12

Developing New Frames of Reference

At some point participants in an action science seminar will be on their own. They must be able to design their own experiments, to step back with others to reflect on what they see, and to sustain a process of inquiry into the surprises and puzzles that they discover. The impediments to these processes are not unique to action science; they often affect more traditional research as well. As Campbell and Stanley (1963) describe it: "For the usual highly motivated researcher the nonconfirmation of a cherished hypothesis is actually painful. . . . the experimenter is subject to laws of learning which lead him to associate this pain with . . . the experimental process itself, more vividly and directly than the 'true' source of frustration, that is, the inadequate theory. [Since] our science is one in which there are available more wrong responses than correct ones, we may anticipate that most experiments will be disappointing. We must somehow inoculate young experimenters against this effect" (Campbell and Stanley, 1963, p. 3).

Campbell and Stanley go on to recommend that, as experimenters, we ought to lower our sights, that is, increase our

time perspective, stop expecting clear-cut outcomes to resolve opposing theories, expect mixed results, and so on. All in all, we ought to "expand our students' vow of poverty to include . . . poverty of experimental results" (p. 2). Our work has tried to explicate the "somehow" of inoculation against a protective stance toward failed experiments. In some sense this work might be considered a kind of lowering of sights because it nurtures the expectation of mixed results, the recognition of ambiguity and paradox, the anticipation of failed hypotheses, even of cherished ones, and so forth. But from our perspective these phenomena are also what should make the experience of science a rich one. The surprise of a failed hypothesis might be either pleasant or disturbing depending on how one regards it. The puzzles presented by mixed results can be the most engaging. Einstein, for example, spent the latter part of his life delving into and trying to reconcile the inconsistencies between quantum physics and Newtonian physics.

What is it about the way we regard our practice as researchers that blinds us to these possibilities? Certainly, there are structural and professional constraints that have contributed to these responses. The professional norm has become "advance through proving your hunches." But within these constraints we have choices. We might dismiss the unexpected failure or herald it as a counterintuitive result worthy of further pursuit. We might grow angry and impatient with conflicting theories and despair of ever achieving a consistent paradigm. Or, we might see such conflicts as clues to the nature of our social world and thus regard them as questions to pursue instead of battlegrounds on which to stake out and protect our own territory. We believe that such a stance toward experimentation is possible and necessary for all research, not just for action science.

If this is so, the best inoculation may lie in the development of a reflective orientation toward experimentation. But how are we to achieve this? So far, we have seen that the interventionist takes this stance when participants experiment. Once on their own, participants must be able to assume this stance themselves, yet the previous chapter revealed some limits in their ability to do so. What follows in this chapter is a sequence

of three frame experiments designed to stimulate a process of reframing what it means and takes to experiment in the face of failure, ambiguity, and conflicting results. Each one uncovers the inferential and emotional reactions that comprise how participants regard experimentation and the outcomes it yields. Each one is set into motion by making the obvious seem curious. And each experiment builds on the one before it, as it stimulates new actions that in turn reveal new paradoxes. We tell the story of these experiments in the sequence in which they unfold. They are intended to describe how the action scientist and participants experiment and reflect in action in a way that allows participants to renegotiate or reframe what it means to engage in reflective experimentation.

Withdrawing: Designing One's Own Injustice

Early in the second semester of the seminar the interventionist noticed a pattern of interactions that suggested participants were retreating from the risks of experimentation. One incident in particular stood out since it revealed a paradox. A participant who had been particularly active in discussing a consulting case also took the first opportunity to generate an alternative and experiment with it. But before doing so, he checked to see if others wished to go first. He waited before volunteering and then explicitly asked if anyone else would like to start. After being met by silence, he waited yet another moment, looked around the group, and then began to role play an alternative. The interventionist was puzzled. With participants aware of the limited amount of time left, what would lead them not to use their "fair share" of air time?

The interventionist initiated the first experiment in order to pursue this question, and he did so by making salient to participants what was puzzling to him about their actions, so that they might together inquire into what might account for them. In the language of the group, the experiment came to be known as the passivity experiment (see Chapter Four), and we saw a segment from it earlier in our case study on experimentation. In this section we return to it as an example of an experiment in frame breaking.

Phase One: Generating A Sense of Dissonance. The pattern that so engaged the interventionist's attention was taken for granted by participants. The responses that composed it were enacted automatically, and the group members assumed that others, not themselves, were responsible for their lack of participation. The interventionist thus initiated the experiment by framing their actions in a way that would make paradoxical what they regarded as obvious:

Interventionist: Okay, another one of my experiments. What I'd like to do is start by making two attributions about this class which I'd like to test out, if I may.	The interventionist says he is about to make attributions that require testing.
One, since our time is scarce, there is an issue of justice. Most of you believe you should not take more air time than however you measure your fair share. Is there anyone who'd disagree with that attribution? And another one was that Paul, when he began, had the equivalent of what many of you might have felt was a fair share, regardless of whether you agreed with the way he began or not.	The interventionist makes and tests two attributions about the group's beliefs: First, the group believes air time is an issue of justice; the group also believes you should not take more than your fair share. Second, one participant, Paul, had already taken his fair share.

The class members confirmed the inferences, and one person said that he thought Paul had taken more than his fair share. The interventionist continued:

Interventionist: I then said, "Who would like to go first?" Utter silence. [Paul] looked at me; I looked at him. I	He then cites data from the last class in which persons let Paul go first.

looked around three or four times. Paul looked around. He finally took over.

I want to know: How come? What's the dynamic here that says the guy who's already had enough air time is now asked to even use more?

He inquires into why the person who has already taken his share of time, by their own assessment, is asked to take more.

During this first phase the interventionist made a series of low-level inferences that, once confirmed, yielded a puzzle. Participants held as equally true conclusions that were psychologically inconsistent and that made them appear to be designing their own injustice. On the one hand, they believed that air time was an issue of justice and that Paul had already taken his fair share of it, if not more. Yet on the other hand, they acted as if they believed that Paul ought to take more time. Faced with two such contradictory beliefs, individuals ordinarily experience a sense of discomfort that they then try to reduce either by resorting to fancy footwork or by holding others responsible for their beliefs (see Chapter Nine). Similarly, Festinger and Carlsmith (1959) found that to reduce such dissonance, individuals will bring in a third view to try to convince themselves that the first two were untrue. Milgram (1974) discovered that people who violate their values will blame external factors or those in authority. And Latané and Darley's work (1970) on the innocent bystander showed how individuals will tend to think others are more responsible for acting consistently with their values than they themselves are.

The interventionist thus designed his intervention in a way that made it less likely that others could be held responsible for participants' contradictory actions. He started out by publicly testing his inferences about their beliefs, giving participants control over the meanings imposed on their actions. This at once allowed them to reach agreement on what occurred and made it harder for them to later assert that such meanings were no longer true without creating further inconsistencies. He

based these inferences on data that they were responsible for generating. The data were not the result of a hoax that brings to light the errors of participants after it has been revealed. Unlike subjects in many psychological experiments, participants here did not have to contend with the added embarrassment of being set up, falling for the ruse, unknowingly exposing their inconsistencies, and having to make themselves look credible to the very person who just set them up. Their actions were a result of their own design, not the experimenter's. Consequently, they were more apt to pay attention to what *they* did in trying to account for the contradiction, and an inquiry into their actions was thus set into motion.

This first phase was directed at creating an optimal kind of dissonance, one that would spark an inquiry that would be minimally self-protective. The act of withdrawing was interrupted by helping participants to see how they were violating their own notion of fairness. At the same time, this interruption occurred in a context in which the participants created the data and confirmed the inferences that ignited their sense of dissonance and sparked the incentive to figure out what had led to their inconsistencies in the first place. This kind of dissonance can serve as a catalyst to jar participants into taking account of their actions.

Phase Two: Generating A Rich Description. As a result of the first phase, the interventionist opened up a process of reflection on withdrawal. But there was still no assurance that the group would end up with a full description of the conditions that triggered it. Such a description requires that participant and interventionist together reconstruct how participants understood and experienced the situation in which they withdrew: what they saw happening (the data they selected), how they understood what happened (the inferences they drew from these data about themselves and others), how they felt about the situation as they understood it (the emotional experience), and what actions they took and felt unable to take. Yet these are often not the kind of data put forth when individuals account for their actions (Nisbett and Wilson, 1977; Scott and Lyman, 1968). Instead, as the quotations that follow illustrate,

participants often capture their experience in highly inferential categories, calling on plausible theories and metaphors to explain what occurred:

Actual Statements	*Comments*
I felt taken aback [by something the interventionist did].	Describes his reactions in metaphorical terms; does not say what it is he is actually feeling.
I feel on the spot, like I'm breaking ice.	
[After I listened to the tape], I felt I should say something smart or the interventionist [would] attack me.	Makes an inference about the interventionist; does not report the data that led to the inference.
I feel I'm hiding out and easing in like I did at the beginning of last semester.	Makes an inference about himself; does not report the data that led to the inference.
I'm waiting for someone to make a mistake to see what the interventionist will do.	Makes an inference about himself; does not report the data that led to the inference.
I felt my intervention had to be perfect; and I had no model of perfect.	Reports an inference he made at the time, but not what data led to it.
I have a sense of impending embarrassment.	Reports a feeling at the time.
I don't want to appear stupid.	Reports a feeling at the time that is based on an inference (she will appear stupid if she makes a mistake).

For the most part these are inferential accounts couched as feelings, but they run the gamut from metaphors to causal attributions about oneself and others to the occasional expression of affect. Without doubt all these data are crucial. They en-

able participants to make sense of their experience, and they can act as clues to direct our inquiry into how participants constructed a situation in which they withdrew. But by themselves they are not sufficient. The metaphors are so rich in meaning that we can easily take from them any number of unintended meanings: Does "on the spot" mean "anxious about errors," "resentful of unwarranted scrutiny," or both? Similarly, the attributions about self and others leave us stumped as to what led to them and whether or not they are accurate: Is the interventionist attacking the actor, is the actor magnifying the interventionist's actions, or is it a little of both? These accounts all raise such questions, and such questions are crucial to a process of inquiry into action. Different answers would hold significantly different implications for future moves: Should the interventionist change his actions, should the participants alter the way they make and hold inferences, or should both interventionist and participants do something else altogether.

As it stands, the group members do not have enough to go on to take the next step. They need to develop an additional set of data. They need to reconstruct what happened and how they thought and felt about it so they can figure out how to push beyond the responses that get in the way of learning. This means that the interventionist must mine the accounts quoted earlier for such data and begin to organize them in a way that will produce movement toward a more reflective orientation. Such a process begins in this phase with the probing of accounts for illustrations that will provide rich or "thick" descriptions of the situation and participants' experience of it. The interventionist thus asked one participant—"What was it in the tape that led you to see me as attacking?"—to inquire into his responsibility and to generate data to test the claim that his actions had constituted an attack. Similarly, he probed metaphors for their reference points, asking the participant who spoke of being "taken aback" what it was he was thinking and feeling at the time.

Once these data started to emerge, the interventionist sought to discover to what extent participants' inferences and experiences were shared. He thus asked not only what it meant

to be on the spot but if others felt the same way and, if so, what it meant to them. When the interventionist discovered that a participant felt humiliated by his actions, he checked to see if he had had the same impact on others. Such queries served both to clarify meanings and to uncover differences and similarities that might otherwise have gone unnoticed. Once generated, these data allowed the interventionist to build from the individual to the group level, developing a collage that represented the group's collective experience. And as he took these steps, he tested with the participants to see if the connections and patterns he was developing were the right ones. This process of collage building was thus a public and collaborative one, with the interventionist reflecting out loud as he went along and participants filling in the gaps of his understanding.

To keep this process moving without triggering protective responses, the interventionist continued to assume the stance of vulnerability described previously. He consistently communicated a readiness to own up to his responsibility for what occurred by continually inquiring into his impact and acknowledging his errors. In one instance a participant confronted him for making a sexist remark. After hearing the data, the interventionist agreed, "Right on. It was sexist and I apologize for it, because I think you're dead right." These responses also increased trust, as participants came to see that the interventionist was not simply trying to nail participants with their own distortions. Instead, he communicated that he might be the one who needed to change if the group was to move forward. Unlike the protective notions of trust and safety described in the map (Figure 8 in Chapter Nine), the interventionist creates trust and safety not by minimizing the negative and emphasizing the positive but by evidencing a commitment to accuracy and learning.

Phase Three: Generating Frame Conflict. Once a collage was developed, the line of inquiry into participants' accounts gradually shifted, and new queries emerged as the group took a deeper cut into how participants constructed and experienced the situation before them. The first hint of this appeared when the interventionist began to organize the material generated in the previous phase into new puzzles. He made such a shift when

he inquired into a participant's fears of appearing stupid by asking the question: "I don't know how easy it is for you to answer this. Does Paul appear stupid to you? [Several no's.] He made loads of errors. What is it that leads you to believe you'll appear stupid?" This inquiry not only elicited new data, it suggested a new inconsistency. It is inconsistent when one uses two different standards for evaluation, and it is puzzling when one does so at a disadvantage to oneself. Yet by their own definition this is what the participants were doing. And notice: This inconsistency was discovered in the course of their attempts to resolve a prior inconsistency. They were trying to explain that they had violated their own notion of fairness because of their fears of appearing stupid; but rather than resolving the first inconsistency, this explanation itself ends up being equally inconsistent and equally disadvantageous to participants. They consider themselves, but not others, stupid for making errors. Thus their efforts to achieve consistency fail as they end up creating new inconsistencies, and doubts begin to emerge about how well they are making sense of the world around them.

To describe this process more fully, let us turn to an interaction between the interventionist and Lee, the participant we described earlier as leaving it up to others to create the conditions that she believed she needed for learning (see Chapter Nine). There we saw that she withdrew; she privately blamed others for this withdrawal; and when she finally expressed what she was experiencing, she used this description as a lever to get others to conform to her views. An important logic characterizes this reasoning and action, a logic that we argued earlier is embedded in the framing of one's role as a recipient rather than as an agent of the learning process. Lee did not see, and she consistently did not act as if she saw, herself as mutually responsible for designing the learning that occurred. Similarly, she and others acted as if errors were taboo. They recoiled from the risks of experimentation, feared making or pointing out errors, and experienced errors as embarrassing or humiliating. These responses also contain a certain logic—the logic embedded in the frame that it is wrong to be wrong and that makes a sense of success contingent on not making mistakes. The most striking

feature of these frames is that they lead individuals to consistently act in ways that they themselves consider illogical and inconsistent with their conscious intentions and beliefs. In this instance such logic led the members of the group to withdraw, even though they thereby violated their own beliefs and designed their own injustice.

In an interaction with Lee the interventionist brought this logic to the surface, so that the simultaneous "illogic" in it might be seen. The process began when Lee said that she had felt humiliated by the interventionist when he had confronted her on an error and that she feared that she herself had humiliated one of her peers, Melinda. After Melinda said that she had not felt humiliated, Lee recounted the reactions that she had had previously to both the interventionist and Melinda. It was at this point that the interventionist made two strategic probes that allowed him to build on the data about humiliation provided by Lee and Melinda and to formulate for the first time the problem of how participants construct and experience the learning situation before them:

Lee: There were repeated instances of your defending Melinda. It was at that point I felt, "Again he's defending her, and he's not really hearing what I'm saying."	Lee made repeated inferences that upset her: In her view the interventionist was treating her unfairly. But she kept these views and feelings private at the time.
Interventionist: And is there anything that prevented you from saying that?	The interventionist probes for obstacles to making such reactions public.
Lee: No, I thought after that, that it wouldn't be correct.	Lee thought it wrong to express these reactions but does not say what leads her to think so.
Interventionist: Might it be humiliating to the receiver?	The interventionist tests a hypothesis.
Lee: Yes.	Lee confirms.

In this excerpt we have another instance of an actor inadvertently colluding with others in designing a situation that she considers unfair to herself. In this instance Lee believed the interventionist was acting unfairly, yet she said nothing and by default contributed to the unfairness she saw. The interventionist had a choice point here. He might have intervened as he had in the previous phase, eliciting data to test her inferences and perhaps asking, "Can you say what I did that struck you as defending Melinda and not hearing you?" But instead he shifted the inquiry, probing for an additional kind of data: data on what stops participants from acting in ways that would ensure that they were treated fairly and that would allow them to learn. With this new focus, he went on to offer a hypothesis based on data about Lee's feelings of humiliation over her own errors and her fears of humiliating others. He posited that Lee held a set of propositions about humiliation that led her not to say what was on her mind because she anticipated humiliating herself or others. Once she confirmed this, he was able to organize these data into a pattern that suggested the following formulation:

Interventionist: So I have a problem: Those of you who feel easily humiliated also design your interventions so they do not humiliate someone else. But what you consider humiliation may not be even a pinprick to the receiver.

[So] we're both in an interesting bind: I can't make an error or a quasi error without humiliating. And Lee can't tell me what she feels without fearing humiliating me.

[And finally:] I don't know how to create Model II

The interventionist begins by organizing the data elicited so far: People who are easily humiliated assume others will feel the same and sometimes they are wrong: Melinda didn't feel humiliated.

Then he builds on these data by identifying a bind: If he makes an error, he will humiliate. But he cannot learn this because others fear they will humiliate him by pointing out this error.

And he builds on this to point out the implications

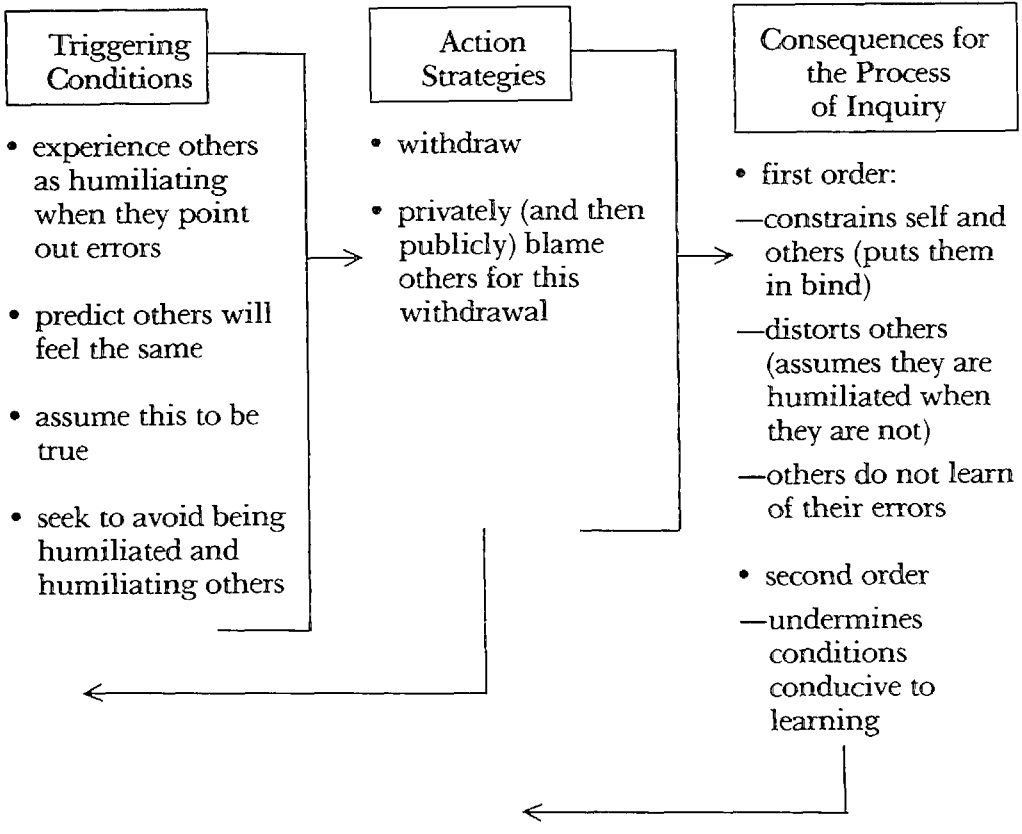
conditions, if the behavior on the peoples' part is . . . to withdraw.

for the learning context: If people withdraw, he cannot create conditions conducive to learning.

Combining new data with those from the previous phase, the interventionist reformulated and mapped out the problem of withdrawal. He began with conditions hypothesized to trigger withdrawal: People experience humiliation, predict others will experience the same, assume this to be true, and design their actions to avoid humiliating themselves or others. Notice that we now have data for the constellation of affect (humiliation), inference making (make predictions about others and assume them to be true), and intention (avoid humiliating self and others) that the interventionist originally sought because his model of participants regarded this constellation as crucial to understanding action. Next he connected this constellation to their tendency to withdraw and to blame others. Lee believes he made the error of humiliating her, yet she does not tell him so and instead withdraws. And finally he tied these actions to a series of consequences for the two of them and the learning process: Her actions put them in a bind, they assume people are humiliated who may not be, they prevent the interventionist from learning of his errors, and they thus end up undermining the conditions necessary for learning. Diagrammatically we might map these causal relationships as shown in Figure 9.

These data suggest the frame about what it means and takes to learn that we saw in the previous map of participants (Chapter Nine). It was through these processes of reflective experimentation that we began to generate the data and insights that eventually were organized into the more comprehensive map of their experience. From the vantage point of participants' frames, learning means making or exposing errors that are humiliating (it is wrong to be wrong), and it requires leaving the process up to others to avoid such humiliation (one's role is that of recipient of learning). By unearthing the structure of this logic-in-action and by pointing out its consequences, the interventionist started to unfreeze the participants' frames, saying

Figure 9. The Withdrawal Cycle.



in effect: "Your frames are backfiring, leading you to undercut the very beliefs, conditions, and values that brought you here in the first place." He identified factors they had overlooked (people may not be humiliated) and introduced new elements that their frames had not anticipated (they create their own constraints), thereby casting doubt on the usefulness and accuracy of these frames (see Kelly, 1955, on constructs). Such moves are the equivalent of critiquing a theory. The interventionist revealed inconsistencies and uncovered anomalies for which their theories could not account, in essence disconfirming the predictions that ought to logically follow from them.

All this was quite puzzling to participants and certainly unexpected. Since the interventionist's reformulation was based on data brought forth to resolve an earlier puzzle, their sense of dissonance was heightened instead of reduced. The interventionist then built on this unresolved sense of dissonance to suggest an alternative: "You've got to try to make errors or to confront me." It may sound odd to the reader to hear the injunction "try to make errors" when for so long most of us have tried so hard to avoid them or to cover them up. But in this context errors are the material that sustain a process of inquiry into action. Without a willingness both to make errors and to reflect on them, this process cannot go forward. So from the interventionist's perspective, the mistakes that the actions of participants brought forth were essential for success at learning.

When an existing frame is loosened by this kind of doubt, a reframing of mistakes becomes more plausible but remains suspect. Participants may doubt their own frames but continue to shrink away from testing an alternative one. As Kelly (1955) put it: "A person hesitates to experiment because he dreads the outcome. He may fear that the conclusion of the experiment will place him in an ambiguous position where he will no longer be able to predict and control. He does not want to be caught with his construct down" (p. 14). In essence, testing the interventionist's suggestion would require them to break out of their roles as recipients and out of their frame that it is wrong to be wrong. While this was making increasingly good sense to participants, they remained stymied. How were they to make the leap

from a frame that no longer offers firm ground to another they cannot quite envision nor be certain exists? One participant expressed it this way: "I took this class because of its emphasis on not protecting and on reflecting the real world. And I've never been in an environment in which I'm being pushed in those places I'm not courageous! And the question for me is: If we're here, how do we get to out there? And how do we create this as a place, so we can keep pushing each other to go beyond where we've gone." This is the kind of question that comes out of phase three, and it was toward answering it that participants and interventionist turned next.

To summarize Phase Three, we might note that the interventionist began by shifting the direction of inquiry. He built on data already elicited and probed for new data that might now be used to bring about change. Informed by his model of participants (Figure 8 in Chapter Nine), he organized these data into a reformulation of their withdrawal that explained the withdrawal, helped to make them aware of the logic in it, and pointed out unanticipated results, thereby revealing new inconsistencies in their actions and in the premises upon which those actions were based. In this way the frames of participants were brought to the surface and cast in doubt, and participants began to reconsider them. The interventionist then posed an alternative that required them to break out of their existing frames, something they were now in a better position to do but at a loss how to do.

Phase Four: Working Through Dilemmas. At this point participants' efforts to diminish their sense of dissonance had failed, and they were growing increasingly doubtful of the way they were framing the learning process. Yet at the same time they remained hesitant and doubtful about the next step to make. The presence—and expression—of such doubts indicates a qualitative shift in participants' perspective and the emergence of a new phase in the experiment. These doubts suggest readiness, rather than resistance, to think through how they might actually negotiate such a reframing process and the obstacles to such a process. Or put differently, such doubts express the best kind of resistance, one that in effect says to an inter-

ventionist: "Don't forget. I may be questioning my own logic, but I'm not so sure about yours either. So before I try your logic, I'm going to hold you to explaining it, exploring it, and submitting it to the same scrutiny we've just submitted mine."

The interventionist regards this stance as a step forward and as an opportunity for collaboration, not as resistance aimed at undermining him or the process. The interventionist thus helped to initiate an iterative process that involved identifying doubts and dilemmas, designing ways out, eliciting new doubts and new dilemmas, designing new ways out, and so on. Each iteration incrementally served to test an alternative frame and moved participants toward a reframing of the learning process. To describe this last phase, we follow the interventionist and participants through two iterations of this process, and we start with his response to the participant who earlier expressed concern over how to move beyond where they were:

Interventionist [referring back to an earlier description]: That's the part I was unaware of. It sounds to me like you and Roy were saying something like this:	The interventionist empathizes with and takes seriously their doubts: He communicates that he now understands that there are obstacles to enacting his advice: They dread errors so much that they become immobilized.
When I get into this situation, I get into a quick, automatic internal dialogue: "Oh, my God, am I going to do it? Is it going to be bad? My God, that would be terrible."	
You're right. I'd get squeamish too; that kind of dialogue would immobilize me.	
One thing we can do is if any of you feel that dialogue, how about raising your hand, getting in and just talking	He poses an alternative that will allow the participants to make a move in the face of their feelings.

about how you're feeling and
not talking about the answer.

As we have seen earlier, the interventionist responds to dilemmas by taking them seriously while not taking them for granted. He learned from and empathized with the internal dialogue of participants, while pointing out that it had left them immobilized. In this instance, he also went on to suggest a way out of this dilemma by saying that they might make the dialogue itself public. This suggestion serves to lower their aspiration levels, because it implies that interim steps such as surfacing one's reactions are important. If enacted, such steps would put them closer to the goal of a more reflective frame. Their internal dialogue might be full of protective reasoning, but they would be in a better position to explore and move beyond this reasoning once it was made public.

But from the participants' perspective, this suggestion itself posed a new dilemma. Participants conceal their internal dialogues, because they anticipate that revealing them will result in negative consequences. The interventionist is in effect asking that they act as if they believe positive consequences might follow, when they believe otherwise. Not surprisingly, participants were skeptical. In one person's mind she had already seen such a test. When people had done what the interventionist suggested, they were confronted and told that they had gone on too long and that they were thus in some sense wrong. For this participant a new dilemma emerged. The interventionist was saying, "Jump in, think out loud." Yet when people did this, they were confronted and told that they were wrong. This raises an important issue. On the one hand, the interventionist does not want to communicate that participants will not make errors or be wrong. In fact, if the experiment succeeds, they will probably make plenty of mistakes, and he and others will point out and reflect on those errors. On the other hand, this does not mean that people are wrong for making these mistakes or that they should stop making them. But because of the conflicting frames that participants and interventionist bring to this experience,

suggesting alternatives becomes problematic, with participants anticipating one set of results and the interventionist another. Participants reason: "If I am confronted, it will not only mean that I'm wrong but that I'm wrong for being wrong. Since I know I will make mistakes if I jump in and think out loud, the outcome of such advice can only be negative." The interventionist tries to counter such logic by suggesting a way to move past it:

Interventionist: Let's experiment with all sorts of different ways to design our intervention, including if it suddenly occurs and it's really boiling, that you say to the class, "I want a few minutes; it's going to be long."

But it would be okay for it to be long. It's when the class talks in a lengthy, circular manner and acts as if the manner isn't lengthy and circular [that is a problem].

The interventionist encourages experimenting with different ways to intervene.

He suggests that one experiment might include owning up to what you are doing as you intervene.

He communicates that making errors is okay, it is covering them up that is problematic.

In this excerpt, the interventionist reframes the problem: It is not the mistakes of length or circularity but the fact that people act as if these errors are not being made. This offered a heuristic for participating that is highly conducive to learning: Acknowledge what it is you are doing rather than cover it up.

Alternatively, the interventionist might reframe the way participants understand the results of their new attempts to break out of their withdrawal. From the participant's perspective, confrontation of their new actions suggests that their experimentation has failed and that such attempts ought to be abandoned. From the interventionist's perspective, however, such confrontation suggests that new learning can occur and that their attempts ought to continue. To convey this new view of the risks of experimentation, the interventionist might con-

firm that experiments will reveal errors and that these will be identified in the course of reflection. But he might then add that this means that their experimentation is fruitful: It is yielding important results that should further their own and others' learning. Seen in this light, their experimentation becomes a success, even when it reveals the failure of new actions.

This process continued through a series of iterations, each participant probing the interventionist's frame to see whether or not it merited a test and identifying data that he or she thought disconfirmed it. In each instance participants were saying something like: "We did what you suggest and we did not like the results. So your framing doesn't work." Hence, the overarching dilemma of being caught between two frames that seem equally dubious. To help resolve this dilemma, the interventionist reframed the meaning of these results and the participants' solutions for contending with them. In addition, he suggested methods that they might use to break out of each dilemma they raised: Get in and just talk about how you are feeling; acknowledge what it is you are doing and do not cover it up; and reflect on your reactions publicly here, not privately at home. Each of these methods might move them closer to more learning-oriented frames and actions. Throughout, the interventionist reiterated in his own stance of vulnerability and his encouragement of theirs that it is not only okay to make errors, it is a necessary prerequisite for learning.

Results. During that session and in subsequent weeks participants began to increasingly test out these steps. They confronted the norms of the course, posed alternatives to the interventionist's alternatives, confronted each other and the interventionist more frequently, and began to produce the actions represented on the reflection-oriented end of the continuum depicted in the learning map (Figure 8 in Chapter Nine). This led more and more participants to make mistakes publicly, providing them with opportunities to explore mistakes and what it means to make them. Nevertheless, in the course of this experimentation, new obstacles emerged, as participants continued to respond to each other's errors in ways that either reinforced or triggered the more protective frames. But even these

responses provided new opportunities to probe the protective reasoning bracketed by these frames. We turn to one such opportunity next, as the group reflected on their tendency to rescue their peers from having to scrutinize their errors.

Rescue Maneuvers: Undercutting One's Peers

As soon as participants began to jump in and talk, to acknowledge what they were doing, and to discuss their reactions openly, they participated more, made more errors public and saw and pointed out more errors in others. All in all, they came to generate an abundance of mistakes that sparked and fueled a process of reflection. Yet such a process is an incremental one of two steps forward and one step back. With their frames in flux, they at times responded automatically to others' errors in ways that triggered and reinforced the protective frames that they were trying to break out of.

The interventionist regarded such responses as further opportunities for frame breaking and reframing, but he now assumed a somewhat different role in relation to them. Earlier, because so many participants withdrew, he necessarily had to take a primary role in sustaining the process of inquiry, making most of the moves to probe, confront, empathize, and so on. By this point, however, the movement stimulated by the first experiment had led others to come in and increasingly take on this role so that the interventionist could now begin to move back from center stage, giving up the role of a primary actor and taking on the role of a collaborative director who helps others to enact roles and scripts unfamiliar to them. Out of this renegotiation of roles, a new public dialogue emerged with the interventionist and participant together critiquing and reflecting on the latter's performance and on the interventionist's periodic demonstrations of an alternative script.

As with any dialogue that takes place across competing frames or assumptions, this discourse between interventionist and participant was often conflictual, with different meanings being brought to bear on the same performance. Working

through these conflicting meanings and the frames that informed them became the key to further learning and reframing.

The experiment that follows occurred at this transitional period in the learning process. It evolved spontaneously as the interventionist began to see the following pattern of interlocking scripts emerge: One participant, Carol, would make an error either on-line or in the case that she had brought to class; her peers would help her to see the error; she would then grow upset and communicate that she was either helpless or overly harsh on herself; others would pick up these cues and come in either to take over the process that was upsetting her or to minimize her errors; she would then make another error; someone would point it out and the sequence would recur. Earlier we described the double-edged nature of this kind of support (see Chapter Nine). It is well intentioned but undercuts others by usurping control over, and/or circumventing, the process of reflection on errors. It thus confirms the other's role as a helpless recipient and reinforces the frame that it's wrong to make mistakes. The interventionist therefore used this rescue sequence for further frame breaking, interrupting participants' unawareness of it and unfreezing the notion of support embedded in these moves. As he did so, he demonstrated an alternative sequence of supportive moves based on different expectancies, and he reframed what it means to make mistakes and to support those who find them upsetting.

Phase One: Interrupting a Rescue in Progress. The experiment started as the group consulted to Carol on a case involving a client who had just confronted her for misusing a politically sensitive term. In the case, the client stressed that Carol was not dumb and kept asking her why she had used the term, while Carol kept deflecting his questions and minimized the mistake by saying, "I just forgot" and "It's just a term in my head." Internally, however, she was becoming increasingly upset, recounting to the group that she had felt, "God, am I dumb! It's not just like I'm making an error; it's a huge hammer [slaps the table to illustrate the force of the hammer]!" Similarly, as Carol's peers tried to point out in class how her deflections might have heightened her client's mistrust, Carol began to

find it increasingly hard to follow what they were saying, finally coming in to tell them that she was blanking out. Such responses to looking at one's errors—both in the case and in class—are consistent with what we have seen before. Under the stress of being asked to take a look at her errors, a participant may grow increasingly upset and, as here, even blank out. At the same time, we have evidence that a new frame is emerging, that is, Carol revealed her inner dialogue, indicating a new willingness on her part to experiment with being wrong.

But as soon as Carol becomes distressed by her errors, her peers rush in and act as if they read her responses as cues to rescue her. In class, when she said that she was blanking out, they were quick to ask whether they were going too fast, whether they were giving too much information, and so on. In the case, they advised her to tell her client, as she just had told them, how badly she felt about her mistakes. Both of these moves suggest that participants are learning to take more responsibility (they come in to help Carol) and to make reactions public (they advise her to tell her client what she feels). But her peers apply this learning in a way that is apt to reinforce Carol's distress and the helplessness she experiences in blanking out. By coming in and taking over the process in class, they enact a form of support and responsibility (1) that does not help her to work through but rather circumvents her responses, saying in effect, "We will alter what we do to avoid your feeling what you feel"; (2) that implies that she is in fact helpless; and (3) that thus encourages her to give up control in a way that can only feed back to reinforce her sense of helplessness. By advising her to express to her client what she had just expressed in class, they suggest a form of disclosure with a client that is apt to cue him to rescue her as they themselves just did. Once her client realizes that she is hitting herself with a hammer, as it were, he may back down from asking her to take a look at her mistakes for fear he would only escalate her self-punishment.

The interventionist watched these sequences unfold until Carol said that she was unable to follow their advice to express how she felt about her mistake, because she was "already on the ground trying to breathe." Reading this as yet a third cue for

support, the interventionist used it to make a two-pronged intervention directed at both Carol and her peers:

Interventionist: Yes, and it's terribly important not to get seduced by your reactions . . . because if I do, I'm hooked into your button-pushing defense.	The interventionist formulates her responses as defenses.
What was happening in the class in the beginning, when people empathized and said, "Are we doing this too fast?" "Is this kind of complicated?" and so on.	The interventionist describes the way participants empathized with Carol.
There's a validity: We were doing it too fast, we were cutting each other off. So it's not that we were picking on the wrong variables. But as I was listening to it, she could pick it up and say, "You're moving too fast."	He identifies that their responses simultaneously had validity and ignored her capacity to monitor the process
So, I felt the class was being supportive, but that's where they could get caught in the button-pushing defenses that people have.	He points out a paradox: Their form of support could hook into her defenses and thus undermine her learning.

In this excerpt the interventionist disrupts the participants' finely tuned rescue maneuvers. Everyone was tacitly agreeing to enact a series of rescuing moves on cue, when all of a sudden the interventionist comes in on the same cue yet enacts an entirely different script, one that focuses on, rather than circumvents, Carol's responses to her errors and one that formulates them as defenses that can "hook" others. As he does so, he implies some paradoxes: The participants' support may both undermine Carol and reduce their own ability to help, because

it ignores her capacity to monitor the process and because their efforts to help get tangled up in her defenses. Thus the interventionist at once interrupts their unawareness of these factors and redirects their attention to Carol's reactions. Combined, these moves build on the interventionist's prior use of empathy in the service of growth (see Chapter Ten). In the earliest phases he took participants' reactions into account while not taking them for granted. Now, by asking that they pay attention to Carol's reactions, while not getting hooked by them, he suggests that participants ought to assume this same stance.

But as the interventionist himself points out, the participants are already hooked. They take a qualitatively different stance from the one he suggests—one that focuses, as Carol does, on those factors that might produce a sense of helplessness (the pace of the process) and one that ignores, as Carol also does, those factors that might eventually produce a sense of mastery or efficacy (Carol's responsibility for slowing down the pace of the process). Consistent with our discussion of empathy, the participants' moves express an accurate understanding of Carol's experience (they recognize those factors she sees), but the participants omit the same features of the scene as she does, thereby reinforcing a view of the situation that leaves her feeling helpless and distressed. The problem is that their understanding *is* her understanding. They take her reactions for granted and see no need to question them because they share them. Garfinkel (1967) describes a similar kind of shared understanding in drawing on Schutz: "The person assumes, assumes the other person assumes as well, and assumes that as he assumes it of the other person, the other person assumes it of him" (p. 50).

In this instance both Carol and her peers hold a set of interlocking assumptions about what is happening and how best to manage it. They share the same assumptions about what it means and takes to learn; they see the situation as she sees it (Carol's errors are distressing and she is helpless); and they thus act as they might wish and expect others to act were they in her shoes (they rescue the helpless recipient distressed by errors); and consequently they end up confirming her views and main-

taining the cyclical sequence. Ironically, however, such closeness can be an uncaring kind of closeness. It allows Carol's peers to be taken in by her defenses, it causes them to add to her helplessness, and it precludes the optimal distance necessary for a "generative" form of empathy, one that might help her move beyond her present stance (Schafer, 1959; also see Minuchin, 1974; and see Umbarger, 1983, on the dysfunctional features of enmeshed relationships).

Yet no one intended any of this. The intention of the participants was to support Carol's learning. The problem is that they hold a notion of support that is predicated on the assumption that errors are wrong to make and that individuals are recipients, not agents, of their distress. Given this framing, it becomes supportive to rescue "victims" from their distress and their mistakes. If a process of reframing is to continue, the interventionist must continue to draw attention to this reasoning as he begins to do here. His actions disrupt the expected rescue sequence, and his framing of the problem points to critical features in the scene that theirs ignored.

Phase Two: Enacting An Alternative Notion Of Support. As long as frames are in flux, participants will get into these kinds of difficulties as they try to help one another to learn. One way the interventionist deals with such difficulties is by making the kinds of unfreezing moves described earlier, that is, by helping participants to become aware of factors that they have systematically been ignoring. Another way is to enact an alternative notion of support. This has two simultaneous effects. It models how to deal differently with participants' protective responses, and it further unfreezes these responses by bringing to the surface features of the design behind their actions that are usually kept hidden. To illustrate, we give an excerpt of how the interventionist responded to Carol's distress over her errors when she said, "God, am I dumb! It's not just like I'm making an error. It's a hammer!":

Interventionist: There's a curious paradox. The way the director hits you on the	The interventionist identifies a paradox: The director confronts her by saying that she

head is to say, "You're not so dumb." And you're saying, "Yes, I am." So you get the hammer in fascinating ways. That's something to identify, and let's get the data later.

is not dumb, but she confronts herself by saying that she is dumb.

Here's an example of a program in a person's head that keeps her unaware of her program. Because if you can keep saying—"It's me that's dumb, it's me that's dumb"—then there's a lot of things that you can blank out from hearing when people are saying things that are relevant to you.

This paradox leads him to hypothesize that her response is a program designed to avoid hearing about her errors: When she responds this way, she blanks out.

So the automatic response of "Oh, I am so stupid" on the one hand, has some validity; but maybe it's a very sharp thing, your being stupid, and that's now in quotes.

He recognizes the validity of her feeling that she is stupid in that she did in fact make a mistake.

[But to look at it as sharp], then you'd have to take it seriously as something to look at: What is it that led you to be blind, not only to what you sent him but in how you discussed it in the case.

He makes explicit the implications of framing her responses as "sharp": You have to take seriously what led you to be blind.

In tracing the steps of this intervention, we can get at the logic that underlies it. First, a puzzling feature in the case catches the interventionist's attention. The client is saying that Carol is not dumb and is trying to look at what led to her mistake, whereas Carol is doing just the opposite, saying she is

dumb and deflecting his attempts to understand her mistake. In light of this puzzle, the hammer that Carol describes begins to take on a new meaning: It now becomes a clue that she may be designing ways to protect herself from looking at her errors. So while he recognizes some validity to her reaction that she is "dumb" (she did make a mistake), he begins to see her recitations of "I'm so dumb" as an expression of the kind of anguish that may serve to block out those who wish to look at her mistakes. Had she regarded her error as sharp not stupid, she would have to look at the knowledge embedded in her actions. What this suggests, then, is that the interventionist reads Carol's reactions in a qualitatively different way than participants did. She is not helpless or in anguish so much as she is designing a way to protect herself. This is not to say that she experiences no anguish but that the hammer she uses may be both tougher and safer than her client's: tougher because she uses it to punish herself with "I'm so dumb," yet safer because she also uses it to deflect attempts at exploring her mistakes.

In framing Carol's response this way, the interventionist focused on different features in the situation from those selected by the participants. He first focused on the discrepancy in how Carol and her client reacted to her mistake, examining their reactions in light of their accuracy and of how they both dealt with her error. In so doing he saw some validity to her reaction, but he did not regard it as a necessary response to the situation before her. This then led him to see that the actor who considered herself dumb (Carol) in some sense did less about her mistake than her client who did not see her as dumb. This paradox led to the following hypothesis: Her moves to "hammer" herself may have been designed to protect her from becoming aware of what she tacitly knows about managing threatening situations. This hypothesis, arising from this particular puzzle and shaped by the interventionist's theory of protection, posited the view that Carol's responses were designed. If so, then Carol was neither dumb nor helpless, but clever and a master of deflection.

By picking out these features in the situation and framing them as he does, the interventionist constructs a fundamentally

different scene in which to support Carol's learning. In this scene, the problem is that Carol is designing her own anguish and blindness. This is the critical part of the plot to focus on and to help her move beyond. Formulated this way, the prescription for Carol is not to express to her client how upset she is about her errors, possibly cuing him to draw back from them. Rather it is to look at what role such responses play in keeping her blind and helpless. This framing of the situation brings to the surface features of how Carol designs her learning that her peer's framing will keep submerged: her automatic responses to errors and failure. As a result, what was once outside of her awareness and control can gradually come more within it, because she and others can now regard such actions as blanking out and berating herself, not as cues to deflect or rescue her from her errors, but as cues to help her become aware of how she may inadvertently keep others from helping her to learn.

Phase Three: Generating Frame Conflicts. Frames are remarkably resilient. Conceptually, the interventionist's reconstruction of the scene they had just enacted made good sense to participants. They could recognize the description of their behavior and see its usefulness. But frame breaking and reframing constitute an iterative process that involves repeated experimentation in which participants must continually experience the failure of their own frames and be helped to design ways to test out new ones. In this phase, participants walked back onstage and resumed their roles as consultants to Carol, experimenting with new ways of helping her on the basis of what they had just learned. What follows is the emergence of an interesting hybrid. One participant, David, builds on prior learning by trying to help Carol deal with her reactions so that they will become less immobilizing. How he does so reveals new features in the participants' notion of support and provides an opportunity for further unfreezing. We enter as David gives Carol advice on how to manage her reactions:

David: And I have another rule you might follow: Don't assume you're at fault or incompetent.	David suggests a rule: Do not assume that you have made a mistake or that you are incompetent.

Interventionist: But the data are that she is at fault.	The interventionist points to data that illustrate that this rule does not apply here: She did make a mistake.
David: No, I don't buy that.	David asserts that he does not agree but does not say why.
Interventionist: Why not?	The interventionist inquires into his reasoning.
David: I don't buy it.	David continues to assert his view without saying what led to it.
Interventionist: Well, hold on a minute: What do you do with a woman who blanks out? Do you consider that competent?	The interventionist confronts David: He points out actions in class that he sees as incompetent, and he asks David if he sees them as competent.
David: No, I'm talking about what preceded her button getting pushed.	David cites a different situation (the case).
Interventionist: This fellow [Vince] wasn't angry at her; he didn't yell and scream at her.	The interventionist follows his redirection, pointing to data in that situation.
David: But he suggested that she was in error.	David suggests that Vince, not Carol, is responsible for her actions.
Interventionist: That's right. [*Recalls what Vince did.*] He was trying his best, he wasn't trying to be punishing in my view. Now, for you to say that isn't Carol's fault is a terrible undercut of her.	The interventionist confirms these data, but not the inference drawn from them that Carol did not make a mistake. The interventionist then builds on this to reframe David's support as an undercut of Carol.

David's efforts to support Carol run into an unanticipated snag that illustrates how participants build on prior learning to construct and test out new rules. The rule David designed here—"Don't assume you're at fault or incompetent"—both redirects their help toward Carol's reactions and poses an alternative to the rule "assume your inferences are facts." Both features suggest that David is trying to move beyond a theory-in-use that avoids looking at automatic responses and that makes untested assumptions. Yet if we look at two other features of his rule, we see some limits to this forward movement. First, his rule ignores that in this instance Carol did make a mistake; hence, the rule is misapplied here, and this misapplication itself suggests a continued discomfort with errors and an effort to circumvent them. Second, while no one should simply assume that he is at fault, a rule that merely poses the opposite will undermine another rule that participants are also trying to learn: Focus on one's personal responsibility. Given this combination of features, David's rule is a kind of hybrid that draws on his knowledge of a new theory-in-use while staying close to the parameters of his existing one. More precisely, it maintains the features of a protective framing of what is means to make mistakes.

Recognizing this, the interventionist resumes his frame-breaking moves. He points out data that suggest that David's rule will not work, and he identifies consequences that indicate it may actually backfire. As we have seen before, such moves cast doubt on an actor's logic, leading him to question it. But unlike his previous reaction, David responded by more actively confronting and questioning the interventionist, further illustrating the participants' movement forward and enabling David and the interventionist to negotiate and inquire into their conflicting frames and rules. What emerges from this process is a dilemma, one that further reveals the causal reasoning that leads participants to enact the kind of supportive moves they do. In what follows David identifies this dilemma for the first time, and the interventionist continues to point out new gaps in David's reasoning:

David: I don't understand that. If you assume that you're incompetent, how are you going to enter any consulting relationship without going into Model I behavior and screwing up? You have to have confidence, don't you?

David begins to make his causal reasoning explicit: If you assume you're incompetent, this will lead you to act incompetently. Hence, you must have confidence. Implicit in his view is that confidence is contingent on not making errors.

Interventionist: When somebody gets empirical data of an error and gets a pattern of escalating error, that's the thing that leads to the incompetence.

The interventionist reframes what leads to incompetence: If you make an error and these errors escalate, this will lead you to act incompetently.

And later on the interventionist conceptualizes David's approach:

Interventionist: I think you are trying to be supportive, and say, "Gee, Carol, if you don't have that other feeling, if you think positive about yourself."

The interventionist cites David's good intentions. David is trying to be supportive.

And I'm suggesting that she'll think, "That's fine. I'd love to think positive about myself, but how the hell do I do it?" I don't know any way she can do it if she is producing those kinds of errors, to put it dramatically.

He points out some gaps in David's reasoning: Given that she has made these errors, it is not likely that she can follow his advice to feel good about herself.

David: Okay, I see what you're saying. I'm reinforcing her.

David begins to see that his actions may be reinforcing Carol.

Interventionist: Well, it's a kind of Madison Avenue approach. It says, "Think positive." And she ain't thinking positive. Her automatic response is to punish herself.

The interventionist describes David's approach as one that fails to take into account her automatic responses, even though it is directed at them.

David: Well, I do believe there is something to that [approach]. If you believe you're going to be incompetent, it seems to me the chances are much better you're going to set up a self-reinforcing cycle and have it become a self-fulfilling prophecy.

David identifies a dilemma in giving up his framing: If you believe you will make mistakes, you may create a self-fulfilling prophecy.

Once the interventionist points out some gaps in David's approach, David runs up against a dilemma. On the one hand, what the interventionist says makes sense: Carol did make an error, and he may be reinforcing her by ignoring that. But on the other hand, if he focuses on her errors as the interventionist suggests, he will diminish her confidence and may actually create further incompetence. Such a dilemma stems from the following causal reasoning: Focusing on errors will result in diminished confidence that in turn will result in greater incompetence. This reasoning is actually quite similar to our description of what happens when someone holds a protective framing of errors (see Chapter Nine, the map of the learning process). If individuals assume that it is wrong to make errors and then try to avoid them yet go ahead and make them anyway, they do experience a sense of failure and a loss of confidence, and this can lead them to act in ways that get them into further trouble. So from our point of view, David's causal knowledge has much descriptive validity. But the prescription that follows from it should neither be to avoid looking at errors nor to feel good about them. Rather it should be to learn how to use them for one's learning without becoming so discouraged or frightened by them that one cannot acknowledge them. Implicitly, David's

prescription requires that we cover up errors in order to maintain a sense of confidence, and it consequently simplifies the problem of how to create competence. With his theory one does not have to figure out how to develop greater competence in the face of errors or disruptions in one's sense of confidence. But his theory lops off a significant part of the problem: It overlooks a necessary condition for competence, the ongoing detection and correction of error. Therefore at best his theory can only create a *sense* of competence, and at worst it will create a sense of competence that becomes increasingly detached from the actor's actual level of competence, even as the actor himself would judge it were he aware.

As the interventionist pointed out these gaps in David's reasoning, David began to see that his approach might not work. The more he saw this, the more he experienced what we have seen before: the dilemma of being caught between two logics that seem equally doubtful and equally true. He sees that he is reinforcing Carol's method of framing the problem, but he sees no way out of this. To move beyond this frame conflict, he needs an alternative way of supporting a peer, and it is toward offering such an alternative that the interventionist turned next.

Phase Four: Working Through Dilemmas. While Carol observed this process, she began to infer the presence of a tacit frame about errors in what David was saying. In reflecting on someone else's logic, she was able to see the limitations of such a framing, and she reformulated how she understood her own errors. They were no longer evidence that she was terrible; they only suggested that she had a less flexible range of responses in some situations than in others. The interventionist built on this reformulation to suggest another way of thinking about Carol's errors, one that might help David and others out of their dilemma:

Interventionist: Now, to me you're getting at what's an answer. What you just said is equivalent to the metaphor we've used for incompetence.	The interventionist builds on what Carol is saying and connects it to a metaphor.
It's the equivalent of	The metaphor is one that de-

Carol's being a pretty good tennis player and saying, "You know what pushes my button, it's the backhand. You know, there are lots of other things, but we're working on the backhand today."	scribes Carol as a tennis player with a troublesome swing.
It doesn't mean she's a lousy tennis player; we're saying she is identifying her backhand as something she wants to work on.	It does not describe her as a lousy player; rather it focuses on a skill that requires work.

The interventionist's metaphor is one that frames errors in the context of learning a skill; errors become something to work on. It emphasizes aspects of a player's performance instead of global assessments. It follows from this that efforts should be made to improve a player's performance, to provide ample opportunity for lessons and practice, and to reflect on the results of this practice. Similarly, it would be rare, even odd, for anyone to ascribe nasty motives to a tennis player for making a mistake or to attribute that she was consciously trying to miss a shot. Rather we assume that a player's errors are due to the limits of her abilities at that point in time. Such assumptions are quite different from those embedded in the prevailing, although tacit, metaphor implicit in how participants frame their learning. For them the underlying metaphor is error-as-crime, replete with victims, the policing of violations, and the meting out of punishments. Within this frame, the overarching rule becomes one of outlawing errors, and all violations must be covered up or prosecuted. It is this metaphor that underlies Carol's move to berate herself for making an error and David's move to look the other way. Within the context of their shared frame, David knows that Carol cannot act without guilt or anxiety in the face of her errors. But rather than question the frame, he assumes it too and in effect suggests that they ignore the offense rather than punish it, the only two options within such a frame.

By drawing on a metaphor to reframe here, the interventionist provides a way of reconstructing the process that is easily retrievable. The picture of a tennis player working on the notoriously difficult backhand is more vivid and easy to imagine than a series of abstract propositions about what it means and takes to learn. This new metaphor carries with it assumptions that not only can withstand reflection on action but require it. A tennis player in action cannot see what she is doing wrong but must rely on others to observe her form and help her to become aware of what is causing her errors. If retrieved, this metaphor should lead David and others to no longer define their supporting roles as those of prosecutors or acquitters of transgressors but instead to see themselves as cohorts or instructors who can help Carol to see what she cannot see alone. Thus, in the context of this metaphor, support can take on a very different form and can resolve the dilemma that arises when we focus on another's errors.

Getting Angry at Mistakes

Sometimes participants take a kind of hammer to others as well as to themselves. Angered by mistakes, they deal with them not by trying to rescue the person who has erred but by making any one of several distancing moves. Some may blame and punish others for the difficulties they themselves face; others may psychologically detach themselves from what they regard as a frustrating situation over which they have no control and for which they feel no responsibility; and still others may suppress their anger, acting as if they were calm while giving off cues that they are not. But regardless of the move, each one is initially prompted by anger at another's mistakes, and most often each one ends up signaling that those in error should run for cover or retaliate in kind.

Left unexplored, this anger at mistakes can counteract a process of frame breaking and reframing, because the moves it triggers affirm a protective response to learning. It makes sense to guard oneself from those who make themselves invulnerable and who cannot handle fallibility—either their own or others'.

Thus as participants continue to experiment with breaking out of their frames and risking failure, they may discover that their existing frames are valid; that is, their mistakes do in fact get treated as transgressions to be censured and punished. Since such anger is a frequent occurrence in the real world, participants must learn how to work through it themselves and how to help others do the same. Like other obstacles to reframing, anger at mistakes can thus be regarded as both a constraint on learning and as a chance for participants and interventionist to test out ways of exploring and moving beyond such constraints.

Getting angry at mistakes is a common yet puzzling reaction. If we think of mistakes in any learning process as necessary and by definition unintended, it is curious that individuals should act as if their peers' mistakes were punishable offenses, particularly when they themselves make the same kinds of mistakes. Yet this is a frequent occurrence. Participants diagnose Y as judgmental, closed, and controlling and often express deep feelings of resentment toward him for acting in these ways. And since participants assume such diagnoses to be true, they themselves act in ways that are judgmental, closed, and controlling—no matter how hard they try to act otherwise. We might think that the discovery that they act as Y does would be conducive to empathy. But actually this may involve a closeness that is too close for comfort, that breeds contempt, and that triggers moves to distance oneself from one's own fallibility, from that of the other actors, or from the situation that ends up exposing both.

The experiment that follows had the purpose of discovering ways to explore and to work through these reactions by helping participants to see in a new way the situation in question. It inquired into the most puzzling domain of the three experiments, leading the interventionist to take the role of what Schafer (1983) calls a seasoned co-explorer: someone who knows well the methods of exploration but not the territory to be mapped. Along with this, participants took increasing responsibility for initiating new lines of inquiry, for mapping the problem before them, and for designing ways to resolve it. In this way the relationship between interventionist and participants continued to be renegotiated and to move from a state of

dependence on the part of participants toward greater collaboration, with the interventionist assuming less control and the participants more control over the process of inquiry.

Phase One: Interrupting a Chain Reaction. The experiment sprang from reactions that participants had to a series of interactions that occurred after the interventionist had to leave a particular session early. It was thus by accident that we discovered that even relatively late in the learning process, participants still required help in enacting the norms of the course and in taking a stance toward one another that was conducive to inquiry. Without the interventionist's help, participants soon became abstract, acted as if they understood those who confused them, and rehashed what had already been said and said more clearly. This continued until one participant, Paula, came in and threatened to leave if the process continued. In this experiment participants' reactions to their own and others' mistakes became the object of inquiry. What we will see is that once Paula's frustration was expressed, it set off a chain reaction of angry responses. To illustrate, we give an excerpt from the session at the point Paula broke in:

Paula: I'm finding this really frustrating. I don't find anything different in what anybody is saying, and I feel like we are wasting a lot of time, and I would rather just leave if it's going to continue because I feel like I'm having a nervous breakdown because everybody's saying the same thing.	Paula expresses frustration with a process that she considers a waste of time. She communicates anxiety and an intention to leave if its source continues.
Ken: Well, I have a little trouble with what you just said. It's sort of: "You guys are doing something I don't like and if it continues, I'm going to leave."	Ken acts as if he is calm: He uses qualifiers to mitigate his reactions and what he heard. He states the meanings he heard but not what is problematic in them.

Paula: No. All I'm saying is [*pauses*] okay, in some sense—	Paula begins by resisting his meanings but then affirms them.
Ken: That's what I was hearing.	Ken defends his reaction by stating that what he said was only what he heard.
Paula: Because I felt like people were saying the same sort of thing. And when Frank said something and wanted feedback, it was like it was getting circular and circular and circular.	Paula reiterates what others did to cause her reaction.
Ken: Yes. You did illustrate it. The problem I was having was sort of "And I'm going to leave because I don't like the situation."	Ken recognizes the description but not the necessity of the consequence.
Mary: [*with impatience in her tone*] What's your problem then?	Mary demands that Ken state what the problem is.
Paula: Yeah, what's your problem, 'cause I'm feeling—	Paula comes in on this to make a similar demand.
Ken: The problem with that is that it sounds like—	Ken begins to explain.
Paula: I'm not saying that you shouldn't continue, it's just that I do not wish to continue with this, so I would like to leave.	Paula cuts him off to reiterate her position in a way that denies Ken's implied criticism that she was coercive.

This excerpt provides a short but representative sample of a longer chain of angry reactions that reverberated throughout the group. It begins with Paula, who frames the process as

a waste of time, acts as if she sees no role for herself, and becomes anxious and frustrated, threatening to leave if those she holds responsible do not take away the source of her reactions. A recipient of this threat, Ken, then responds by playing back the meanings he heard Paula communicate, mitigating his reactions and implying that Paula has acted coercively but not saying this directly. After initially resisting, Paula concedes that Ken has correctly heard what she said, and Ken takes this as an opportunity to reiterate what he heard, while continuing only to imply the problem in it. At this point, another participant, Mary, also grows angry and demands that Ken come out with it, spurring Paula on to do the same. Finally, as Ken starts to describe the problem, Paula interrupts to defend herself against the criticism of herself that she has inferred all along by insisting that the group was quite free to do whatever it wanted to do.

As we confirmed the following week, a rich subtext lay beneath what was said, and it was accurately read by those involved. First, at the time of Paula's intervention Ken reported that he "reacted very strongly," saying that he had felt threatened, stranded, and unhelped. While he tried to conceal this at the time and to act as if he were calm, he nonetheless gave off cues that this was not the case. By mitigating his reactions, by only implying a critique, and by strategically reiterating what he heard without stating the problem in it, he communicated that he was trying to minimize some negative reaction, which itself suggested that there was a negative reaction to be minimized. Mary, who inferred this template accurately, read in what Ken said what he left unsaid: that he was upset and trying hard not to show it. This lack of authenticity then pushed Mary's button; she later described herself as being very angry at Ken for not being more straightforward. Curiously, she then did to Ken what he had done to Paula. She herself concealed her anger and only implied a criticism of him in her impatient demand to know what the problem was.

The interventionist's departure was a serendipitous event that revealed a significant barrier to achieving independence. Making mistakes is to be expected; but if participants are to

learn from them, they must develop the capacity to discover and reflect on them in an ongoing way. The reactions to mistakes expressed here reveal an important impediment to developing this capacity. With this in mind, the interventionist-in-training, who had remained in the group but had not taken an active role in the discussion, decided to interrupt this chain reaction by evoking the responsibility of participants to be of help to one another:

Interventionist-in-training: If we were to look at you [Paula] as a consultant to this group, what was right about what you did is you surfaced a problem in the group, and you said, "We're going around in circles and I don't think we're getting anywhere." That makes good sense, and I think it's tacitly illustrated: We were going around in circles, and anyone here would immediately recognize that as being true.

As a consultant to the group though, you also said, "How I am now going to deal with the problem is by leaving." What that does is it presents this group with a bind, because on the one hand, we don't want to create conditions that are going to—and I think this is how you communicated it—force you to leave the group. And on the other hand, we're not yet clear about what it is we can

The interventionist evokes the role of a consultant as a lens through which to consider what Paula did.

From this perspective, she identifies what Paula did that could have helped the group: Paula accurately identified a problem.

At the same time, the interventionist also describes how Paula's solution to the problem creates a problem for the group: She puts the group in a bind.

do differently in order to change the conditions that make you want to leave.

Paula: I thought this was going to continue, and my attribution was that there were individuals interested in discussing the situation. I thought we were going to go on and discuss another role play [*pauses*]. Well, I mean, I could have suggested I'd rather do that.

At first Paula tries to legitimate her actions by citing the attributions she was making at the time.

She then stops herself and pauses, recognizing that she might have done something to alter the situation that was frustrating her.

The interventionist's response to Paula models an alternative way of intervening that helps to interrupt the chain reaction. It contains many of the same meanings that Ken's did. Like Ken, she recognizes the data Paula cited, and she identifies the problems of helplessness and coercion. But her response also contains other meanings that Ken's response did not. It affirms Paula's move to publicly identify a problem, while at the same time making explicit how her solution was not only unhelpful but actually rendered the group subject to her reactions. The very explicitness of the intervention itself omits some of the meanings in Ken's intervention that continued the chain reaction. There is no effort to mitigate the negative evaluations in the critique. It is therefore at once tougher in that it explicitly spells out the problems in what Paula did and less likely to perpetuate the defensiveness and anger in that it communicates that the interventionist is not distressed by what she described.

In the meantime, the interventionist asked participants to regard their interventions in a new light. Paula had taken the role of an innocent bystander, seeing no responsibility for what the group did; and, when she did intervene, it was not her intention to try to help the group, as she said later. The problem that Paula set out to solve was how to get out of a situation that she felt no responsibility for creating or altering. She therefore withdrew psychologically, and when this was no longer possible,

she threatened to withdraw physically. By reframing her role as that of a consultant, the interventionist revealed that the way in which Paula understood the problem was inadequate: It was not sufficient in this group to make the diagnosis and run. As a result, Paula began to recognize and acknowledge that there were moves she could have made that might have changed the situation. But what was left unanswered was this twofold question: What got in the way of Paula's impetus to help in the first place, and what got in the way of Ken's ability to help once he saw Paula's mistake? It was this that most crippled their capacity to learn on their own, and so it was toward answering this dual question that the participants turned next.

Phase Two: Initiating An Exploratory Process. The following week the interventionist was back in class with copies of a transcript from the previous session that provided participants with both the data and the distance necessary to reflect on their actions. In reading the transcript, each participant was now able to see his or her own actions as easily as the actions of others, while no longer feeling as caught up in the emotional impact of the moment. This alone, however, was no guarantee that individuals would use the transcript as a means of probing more deeply into what was going on. In fact, as participants began to reflect on the transcript, Paula interrupted by saying, "Before everyone starts agreeing that that wasn't effective, I don't disagree. So I don't want to spend time on how that was ineffective, because I know it wasn't effective." Instead she said that she wished to focus on "how I could have said it differently."

Paula thus frames the problem as "what might I have said differently," as if the problem were a purely technical one. But what this excludes is that, at the time, Paula was so distressed by the group that she felt as if she were having a nervous breakdown. The interventionist thus redirected the group's attention to a somewhat different problem:

Interventionist: My problem is—I'm attributing to you that you are feeling—what? Frustrated? Angry at them?	The interventionist redirects attention to what Paula was feeling at the time.

Paula: Not at the personal qualities of the people but at the content of the discussion.

She replies that she was angry at the discussion, not the people.

Interventionist: At what they were doing?

The interventionist reformulates this to mean that she was angry at what her peers were doing.

Paula: Yes.

Interventionist: Then I know of no magic, no way you can hide that. So if that's what you're feeling, that may be what you need to take a look at first.

Given this, the interventionist identifies a problem in offering alternatives: If you are feeling angry, that will get communicated.

If you're feeling, "Boy, they're screwing up," I hope there'll never be a way that you can cover that up.

Given this, it is here, not on alternatives, that we should focus.

The interventionist believes that their push toward alternatives might backfire if part of the problem—the part not fully reflected in the transcript—is not taken into account: what they were feeling at the time and what led them to feel as they did. The interventionist thus interrupted this premature push toward alternatives by framing the problem, not as what people said, but as what they were feeling and by redirecting their inquiry into these reactions as he does in the following dialogue:

Interventionist: But now you have to ask the question: How come I feel that? [Do] these duds around here [know] that they're making mistakes? Where does the anger about them come from?

In focusing on her reactions, the interventionist frames the question in a way that makes it sound shocking: What leads you to feel angry at persons who are unknowingly making mistakes?

Paula: I don't know if it's so much anger as frustration at

Paula minimizes the strength of her feeling and claims that,

seeing that circularity was recognized, but it was still going on.

Interventionist: And let's assume that they need help right now. How can you be angry at a group that's helpless? Let me put it that way.

although her peers recognized the problem, they did nothing about it.

The interventionist builds on what Paula says and reformulates the question: What leads you to feel angry at a group that is helpless?

The interventionist makes shocking what Paula must assume in order to react as she does. He first asks a question that, once answered, leads Paula into the box of her own reasoning: "[Do] these duds around here [know] that they're making mistakes?" If she answers yes, she risks hurting her peers by agreeing that they are duds, and she risks violating a sense of logic by saying that mistakes can be made knowingly when by definition they cannot. Yet if she answers no, she will offend her own sense of fair play: It is difficult to legitimate getting angry at those who are unaware that they are making mistakes. Paula tries to squeak out of this box by rejecting the premises embedded in the question. She says that she was not angry but frustrated and that her peers may not have knowingly made a mistake but that they certainly knew they were going around in circles. Rather than ask Paula to illustrate her assertion, the interventionist accepts her new premises since they pave the way into the same box. If she was right and the participants did know that they were going around in circles, then they must really be helpless, because no group would knowingly travel in circles unless it was unable to stop.

Discovering such boxes is itself shocking. Reactions like Paula's make such eminent good sense to participants that they rarely give them a second thought. Since participants see themselves as innocent recipients of mistakes that should not have been made in the first place, anger logically follows. To break through this kind of reasoning, the interventionist must provide participants with the impetus to think twice about these reactions. As we have seen before, he does so by making unacceptable to them the logic they have used to make their reactions

acceptable. As a result, participants stop assuming that what they feel is a necessary consequence of the situations they face and start considering what elements went into their feelings.

Phase Three: Generating a Rich Description. With a new problem set, the group dug into a different question: What was happening at the time people became angry? In our first experiment we asked the same question when we set out to describe participants' withdrawal. Then, however, it was primarily the interventionist who pushed this inquiry along, at one moment probing participants' accounts for what they were actually seeing, feeling, and thinking; at another moment checking to see to what extent what they were discovering was shared; and all along testing to see whether he was understanding what they were saying. Now the participants themselves took up this task, following their own hunches and opening up their own lines of inquiry. Out of this process came a description of three modes of responding to anger at others' mistakes:

- Blaming, punishing, and coercing others. During this phase as well as earlier, the group discovered that, at the time Paula became angry, she no longer felt herself to be a part of the group, she defined the problem of circularity as the group's problem, and she could not isolate what led to the circularity and did not know how to stop it. Moreover, when she intervened, she was not aware of trying to help the group and so she set out to solve the problems of dealing with her reactions and with those persons whom she held responsible for triggering them. She thus blamed the group for the circularity and its emotional impact on her ("I'm having a nervous breakdown because everybody's saying the same thing"), and she came up with a solution that combined punitive and coercive features ("I would rather just leave if it's going to continue").
- Suppressing one's anger. In probing Ken's account, the group came up with a variation on the same theme. When Paula intervened, Ken saw what she did as a threat that was unhelpful and that left the group stranded. He described himself as having a "very strong reaction" to what Paula did, but at the same time he said he didn't know how to express these reactions without provoking defensiveness in Paula. And so when he

did intervene, he solved the twofold problem of dealing with Paula and his own reactions by devising a compromise: He suppressed his anger, mitigating his reactions and acting as if he were calm. Similarly, Mary admitted that she had seen Ken as insincere. She was unaware of his dilemma about how to express his reactions, and she grew angry at his insincerity, replicating what Ken did by suppressing what was going on inside her.

• Detaching oneself from the situation. A third response is like Paula's, yet it involves such a great degree of psychological withdrawal that it is itself sufficient for solving the problem, as they define it. This response was described by Karen, who said that she thought that her peers were behaving incompetently but that she had no alternative to suggest. As she described it, she was not angry, she "just tuned out." Yet as she did so, she whispered back and forth with Paula, saying "grhh," "this is so boring," and so on, while saying nothing to the group. Thus, like Paula, she no longer felt herself part of the group, she defined the problem as the group's problem as if she were not a member of it, and she felt unable to alter what she saw.

Phase Four: Mapping the Territory. Once developed, these descriptions suggest some common themes. First, everyone focused on others' mistakes but acted as if they were unaware of the others' binds or limitations. Second, everyone described himself or herself as stuck in binds or at the limits of his or her own abilities. Third, although their particular strategies varied, everyone felt intensely angry and consequently tried to distance themselves from the experience: Paula no longer felt any responsibility for what was happening, Karen and others psychologically removed themselves from the group, and still others distanced themselves from their anger by suppressing it.

At this point the interventionist himself was stumped, unable to understand what led to these reactions. He thus came in to describe the dilemma in which he found himself:

Interventionist: There's a curious thing. First of all, everything going on is so real and happens so often, but I	The interventionist frames the situation before him as one that is at once genuine and curious.

feel so helpless about understanding it in the way I want to.

Let me tell you what I see: Both of you felt strongly, and yet you were feeling strongly about somebody else's incompetence.

That's my dilemma. If some other human being is acting incompetently, what's the connection to your getting upset?

He expresses that he feels helpless to understand the situation as well as he would like to.

He goes on to help the group to help him by first describing what he has seen so far and then describing what he does not yet understand.

As this suggests, the interventionist is at the limits of his own ability to understand the situation before him. While he can recognize the validity of the group's descriptions, recount what it is he sees, and describe where it is that he is stuck, he cannot go from describing what he sees to explaining it. Or put differently, he does not yet know how to take the step from the fragments of descriptions generated so far to explanations that can connect these fragments and account for them in a way that can be used to move beyond them. So the interventionist faces a situation similar to that faced by the participants earlier, one that puts him in a dilemma and at the limits of his own competence. Yet the interventionist acts as if such a situation poses neither threat nor frustration. He is puzzled and says so; he feels helpless and says so; he needs help and so he helps the group to provide the help he needs.

Once he had done this, the participants took up the task of helping to map the problem by generating a series of hypotheses, each one stemming from their own reactions and connectable to the descriptions already developed:

Vince: I know I felt threatened, and I felt angry. When Paula said what she said, the message to me was, "You're incompetent." And when

Vince begins by describing his anger; he then begins to retrace what he believes triggered it or might account for it: He heard her calling him

somebody tells me I'm incompetent, my first reaction is to get very defensive and upset. Therefore, I was not getting angry at Paula because of her incompetence; I was angry because of my incompetence.

incompetent, and he must have implicitly agreed with her, thus becoming upset and defensive. Hence, he was angry not at her, but at his own incompetence.

George: I have one idea which is that the anger has two parts. One is that Ken, or in this case, me because I would've had the same reaction; I would have gotten angry, because I was feeling coerced. But I would've been angry, as opposed to just seeing it as somebody's attempt to coerce me, because in fact I fear I am coercible.

George traces the anger to a dual source: First, he would have felt coerced. Second, he feared he was coercible. Hence, he was angry not at her but at his own ability to be coerced.

Nancy: I felt a little angry, because if somebody just leaves, I cannot confront them. I did not feel angry about the [group's errors], because I was responsible to stop [them]. But Paula, if she leaves, I have no way to catch her.

Nancy retraces her reaction. First, if somebody leaves, I can no longer deal with them. Second, this puts me in a helpless position. Hence, I get angry.

Earlier, participants had held others primarily responsible for their own reactions. They each attributed the cause of their anger to somebody else's mistakes, and they thought that such causality made good sense. But then what was once obvious began to look strange as the interventionist pointed out some gaps in their reactions; and the more they tried to make their reactions acceptable, the more they found themselves in a box of

their own design that they could not accept. Under the impact of these results, participants discarded their original hypotheses and began to construct the hypotheses that emphasized their own responsibility. Although not yet tested, these new hypotheses were connectable to their previous descriptions and useful as a basis for designing ways to move forward. For instance, the next time they find themselves getting angry at others' mistakes, they might do what the interventionist did. Rather than hold others responsible for their reactions, they might describe what it is they are experiencing and the help they need to work through it.

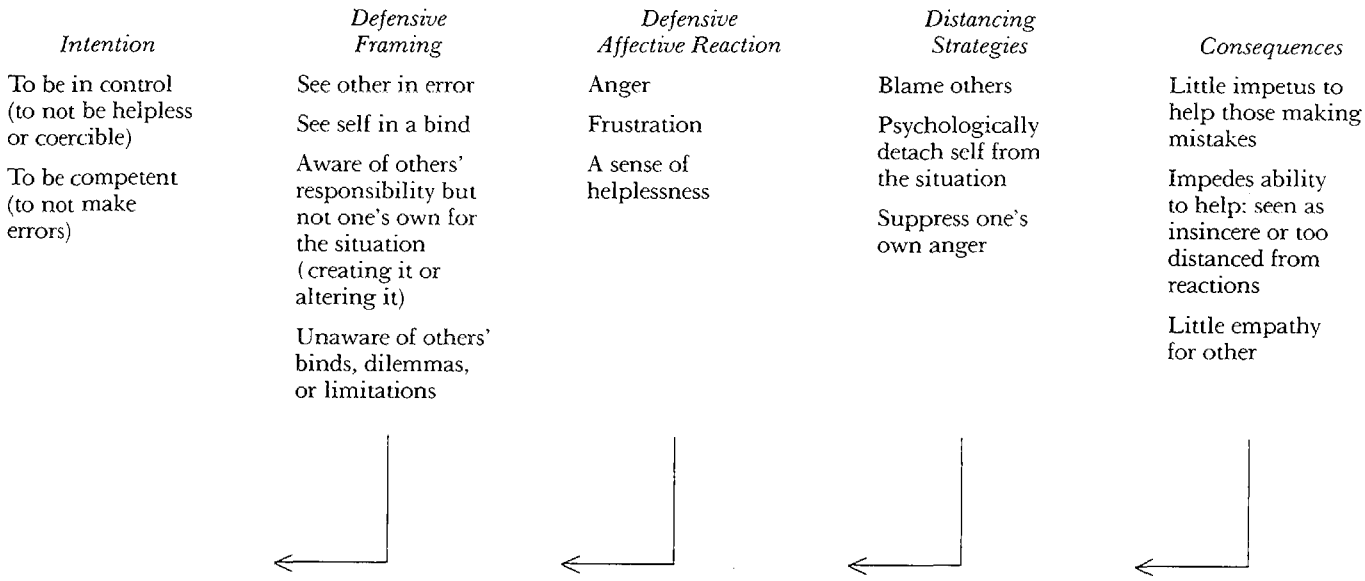
This shift in responsibility was evident in their actions as well. In contrast to their behavior in the first two experiments, the participants here took most of the responsibility for developing a description and then generating a series of hypotheses that might be mapped diagrammatically as shown in Figure 10.

Although the group did not take the step of actually diagramming these results, the necessary components were available to do so. In the process of reflecting on their actions, the participants had developed a rich description of the constellation of inference making, intention, affect, and action that makes up any mapping of action. They thereby brought to the surface the design that underlay their actions, so that they could gain greater awareness of and control over those actions.

Phase Five: Working Through Automatic Reactions. The more clearly that participants saw their own responsibility for these reactions, the more they wished to change them. But how to do so was a difficult problem. As a client once asked with indignation: "How do you control an automatic reaction?" One participant came at the problem this way: "I think it's a constructive use of anger if you acknowledge the anger as an indicator of something that [should] lead you to be curious rather than leveling it as charge or laying it on the group."

To be enacted, however, advice like this may require the very thing that it is trying to produce: optimal distance from one's reactions. Or in other words, if a participant had the distance necessary to follow this advice, he probably would not need the advice in the first place. As Mary put it: "I don't know

Figure 10. Reacting to Others' Mistakes.



how to distance myself. I mean, once I feel anger, it's very hard for me to distance myself to the point where it's almost hard to remember what people are saying." Yet the advice is valid. Individuals are apt to learn more if they regard their reactions as curious and worthy of inquiry rather than as evidence of someone else's transgressions. But the question left unanswered is how to achieve the necessary distance from one's automatic reactions.

One possibility was described by the interventionist: "Here we may do best to express [our angry reactions] and to look at them. But the question is, Why do you feel hostile in the first place? Let's express negative feelings and find out why we have them; and number two: What kind of stance can we take toward life that will reduce the probability that we will even have those feelings?" The advice is thus twofold: Express one's reactions as they occur and inquire into what leads to them. Whereas the former requires only the willingness to make one's reactions public, the latter asks that, once public, these reactions be probed. As such, the advice is designed to begin where participants begin, with an eye on eventually developing "a stance . . . toward life that will reduce the probability that we will even have those feelings." With this alternative in mind, participants could now design their own experiments, ones aimed at producing the advice and seeing what it yielded. As they did so, they developed expertise in dealing with difficult emotional reactions, while at the same time opening these reactions up to inquiry and thus increasing the possibility of learning. In so doing they moved up the continuum described in the map (Figure 8 in Chapter Nine) from a more protective to a more reflective orientation.

Conclusion

Right from the start, the interventionist creates a context that will allow participants to discover the outcomes that their actions yield. Experiment after experiment brings them face-to-face with surprises, as they discover puzzles where a sense of obviousness had prevailed, a sense of stuckness where

they had thought themselves skillful, and a sense of failure where they had experienced success. Participants and interventionist take a different stance toward these experiences. The interventionist strives to keep puzzles alive, to help participants to hurry up and get stuck, and to create ongoing opportunities for failure, all the while encouraging and aiding them to reflect on their experience. From the interventionist's vantage point, creating and reflecting on these experiences are the essence of what it means and takes to negotiate the learning process. Participants take a different view. They strive to settle puzzles quickly, to get their spinning wheels on dry ground as fast as they can, and to avoid failure, shrinking back from looking at and reflecting on these experiences. From their vantage point, minimizing or avoiding these experiences is the essence of what it means and takes to negotiate the learning process. In actuality, the distinctions between interventionist and participants are less stark than we have just drawn them, but they should make salient an essential feature of the learning process: The interventionist and the participant frame this process in qualitatively different ways.

The frame experiments in this chapter display an iterative, cyclical effort at stimulating a process of frame breaking and reframing, so that participants might come to regard their roles and the situations before them in new ways. While there are differences among these experiments, they also have features in common that provide insight into how individuals can be helped to reframe experiences central to their sense of self. What follows is an abstracted sequence of steps that constitutes the structure embedded in the experimental process.

In early phases the process is initiated by the interventionist, who discerns recurrent patterns that yield predicaments that participants seem to be unaware of. By withdrawing, they end up designing their own injustice. By supporting their peers, as they define support, they end up undercutting their peers. And by getting angry at mistakes, they suggest a blindness to their own limitations and that of others. Such patterns attract and engage the interventionist's attention. They puzzle him. But the participants whose interactions generate these patterns take

them for granted and fail to notice them. What is puzzling to the interventionist is thus obvious to the participant.

The interventionist strives to make compelling as a puzzle what is taken for granted. Data that participants ignore are brought to light: Carol did make an error so David's rule does not hold, the group did not knowingly or intentionally go in circles, so Paul's anger becomes curious, and so forth. These data reveal the inconsistencies that make the interactions puzzling.

The interventionist reveals these inconsistencies in a way that does not make him responsible for generating them: The data are the participants' data, and the inferences he draws from them are consensually agreed upon. Aware of and responsible for the paradox, participants thus experience an optimal sense of dissonance; this motivates them to inquire into their own actions in order to account for them and to reduce their sense of dissonance.

As they do so, participants offer explanations of their actions that attempt to reconcile what was inconsistent in them. They cite fears of appearing stupid or being attacked; they put forth theories of support; or they offer explanations in an attempt to justify their anger toward their peers.

The interventionist then mines these explanations for new data, trying to surface the logic embedded in the actions of participants. In so doing he takes a two-pronged approach. On the one hand, he helps to generate a rich description and group collage of how participants understood, felt, and acted or did not act. On the other hand, he organizes, reflects on, and inquires into these new data, constructing moves that reveal new gaps and new inconsistencies in the reasoning of participants. As a consequence, he keeps the inquiry into the puzzle alive and heightens the sense of dissonance still further.

The participants' efforts to make acceptable the unacceptable thus fall short. Slowly they begin to question the way in which they construct their social world, in terms of both how they see it and how they interact in it. Paula finds herself in a box of her own design; David discovers that his theory for creating competence would simultaneously create conditions of in-

competence; and Lee sees that her theory of humiliation generates conditions for more failure and humiliation.

At this point participants recognize that their way of understanding and acting in the world requires reexamination and change. But they are stymied, unaware of an alternative or of how to enact it. Carol asks how she can learn to take a more courageous stance, David asks how one can examine errors without disrupting the other's confidence to the point of creating incompetence, and Mary asks how she can come to distance herself from her feelings when she can no longer even retrieve what is being said. As the client asked, "How do you control automatic reactions?" This is experienced as a contradiction and participants feel stuck. Their frames are inadequate but how are they to move beyond them?

As this stuckness reveals itself, the interventionist takes a stance toward the participants' experience that can keep the process of inquiry moving despite their being stuck. He encourages them to express what is difficult to express, and he empathizes with their experience while continuing to call into question how they are framing it.

At the same time, he poses alternatives and does so at three different levels. The first is at the level of strategy, and here he suggests interim moves that, if tried, might free the participants from the particular dilemma at hand and help them to break out of their frames: Jump in and talk, express your negative feelings, reflect publicly on your reactions. The second is at the level of frames, where he offers new ways of seeing a problem and suggests new questions to ask of it. For example, he reframes Vince's solution, saying the important thing is not to be right but to be willing to learn; he reframes the underlying metaphor used for thinking about errors; and so on. The third level is that of action; here, the interventionist enacts these understandings himself. His supportive moves toward Carol and the group display a different construction of the situation from the one they held. Thus, as he acts and reflects publicly on his actions, participants become more familiar with an unfamiliar way of framing the process.

But at some point participants must design their own frame experiments. They must test out the alternatives that are posed. Yet they feel caught between two frames, neither one of which they fully trust. To design such experiments thus requires acting in the face of doubt and taking risks.

To reduce these risks, participants scan for data that might help them to anticipate the results of fundamentally new moves. But this scanning process is conducted from the vantage point of existing frames, and the results they anticipate are therefore problematic: "He tells me to confront him; but when I do, I am told I am wrong." Apparent inconsistencies are discovered and brought to the surface, and opportunities arise for the interventionist to elaborate on the meanings he brings to these moves. The gaps that result from their conflicting frames thus begin to be filled in, and participants start to design tests of these alternatives.

At this point new actions emerge and new puzzles are revealed. Once again, the interventionist and, increasingly, the participants are drawn to them, and the cycle repeats itself, iteratively moving forward from a more protective orientation toward a more reflective one.