.
- REBER, A. S. (1995). *Dictionary of Psychology*, 2nd edn., London: Penguin.
- RUNKEL, P. J., and RUNKEL, M. (1984). *A Guide to Usage for Writers and Students in the Social Sciences*. Totowa, NJ: Rowman and Allanheld.
- SANDELANDS, L. E. (1990). What is so practical about theory? Lewin revisited. *Journal for the Theory of Social Behaviour*, 20: 235–262.
- SCHUTZ, W. (1979). *Profound Simplicity*. New York: Bantam.
- SCOTT, W. R. (1998). *Organizations: Rational, Natural, and Open Systems*, 4th ed. Upper Saddle River, NJ: Prentice-Hall.
- TAYLOR, J. R., and VAN EVERY, E. J. (2000). *The Emergent Organization: Communication as its Site and Surface*. Mahwah, NJ: Erlbaum.
- THORNGATE, W. (1976). Possible limits on a science of social behavior. In L. H. Strickland, F. E. Aboud, and K. J. Gergen (eds.), *Social Psychology in Transition*: 121–139. New York: Plenum.
- VAN MAANEN, J. (1995). Style as theory. *Organization Science*, 6: 133–143.
- VAUGHAN, D. (1996). *The Challenger Launch Decision: Risky Technology, Culture and Deviance at NASA*. Chicago, Ill.: University of Chicago Press.
- WARGLIEN, M. (2002). Intraorganizational evolution. In J. A. C. Baum (ed.), *The Blackwell Companion to Organizations*: 98–118. Oxford: Blackwell.
- WEICK, K. E. (1964). The reduction of cognitive dissonance through task enhancement and effort expenditure. *Journal of Abnormal and Social Psychology*, 68: 533–539.
- (1969). *Social Psychology of Organizing*. Reading, Mass.: Addison-Wesley.
- (1974). Amendments to organizational theorizing. *Journal of Academy of Management*, 17: 487–502.
- (1979). *The Social Psychology of Organizing*, 2nd edn., Reading, Mass.: Addison-Wesley.
- (1981). Psychology as gloss. In R. Kasschau and C. N. Cofer (eds.), *Psychology's Second Century*: 110–132. New York: Praeger.
- (1983). Contradictions in a community of scholars: The cohesion-accuracy tradeoff. *The Review of Higher Education*, 6(4): 253–267.
- (1985). A stress analysis of future battlefields. In J. G. Hunt (ed.), *Leadership and Future Battlefields*: 32–46. Washington, D.C.: Pergamon-Brassey's.
- (1989). Theory construction as disciplined imagination. *Academy of Management Review*, 14: 516–531.
- (1990). The vulnerable system: Analysis of the Tenerife air disaster. *Journal of Management*, 16: 571–593.
- (1992a). Agenda setting in organizational behavior: A theory-focused approach. *Journal of Management Inquiry*, 1(3): 171–182.
- (1992b). The management of closeness in Jungian training societies: An organizational analysis. In H. A. Wilmer (ed.), *Closeness*: 181–202. Denver: Shambala.
- (1993a). The collapse of sensemaking in organizations: The Mann Gulch disaster. *Administrative Science Quarterly*, 38: 628–652.
- (1993b). Sensemaking in organizations: Small structures with large consequences. In J. K. Murnighan (ed.), *Social Psychology in Organizations: Advances in Theory and Research*: 10–37. Englewood Cliffs, NJ: Prentice-Hall.

- (1995a). Creativity and the aesthetics of imperfection. In C. M. Ford, and D. Gioia (eds.), *Creative Action in Organizations*: 187–192. Newbury Park, Calif.: Sage.
- (1995b). *Sensemaking in Organizations*. Thousand Oaks, Calif.: Sage.
- (1996a). Drop your tools: An allegory for organizational studies. *Administrative Science Quarterly*, 41(2): 301–313.
- (1996b). Speaking to practice: The scholarship of integration. *Journal of Management Inquiry*, 5: 251–258.
- (2001). Tool retention and fatalities in wildland fire settings: Conceptualizing the naturalistic. In E. Salas and G. Klein (eds.), *Linking Expertise and Naturalistic Decision Making*: 321–336. Mahwah, NJ: Erlbaum.
- (2002). The reduction of medical errors through mindful interdependence. In M. Rosenthal and K. M. Sutcliffe (eds.), *What Do We Know about Medical Mistakes?* 177–199. San Francisco: Jossey-Bass.
- (2003a). Enacting an environment: The infrastructure of organizing. In R. Westwood and S. Clegg (eds.), *Debating Organization*: 183–207. Oxford: Oxford University Press.
- (2003b). Theory and practice in the real world. In H. Tsoukas and C. Knudsen (eds.), *The Oxford Handbook of Organization Theory*: 453–475. New York: Oxford University Press.
- GILFILLAN, D. P., and KEITH, T. (1973). The effect of composer credibility on orchestra performance. *Sociometry*, 36: 435–462.
- and PRESTHOLDT, P. (1968). The realignment of discrepant reinforcement value. *Journal of Personality and Social Psychology*, 8: 180–187.
- and ROBERTS, K. H. (1993). Collective mind in organizations: Heedful interrelating on flight decks. *Administrative Science Quarterly*, 38: 357–381.
- and SUTCLIFFE, K. M. (2003). Hospitals as cultures of entrapment: A re-analysis of the Bristol Royal Infirmary. *California Management Review*, 45(2): 73–84.
- — and OBSTFELD, D. (1999). Organizing for high reliability: Processes of collective mindfulness. In B. Staw and R. Sutton (eds.), *Research in Organizational Behavior*: 21. 81–123. Greenwich, Conn.: JAI.
- WESCHLER, L. (1982). *Seeing is forgetting the name of the thing one sees: A life of contemporary artist Robert Irwin*. Berkeley, Calif.: University of California Press.