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Transforming Social Inquiry, Transforming Social Action

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Chapter 9

The Challenge of Creating a Community of Inquiry

Among Scholar-Consultants Critiquing

One Another's Theories-in-Practice

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This chapter offers a “blow-by-blow” account of a small group of scholar/consultants that referred to itself as a ‘Community of Inquiry’ (Torbert, 1976, 1991). The general model of a 'Community of Inquiry' can potentially be recreated in a variety of settings - businesses, schools, or government agencies - where the aim is to improve the congruity among mission, strategy, members' practices, and outcomes (and to question what each of these terms means). Argyris, Putnam and Smith (1985) propose the creation of “communities of inquiry within communities of social practice” as a social change process, and we see a variety of illustrations of this approach in this book, particularly in Chapters 4, 8, and 11.

A ‘Community of Inquiry’ is a real-time, second-person research/practice -- a dialogue in which participants are engaged in an inquiry together that pertains to the practice of the current conversation as well as to practice in other settings (Alexi, 1990; Argyris, Putnam & Smith, 1985; Evered & Tannenbaum, 1992). In this particular year-

long series of monthly, taped sessions, the members test together: 1) whether they are helpful to clients? 2) how they can be more helpful? 3) how they can help one another right now? 4) how can one tell what helps? 5) is "the proof in the pudding" in the sense that helpful action is assessed by later results the colleague or the colleague's clients achieve? 6) is "the proof in the pudding" in the sense that some actions are intrinsically helpful, whereas others are not? 7) is there, indeed, a pudding at all in the case of social action, let alone a proof? 8) how does a given theory help and how does it limit a helper's helpfulness?

In the service of these questions, each monthly meeting of this group during 1990-91 was based on a draft paper or other materials describing the practice of a given group member, and each meeting was taped for educational and scientific purposes, such as this chapter. This chapter presents parts of a dialogue that took place in one such meeting. The dialogue was later transcribed and another meeting was dedicated to discussing what each individual wished to learn next, after having reviewed his or her part in the first dialogue. Parts of this meeting are also described.

The participants in the dialogue believe that there is a profound need for cultivating a dialogic action science (Argyris, Putnam & Smith, 1985; Schon, 1983; Torbert, 1976, 1998) given that the assumptions, theories, and findings of the physical and social sciences are constantly applied in action, sometimes with nightmarish results, rarely with any careful study. Such a dialogic action science encourages its practitioners to test *in real-time*: 1) the effectiveness of their actions; 2) the power, the justice, the openness, and the validity of their theories; 3) the alignment of practitioners' theories and actions; 4) the aesthetic assumptions and limits of their paradigms. As the ensuing

dialogue itself illustrates, however, there are profound dilemmas on the path toward such an action science, even for those committed to and learned in its early practice.

In particular, as we engage in action (even action which is, for the most part, reflective speaking), each next comment can only be a partial explication of the speaker's vision/frame, strategy/advocacy, performance/illustration, and assessment/inquiry (see Table 2, Chapter 5). Therefore, the next speaker is invariably engaged in attributions, interpretations, and assessments of prior comments (and how they relate to each other), only some of which can possibly be tested for validity at that moment (and, of course, most of us engage in such validity testing only rarely).

Moreover, there are at least two different ways in which we may take our own attributions and interpretations for granted, "re-truing" them rather than successfully testing their validity. The first way - Level I - is that we may altogether fail to test, or test in such a biased way that the test is likely to yield invalid data (e.g. "Isn't my new hairdo great?"). The second way - Level II - is that, even though we have a carefully designed validity-testing system, the validity-testing system as a whole may generate a systemic bias over time simply by virtue of ignoring certain variables. For example, Empirical Positivism in third-person science (see Chapter 5) is one validity-testing system. The seven guidelines of action science (Argyris, Putnam & Smith, 1985, p.258ff) is another validity-testing system. By assuming that a participant in action disturbs the setting and perceives data from an interested rather than a disinterested perspective, Empirical Positivism ignores the question of how one can do validity testing in action. By contrast, action science takes on the challenge of getting participants in real-time action to test the validity, efficacy, and emancipatory power of their actions, but it ignores issues of trans-

cognitive awareness, of timing, and of how to balance validity-testing with other life concerns. We will return to this theoretical and practical issue of how to test and increase the timeliness and whole-life-validity of a validity testing system when we analyze the dialogue presented below.

The Particular 'Players' and the 'Play'

The seven participants present for this meeting are here named Cy, Greg, Gwen, John, Pat, Susan, and Terry¹. All members of each meeting are conversant with both developmental theory (Kegan, 1982, 1994; Loevinger, 1978; Lahey & Kegan, 1984; Pascual-Leone, 1990; Souvaine, 1985; Souvaine, Lahey & Kegan, 1990; Torbert, 1987) and the theory-of-action perspective (Argyris, 1994; Argyris, & Schon, 1974; Argyris, Putnam & Smith, 1985; Torbert, 1991). Indeed, five of the ten authors just referenced were among the seven participants at the meeting.

In the first meeting, Susan presents her case. Shortly into the meeting, John suggests that certain of Susan's actions, guided by the interpretive emphasis of developmental theory, may 'over-protect' clients, preventing them from learning from negative feedback and the effects of their actions. As the dialogue continues, John enlarges upon this issue, eventually citing additional evidence from the present dialogue that suggests to him that Susan acts in ways that do not test her theory of intervention but instead 're-true' it.

This meeting was recorded, transcribed, and summarized, and it was decided that it would be the subject of a later meeting. What follows is a summary of the first half of the first meeting, followed by actual dialogue from the second half of the meeting, interspersed with analysis and theoretical discussion. In conclusion, events from the follow-up meeting are summarized and questions critical to the ongoing development of second-person research/practice are raised.

Is there a proof in this pudding?

The meeting began with administrative comments and proceeded to high merriment with the celebration, with champagne, of the approval of Greg's thesis. The new doctor offered a benediction from Karl Popper on this section of the meeting: "We differ in the bits of knowledge we possess; but in our infinite ignorance we are all equal."

Then we turned to discussion of the case Susan had sent of a group of 14 school system members that she and another developmentally-oriented colleague had worked with over a period of 13 weekly sessions. Participation was voluntary, with the opportunity to choose out after the first meeting (as two people did), and no one reported directly to anyone else who participated in the meetings. The purpose was to discuss work issues and what they could learn from them. Over the weeks, each member of the group worked through each of five steps on a particular problem: 1) identifying assumptions they were making about the situation; 2) exploring how they knew their assumptions were true; 3) evaluating whether the original basis for holding the assumption was still operative; 4) testing for the degree to which the person had been 're-training' the assumption, rather than truly testing its validity; 5) designing experiments to try alternative behaviors.

Greg asked how their developmental approach was different from the theory-of-action approach he had illustrated the month before. Cy pointed to some differences he saw, such as the lack of direct testing of attributions, including the 'laughable' assumption that Sarah made in her case that the principal must not value her teaching because he did not specifically praise her, in a comment she overheard him making in which he praised another teacher and said nothing whatsoever about her. Cy said one probably shouldn't laugh (since such untested attributions are common), but John said why not? It struck him that the developmental approach tended to be over-protective of its clients. Susan emphasized that in their approach, they let each client choose which issues they wish to address so that they will feel safe.

Pat raised the question whether persons at different developmental stages responded differently. Susan said yes, in theory, and said they discovered later that all but one of this group were at stage 4² with some self-reflective ability, where she and her colleague believe people have to be developmentally for this approach to work. She also said that one person was closer to stage 3² and that this was the person with whom they had the most difficulty. This person would continually jump in saying things like "That's ridiculous" and would also externalize problems as caused by others. Pat raised the question how one would work with organizations, such as his, in which numerous people are at such earlier stages.

John challenged whether Susan was willing to test the assumption that persons have to be at a certain developmental stage before they can engage in self-reflective learning. She clarified that this in fact constituted such a test because they had tested persons' developmental stage before the class, but had not scored the tests until after all the sessions. Hence, they were not reacting to the person later scored at level 3 based on knowledge of that fact.

Cy asked how she and her colleague actually responded when this man intervened in apparently inappropriate ways. John commented that her response was a recipe for telling people to lay off one another, and Susan agreed. John said she didn't have a universalizable rule because she herself wasn't 'laying off' the man. She agreed, but said that the exception is when someone is hurting someone else. John said this was another example of over-protectiveness.

Gwen suggested that the rule was really more complicated. Here there was a verbal tussle between John and Gwen, each seeking to control the sequence of the dialogue, with laughter from others. John won, talking over Gwen several times. Susan asked what John's preferred rule would be, and he offered one that included seeking disconfirmation. By contrast, he saw Susan 're-truing' her theory rather than seeking disconfirmation.

For this first part of the meeting from Susan's introduction of her paper, relative participation, in terms of sheer number of comments, was as follows: Susan: 27; John: 30; Gwen: 17; Cy: 11; Greg: 6; Terry: 5; Pat: 4. (Since these happen to add to 100, the numbers also represent percentages.) These proportions remain quite consistent throughout the session, Greg's increasing some and Gwen's falling, so that at the end of the session, of 303 total comments, the percentages were as follows: Susan: 24%; John: 31%; Gwen: 12%; Cy: 12%; Greg: 11%; Terry: 6%; Pat: 3%.

“Re-truing” vs. Validity Testing

At this point, Susan said she would like to hear more examples of how she may be 're-truing.' Gwen and John tussled again about where the examples should come from, Gwen wanting to address the paper, John wanting to address issues raised in this conversation. And this is where we join the actual transcript:

Gwen: I was stating a preference for seeing illustrations from her paper about their work. 1

John: The reason my preference is for illustrations that are directly or indirectly connected to our behavior here is that they are richer data. I don't want to find myself arguing a position that is only illustratable through Susan's summary, without a transcript, because the inferences I am making come out nicer in those examples than they otherwise may. But we can try both. 2

Greg: Could I try to recreate the data that I think we're talking about? We had Sarah saying that she assumes that not being talked about when talk is favorable means that she is not seen favorably. Cy said something like "I'd laugh," or "That seems ridiculous." Now, I'm making a leap here... 3

John: He also said, "Perhaps I shouldn't say that." 4

Greg: Right. 5

John: And I said, "Perhaps you should." 6 ...

Greg: OK, and now I'm making the following leap, that I think is shared,

that this guy that you saw as problematic in the group did just this kind of thing. 7

Susan: That's right. 8

Greg: OK, and when he did it, you and your colleague, one or the other, said in effect, "We designed a rule that we'd like to establish as a norm in this group..." Well... maybe it's better for you to say it at this point. What is the thing that you'd say to this person who laughed and said that it's ridiculous? 9

Susan: Basically, "On behalf of creating an opportunity for Sarah to learn at her own pace the things that she wants to learn about, we're asking people to hold their evaluations of what they think about - certainly the silliness of what someone else is saying - to themselves." 10

John: There was more. Let me add something and see if you agree. It was more like saying to this person, "You know, be patient, because there's validity to what people are doing. They're not just - Sarah's not just - everyone strives to grow, and they have their own way of growing, and let's see if we can create a culture in which we can facilitate that." 11

Susan: No, I wouldn't say that. I'd say that everybody has a right to think the things they do, and she's not silly for thinking that. 12

John: That's what I heard, yeah, I like that, OK. 13

Greg: OK. So, if I were the recipient of that on your part, I think the meaning I would get that would lead me to shut up is that I should not express comments that communicate that someone is silly. 14

Susan: Yes. 15

Greg: That's one thing the leader is saying to me and that is "lay off." Now, is the next step for you, John, to show how that is an illustration of "re-truing"? 16

John: Well, I don't know. Let me try. I asked then the question, "How do you know that the laughter in Cy's case would not facilitate the goal that Susan just said. And you'll have to help me, but the only answer I could get was an answer within her own logic. 17

Greg: Gee, I don't remember an answer at all, actually. 18

Gwen: I gave an answer. 19

John: No, no. You gave a clarification - you gave her the more complicated rule. 20

Gwen: But I also said that I don't think you do know. 21

John: Pardon me? 22

Gwen: "I don't think you do know." 23

John: I think that's a different issue. I think that what Greg is trying to get at is, "What is the deal with this? What did I say and how did Susan deal with it? How is it re-trueing? How do you, John..." 24

Susan: How is it re-trueing by my saying... 25

Greg: Let me now try. I think I see a way in which it is re-trueing. That if you tell the guy who says, "Sarah, that's ridiculous" - if you give the speech you just gave - the meaning then is "Greg, you shouldn't say things like 'That's ridiculous'." Then you act in the group in ways that prevent you from learning that 'disrespectful actions' like laughing at her silliness might in fact be growthful. 26

Susan: Yeah. 27

Greg: In that sense, you would re-true your view of what are helpful comments and unhelpful comments in the group. 28

Susan: Yes. 29

John: Fair enough. 30

Susan: I feel like... I'm willing to re-true here on behalf of a belief I have - based on experiences which may well be self-selected on the basis of my having this belief to begin with - that being laughed at, people experience as hurtful, leading them to draw in. Which is not to say that they're not going to learn from it, because down the line they may learn something from the hurt of being laughed at - it's quite possible. But it leads the person to withdraw from the group and not have the opportunity to play around with any of the things we're trying to learn during our 14 weeks together. 31

John: And I think that is another example of re-trueing. I don't remember if you were in this class: remember, there was a woman who made a point and the class went around being supportive, and I said - these are no longer the same words, but they sure convey my meaning - "What you're saying is fuzzy, inconsistent, and I

would never hire you," and she either burst into tears or welled into tears, and some members of the group supported her in the sense of being cared for. She was hurt, deeply hurt. And I had several people in the class who said, "That went too far." The next session she said to the whole group, "There's only one person I really care for and that's John because what he said a lot of other people have been saying to me, and I've not listened to them. Instead, I listened to the support I got from you. Now it shows me how weak I was if that's what you think I need." When you see someone hurt and therefore back off, there's another theory that says, "When the person is hurt, hang in there." All I'm saying is, "I don't know which is right, but unless you find a way of finding that out, you are re-truing." 32

Susan: This is the same thing as learning about whether someone's laughing can be a source of learning for someone else. 33

John: And whether someone's crying is a sign that you can legitimately ask people to back off. Because you asked us all to back off before Sarah might have gotten near the point of being upset. 34

Gwen: It just seems to me that you can take this the reverse way too. You chose, when you said what she did that was fuzzy "and I wouldn't hire you," you chose a particular action, I assume out of a particular belief you have about what is helpful learning. And it seems to me that someone could just the same way ask you, "How do you know that it wouldn't be helpful learning for this person if you had instead supported her?" 35

John: I think I just said that I don't know which is right. All I'm presenting is data. See, I'm not taking the position that mine is right. I'm taking the position that she at that point is doing re-truing, and that is all I'm saying. For example, I didn't know what she was going to do the next session. What if she came in and said, "John, I just want you to know that I didn't sleep, I didn't learn" and so on. Then the question would be to watch my behavior, how am I learning? Because she at that point is attacking me in the way she thought I attacked her. What if I were able to learn from her? That begins to give some data about whether some people can learn from those kinds of attacks and others can't. Is that sort of developmentally caused, or is it because they haven't had enough practice in learning under conditions in which they are normally uncomfortable? 36

Cy: There's another angle to this whole thing. So far, there seems to be a bi-polar assumption that either you ask somebody to back off when they do this 'inappropriate' behavior, or else you let them do it. But it seems to me that you don't have to choose either of those poles. You can start testing with him or her what the effect of that statement is. You might set up a situation in which he ends up learning not to say "That's ridiculous" then and there rather than just being told not to say it. Or she may in fact say she is learning from his comment, so you learn that stopping him would have been overprotective. 37

Susan: Right. 38

Cy: There are all kinds of possibilities. 39

Gwen: But I see something else going on: because you (John) have a different rule, you don't find out what happens when you do it this (Susan's) way. That's all I'm saying. I'm interested in what goes on if you do it this way. 40

Let us review this part of the dialogue with our earlier distinction between Level I and Level II re-truing in mind. In a sense, the entire dialog is explicitly concerned with, and an illustration of, the dilemma of effective validity testing in action. Susan and her colleague have created an educational process for their school system clients which is intended to help these administrators and teachers identify the assumptions framing their prior behavior, test their validity while explicitly attempting to avoid re-truing, and design alternative, more effective actions. John raises the creative and provocative question whether her approach, which he identifies more generally as the 'developmental' approach, may be 'over-protective' of her clients and herself, and whether her responses to his challenges may be re-truing rather than true validity testing (see John's comment #32). At different points, Cy and Greg and Gwen all challenge John about whether his actions may also have the character of re-truing rather than true validity testing (see Gwen's comment #35). Let us examine Comments #31 through #36 more closely to see if we can ferret out who, if anyone, is re-truing and how.

We find that, in Comment #31, Susan acknowledges re-truing and explains her willingness to continue doing so in this sort of instance, even though she recognizes that her entire justification for doing so may itself be another instance of re-truing ("...I'm willing to re-true here on behalf of a belief I have - based on experiences which may well be self-selected on the basis of my having this belief to begin with..."). Her openness

about her re-trying can suggest that she is available to be confronted if anyone should have an illustration of how her re-trying is harmful.

In his following comment (#32), John confronts Susan as again re-trying, as though he is showing her something new and as though she has not just acknowledged that she may be re-trying right now in her justification for feeling comfortable re-trying on a different occasion. He then gives an illustration of how a woman he confronted strongly in another situation was deeply hurt, but came back a week later to say she had learned from the hurt. He offers his theory for how to act in such cases, and then steps outside his own theory to say that the fundamental issue is how to find out which actions are truly helpful ("unless you find a way of finding out, you are re-trying").

After two more brief comments back and forth between Susan and John, Gwen confronts John (#35) about whether his type of behavior ("hanging in there") doesn't have the same systemic possibility of blinding him to alternative ways of helping someone learn as Susan's. John's response (# 36) deflects the question by at first seeming to agree that he too may be re-trying, but then emphasizing again that Susan is re-trying. He continues by giving a hypothetical example of how someone could determine whether he retrues ("Then the question would be to watch my behavior, how am I learning?").

If one watches John's behavior closely in these exchanges, he does not appear to be paying attention to what Susan says in Comment #31, nor to seriously consider what Gwen is saying in Comment #35. Instead, he seems more focused on (a) making his case and (b) elaborating a complex systemic view of how effective action and validity testing are interrelated in general, with little or no awareness that there may be times, such as this, when his general point is not timely. But notice how subtle this is: nothing he says

is overtly inaccurate or defensive. Indeed, his illustration of the woman weeping under his confrontation is riveting, self-disclosing, and on-point in two different senses. It is on point in the sense that it illustrates someone learning close to the time when she is hurt, contrary to Susan's just-stated belief. And it is on point in a prescient sense, since a parallel scene unfolds as this conversation continues. (At the same time, John is asking the present group to take his description of this other event on faith, just the sort of move he resisted making with regard to discussing other details of Susan's written case.)

After Gwen confronts John about whether his validity-testing system isn't susceptible to the same Level II re-truing dilemma as Susan's system (#35), he dodges the issue she raises by claiming he doesn't know "which is right. All I'm presenting is data." Then he returns to the there-and-then situation, and becomes hypothetical about that. In the final comment so far presented (#40), Gwen returns to her earlier point (#35).

Let us see how John responds this time:

John: Well, let me tell you the worry I have. I think I can find out and you've been in plenty of sessions with me where I've behaved in ways that people find intimidating and so on... But when you said "I want to learn what she (Susan) learns from her approach... 41

Gwen: Right. 42

John: Let me tell you the worry I have. I can't be against learning. What worries me is learning independent of responsibility for action. She's selling a pill, and I'm selling a pill - as a metaphor - and she'd be in jail this moment if we ever applied the rules of pill making. Some of the things she has on tape and your kind of comment. Just imagine being in front of a jury and saying "Yes, sir, that is what we did, but we were trying to find out what would happen." So, if I understand your question, I have an issue of ethics here, of research that separates inquiry from action and that doesn't couple them intimately. 43

Greg: ...later on the page you say "we ask Sarah to watch for other instances of this assumption operating. We ask her not to change anything that she does..." Then I start to pull in some things I know about paradoxical family therapy, right? If you

tell someone in therapy "Now, that's good, that's great; now, don't change that problematic behavior" (laughter)... It's a different way of motivating change. I don't know if the right word is 'indirect,' or 'judo' - this kind of a thing. 44

Cy: Paradoxical. 45

Greg: And the last thing I saw in that domain is, you ask her to consider the risks and to consider, "Is the worst case outcome bearable?" And now I may be reading too much in, but in your concern that people remain safe, that they don't go too far, are you sure you're ready to take the risk, is the sort of thing that in paradoxical family therapy can get people to say (loudly) "For God's sake, I'm ready to move!" So, my construction of those cues was that - with what degree of intentionality I don't know - here is an alternative of dealing with the common problem of, how do you help people unfreeze deeply held, automatic, taken-for-granted re-truing of their assumptions? Do you challenge them and reveal the illogic of their assumptions in a more forthright, let me say, way; or here's an alternative approach. I'd like to hear your reaction to that. 46

Susan: Well, my first reaction is, I think, the proof has to be in the pudding. If Sarah or someone who takes this safe route actually does have more options opened to them, or can unfreeze some way that they have been looking at something, perhaps it is - and I think it's likely to be a less "important" issue - but if they do unfreeze, it suggests to me that this can work. Now I don't know exactly what the features are of what we do that lead that to happen. But I do know that in Sarah's case she was willing to do something different than she was in the beginning. A lot of the people in the group did something different. A lot of them had to do with evaluation. Someone confronted a principal on an evaluation she had received, which she earlier never would have conceived herself capable of doing. I would like to hear from people whether that is reasonable thing to be focusing on because that kind of outcome has been what has fueled my sense that it makes sense to try to see what are the things that contribute to that happening. 47

Cy: One thing that I would like to have both in the case of confronting the principal and in this case is more data on the outcome and the feelings surrounding the outcome. All the last two paragraphs I want to know more about what she actually did in front of the mirror and more about what she actually did in the classroom and whether she felt that it worked even though she felt awkward - more of a sense of that, because right now it's hard for me to tell whether it's something she's going to carry one step beyond the support she's getting from you and your colleague. 48

Susan: Yeah... 49

Terry: I'm having - I don't know if anyone else is having this - I feel that Greg asked a really big question and I don't feel like it was answered. And maybe I... 50

Greg: No, I was just musing about that - that either I wasn't clear about it, or else it

just missed in terms of Susan's interpretive system, but then Cy also... 51

Many voices. 52

Terry: Let me say what I think wasn't answered. I heard Greg say something about paradoxical family therapy theory, and how some of the actions that you took, some of the instructions you gave here, could either be interpreted as direct requests to just observe, don't change, or they could have been intended to create the opposite effect. I didn't hear you answer whether your intention was a direct request, or to have an opposite effect. I would like to know that. And I thought I heard you say "the proof is in the pudding"; to me, that translated to "the ends justify the means" and "if the outcome is that Sarah is exploring more options, then it doesn't matter how I got there really." So, I would like to hear you speak more about that. 53

Susan: OK 54

Terry: Did you answer that? 55

Susan: Well, my answer to whether the instruction was paradoxical is that it could have had that effect, but... 56

Cy: But it wasn't intentional - you weren't consciously working... 57

Susan: No, it was really with the intent of - it all ties together with this safety - with creating a safe pace - that a person keeps their own pace... 58

Cy: It's more Rogerian, in a sense? 59

Susan: Yes, it's client centered. 60

John: And I go back and think "You are the one who is creating a safe place for you" and I see much less concern about Sarah. If you couple your answer "I can't know" with "the proof is in the pudding" - if you can't know, then how can you get to the second? What's the scientific, the research-oriented reasoning that says "I can't know, but the proof is in the pudding." Look, that's defensive reasoning. If you can't know... 61

Susan: I guess I don't see how I can know which of the features - I mean we're not controlling for each one of the interventions we're making, to know which of all the things that we're doing allows somebody ultimately to play around and have a different relationship... 62

John: But that doesn't mean you can't get a little better data - maybe you have it - can't get a little more differentiated answer than you gave Greg... 63

Susan: Right. Give me a for-instance because I see the problem... 64

John: Well, I thought I heard the confrontation was that he said to you it could have been the following: it could have been paradoxical. I would have thought you could tell him "(a) I really can't tell you in some ultimate sense, but here are the things we do to test whether our intentions are experienced by Sarah the way we wanted. So, here is what Sarah said and it is from this kind of data that we believe it wasn't paradoxical (but that doesn't mean it wasn't; it just means it's the best we can do)." I heard you not even care about doing what I just suggested: "The only thing I can tell you is 'the proof is in the pudding.'" 65

Terry: I think "not caring" is strong. I got the sense that Susan hadn't thought about that. 66

Greg: I understand the 'proof is in the pudding' comment differently. I understand that to mean, "If we've achieved what appears to be a valuable change, and I think we have, I take that as an indication that we should go forward, so we can have future work tease out what it is that had the good impact." 67

Susan: That's right. 68

John: How is that different from mine? Because it's exactly what you said that just bothered the hell out of me, if she goes along with it. If she said, "If it's right" as you said, "If it is a positive thing, then we're encouraged." 69

Greg: Right. 70

Cy: "(encouraged) to do further testing." 71

John: Yeah... Wait a minute! I'm saying that the statement "If it's positive..." is equivalent to a pill maker who says, "Well, if people felt better, we're going to continue our further testing." 72

Terry: It's as if the evaluation happens at the end and there isn't a check, for example of "observe but don't change your behavior." "Did your behavior change or not?" - that would be a way of testing. 73

Susan: Well, sure, I mean each one of these steps was a step unto itself. So that, is identifying an assumption somebody makes really helpful? We can't really know that until we go further down the line. As far as I can see, there isn't much we can know about the usefulness of that until we know about next steps. One of the sessions beyond that there was an occasion for each person to talk about what any of it meant to them. 74

John: Let me quote to you from p6 now: "From there, we ask, 'How do you know that your assumption is true?'" How do you know that people have to go through the first to get to the second to get to the third. In other words, I'm doing to you what

you did to Sarah. How do you know your assumption is true? 75

Susan: I don't know that they have to start at #1 to go to #2. 76

John: Well, I thought - maybe I misunderstood you - that that's what your answer was. You said you had to do one at a time. 77

Susan: What I was responding to was "Is there a way I can know about the usefulness or helpfulness of any one of these steps?" And my answer was that the first one is not something we can learn something about its usefulness unto itself. 78

John: I thought I heard your (Terry's) question was something like "Gee, Susan, I thought you waited until the end. Isn't there anything you could have done between the beginning and the end which would provide some data - more than what you provided. I didn't hear her say for each step there has to be a test. But if she did, I wouldn't. I don't think you have to have a test each step. But I do think there ought to be more than "these are the things we did, and she did the following." And "we believe the proof is in the pudding." 79

Cy: Well, it seems like, to me, Susan has broken down the general statement about 'the proof is in the pudding' into six little statements still based on the same model: 'the proof of the pudding' of step 1 is what happens in step 2, and 'the proof of the pudding' of step 2 is what happens in step 3. That's what I heard you saying: "There's lots of little proofs along the way." But it still has the same - maybe it still has the same - basic set-up to it that you're always looking for after-the-fact evidence, rather than 'during-the-fact' evidence. I don't know if that's what the essential issue is, perhaps, here right now? And the question is, could you also use 'during-the-fact' methodologies? Because after-the-fact is certainly used all the time in social science and has some value, but what's been raised is whether there's a whole additional methodology of 'during-the-fact' evidence that seems as though it hasn't been your style so much. 80

John: The abstraction of the evidence is pretty high level. There's relatively little directly observable data, so that we can make up our own minds as to what do you do; what does Sarah actually say. So we're caught in your description. It would have been helpful even to take just one or two steps - getting back to your (Cy's) previous comment - giving us some quotes so that we can make up our own mind - we're not just caught up. So, it's partly the level of data (said quietly). 81

(fairly long pause)

Terry: This is a group that Susan and her colleague were working with; I don't know to what extent your and your colleague's skills are oriented in this direction. Still, it would be difficult to do all this testing with 13 people, in my imagination. So, I can see that you might have been constrained by the numbers. Even with that,

it may be very helpful for my learning. 82

In these comments, we hear two distinct streams of concern and tones of confrontation. One stream of concern focuses on the degree to which Susan in her theory-in-practice actually seeks out Level I disconfirming data. Cy's most recent comment (#80) poses the issue in what may be its most elegant form. He in effect argues that Empirical Positivism and modern science in general only generate after-the-fact disconfirming data, at best, whereas the kind of second-person, real-time research/practice this group is currently engaged in can go further and generate "during-the-act" disconfirming data that can potentially influence action in real-time. The critical issue about the quality of such data is the degree to which the actual behavior is characterized concretely (#44, 48, 63, 81), so that different participants can test whether they make the same inferences about it.

The second stream of concern focuses on the degree to which Susan's theory-of-practice seeks out Level II disconfirming data. Remember that the first comment (#41/43) is John's response to Gwen's confrontation (#35, 40) about whether his approach isn't just as likely as Susan's to "re-true" itself at Level II. Instead of responding about his approach, John ups the ante in his confrontation of Susan's approach: he uses a very strong and emotional analogy ("She's selling a pill... and she'd be in jail this moment if we ever applied the rules of pill making"). Greg and others return the focus to a more concrete level (#44-60), but then John re-enters the conversation (#61), confronting Susan's whole approach as "defensive reasoning" ("You are the one who is creating a safe place for you' and I see much less concern about Sarah").

John may or may not be right about Susan's tendency to re-true at Level II; but when we remember that all this strong confrontation has the effect of deflecting attention from Gwen's two invitations to John to consider whether his approach may also re-true at Level II, the concrete data from this dialogue seem to this reader to support Gwen's contention more clearly than John's, even though the power of John's rhetoric makes it hard for this view to surface. Indeed, even John's use of concrete data (#61 "If you couple your answer 'I can't know' with 'the proof is in the pudding' - if you can't know, then how can you get to the second?") is confusing because it is he who is coupling and interpreting otherwise disconnected phrases.

By contrast, Susan repeatedly indicates her openness to learning (#64) and that her "can't know" comment was not can't-know-in-principle, but rather can't-know-from-the-current-study because they simply did not collect some of the data that this group is suggesting to her would be useful (#67 and 68). John, however, hears her differently (#65 - "...I heard you not even care about doing what I just suggested" and #69). Cy tries to clarify for John (#71) and John momentarily agrees (#72 - "Yeah"), but then for some reason (because he realizes that his agreement deflates his argument?) he jumps back strongly ("Wait a minute!") to his inquisition of Susan. Susan suggests that she and her colleague do have data about what the sessions meant to participants (#74), but rather than inquiring about that, John stays with his agenda, returning to the abstract issue of whether she is re-trueing her assumptions (#75).

As we return to the transcript, we now find Greg attempting to raise the issue of John's overall theory-in-practice:

Greg: I've thought of a way to say this, which is to preface it by saying, I don't know to what degree it's my defensiveness or protectiveness, but I've been feeling just in the past 10 minutes a kind of unfairness in the critique of Susan - particularly in what you've been saying, John. I'm sure there is a chunk of my defensiveness hooked in, but I just want to say, substantively, how come? Because it seems to me they've got a theory-based intervention, based on developmental theory. So they didn't just pull it out of a hat. They've got theories we can disagree with and so on. They find what appear to be positive results: some teachers are trying some things they haven't tried before. In my work with these people, I imagine that if a person designed an experiment and tried to carry it out, I'd say "Hmm, that's quite a success." Now when Susan says, "I can't know what impact particular interventions have," I have some trouble with that because I would like to engage more on what your thinking was about this particular one where you ask her not to change anything. But it seems a reasonable thing to bring into this group; this description comes up with seemingly useful results; and then she says, "Now if you agree these are interesting results, we think it's worth pursuing how are we creating them." It's true there's relatively little directly observable data and that frustrated me too; but by the time you got to that point, I think my juices were flowing a little bit, and I was defending that by saying she wrote that for us - for this group. Let me stop there and get reactions. I need help. 83

John: Before you get reactions, I still haven't heard what's unfair. 84

Greg: OK 85

John: I'd ask you to be a lot more clear about what's unfair about my behavior. 86

Greg: The discussion about 'the proof is in the pudding' - I'm going to need help in reconstructing. I think you made an attribution about Susan that, in saying 'the proof is in the pudding' and in saying 'I don't know what the impact of particular interventions was' that was an illustration of a highly defensive response. 87

John: Yes, she says she can't know. I want to know what's unfair about that? 88

Greg (astonished): You took it seriously! ("can't know") 89

laughter

John: Yes, I do take it seriously. 90

Greg: You're right. And, you see, I discounted that. She said, "I can't know." I didn't believe that. I thought she meant, "I don't know looking back with Sarah which one of those things had an effect." 91

John: That I buy. She couldn't know from this description. 92

Susan: I don't mean by that, just to clarify, "there's no way to know." What I mean is... 93

John: Is there any way for you to know? 94

Susan (perplexed): "Is there any way for me to know?" 95

John: Yes. 96

Susan: In this situation with Sarah... 97

John: Yes. 98

Susan: I can't know which of the particular things... 99

John: I didn't ask you that (strongly). I asked you to say something about other than "the proof is in the pudding' is the only answer." I haven't asked you - in fact I think if you listen to the tape I said 'if she was saying 1, 2, 3, 4...' I just want to know if there's something between the first and the last. So I'm still going to hang in there. I want to know what is unfair. I think she said "I can't know." 100

Greg: Well that's right. And my assumption in her saying "I can't know" is that it means "in looking back at Sarah, I don't know, but looking forward there are ways for me to learn." I attribute all those meanings to her. 101

John: From this report, what data are there - from what you know are the criteria of learning - regardless of any theory - what evidence is there that she can learn in the future? from this report? from the way she presented it? from the way she crafted it? 102

Gwen: Boy, I'd be surprised if she couldn't learn something... 103

John: That's a different issue. He's talking about my unfairness and I just want to find out; but you may be dead right. 104

Greg: I see this report as including a number of things which make it possible to engage in a learning discussion. For example, the steps they go through at an intermediate level of abstraction; and the reaction of what the other person did, again at an intermediate level. So, for us to engage her in more testing, we have to dig into episodes, as we have done. Again, I'm attracted to this notion that what was unfair is that you took seriously - and by that I mean literally - "I can't know"; or, in the case of the report, the analogous thing is - the way I give leeway that I think you're tougher on - I say "She produced this in a short period of time just for this group. There's plenty of material for this group to talk about." So, to say that this report does not supply the level of directly observable data that would allow us to make independent judgments is accurate, yet I thought it was unfair under the

circumstances. 105

Cy: It doesn't prove that she's not willing to learn... 106

John: I'm not questioning her motivation to learn. I'm asking "Could it be that their theory is overprotective?" So, I'm not questioning about her motive. If that were true, I wouldn't be here. I think everyone here is interested. What interested me is you (Greg) discounted something for which there was directly observable data... I don't know anybody who's written a book like you have that has as much directly observable data, right? 107

Greg: Right. 108

Cy: I don't think it's fair to call it "discounted." You mean... 109

John: He said it. 110

Cy: Well, he may have said that, but I think you (Greg) were unfair to yourself because you came back later and defended yourself and I think your defense made sense. He didn't discount it; he interpreted it not-literally. He made some inferences about what she meant... 111

John: Oh no, I'm not talking about that. I'm talking about discounting - after all, we're not talking about 'beginning students.' He (Greg) made the choice at some point in his life...(to) do a fine-grained analysis... because he had some criteria of how does he learn and how do you help other people to learn in such a way that they can confront him on his theory. And I say I don't know anyone who's focused as much as Greg on the fine grained analysis. I don't know if Susan wants to use the hours as a reason, but she could have taken the same amount of time to say, "I'm just going to give you one or two of these and work it in detail. 112

Greg: So, that's the choice, and the time did require to pick between those...
(inaudible) 113

Cy: And I think our whole discussion could conceivably persuade her to go out and do a fine-grained analysis. So, she can't know from what she did, maybe; she can't know because she didn't collect that kind of data and make those type of interventions. But that doesn't mean she can't know in principle and may not know next time... 114

John: I don't think his concept of unfairness was an attribution that I said she can't learn in principle. I was saying she was giving an answer - put it in my words - "Given my theory, and given how I studied this, I can't answer your question other than 'the proof is in the pudding.' I'm saying, "I need to know what's unfair." Because that is the kind of thinking that, if it goes on in the real world, can get people into trouble. Look at how many managers say, "I don't know what the hell

did it, but look at what happened." It's the same thing. And that just makes me as anxious as hell. 115

Greg: Right. 116

Cy: How do you understand this, Susan? Can I ask? I mean the conversation that's going on now and the level of John's attribution about your defensive reasoning and so forth? 117

Susan: Well, what I'm focusing on now is to really get with what John means by the problem with saying 'the proof is in the pudding' as some way of learning. The choice that I made in writing this up was to present a picture that was close enough to what my colleague and I were doing that I was hoping it would in an overall way provide data or material for people to make judgments about the usefulness or non-usefulness of this. To the extent that you need to have what people are calling a fine-grained analysis in order to know that - is not something that I considered. So, I don't know whether that, unto itself, was a form of protecting myself. But, given that's not the way I did this, I've heard a lot about how this doesn't meet the standard, from John. And then I've heard, from Greg and Gwen more so, sort of take this broad brush stroke and say what they saw at that level. So, I guess I'm somewhere in between those and not knowing what to make of it... 118

Gwen: Is there something that would be helpful to you at this point for us to talk about to help make sense... 119

(pause)

Susan: What's going on for me is... 120

(pause)

John: I'll try - is there a question you would have hoped would have been answered that hasn't been answered in this discussion? Would that be a way of getting at... so that you would feel more like you got something out of this? 121

Susan: Oh no. I feel... 122

John: I don't see you deprecating what you've learned, but I just wanted to add to and be supportive of, if there's a question the group could focus on - that would be of real interest to me. 123

Cy: But I'm seeing Susan somehow working quite actively there (looking at her face and throat moving) somehow to try to say... 124

John: I may have moved in too fast... 125

Susan (weeping): I am upset... (pause) I feel... what I'm doing is making very strong either/or kinds of conclusions... (long pause) When I focus on... Well, so I'm taking these general things from what people are saying and thinking this is an unfair and unhealthy thing for me to be doing... feeling like there's something in this that makes sense to pursue along with a far more active learning about the things that are helpful to me about what John has said to me tonight about the ways I can be protective of other people. I think I feel... 126

(pause) ...(end of tape) (meeting ended shortly after)

Through this period of the dialog, Greg is evidently experiencing John's style as not maximally helpful, for he says (#83) that he feels a kind of unfairness in John's critique. He does not describe (and may not have fully known) what was unfair about John's behavior, and John asks him to do so. Greg refers back to comment #61, and John defends himself by re-quoting Susan's "can't know" comment with the emphasis on the in-principle "can't," even though Susan has already clarified that she did not mean it in principle. Again, John appears to be listening more closely to his conceptual scheme than to the conversation. Greg, however, is buffaloed (#91), though Susan follows by once again clarifying that she did not mean it in principle. John interrupts her to ask a question, the purpose of which is unclear, but the effect of which is to give him control (#94). He interrupts her twice more in quick succession (#98, 100), with anger in his voice the second time. Horror of horrors: she is evidently not playing this game the way he wants to see it played! And he wants to know what is unfair about his behavior!! (Or does he?)

John's interruptions of other participants continue (#104, 107, 110). Despite repeated refutations of his interpretation of Susan's "can't know" comment, he now (#107) 'describes' Greg as "having discounted something for which there was directly observable behavior." Finally, someone gives John a concrete illustration of what is

being heard as unfair in his behavior, when Cy (#109 and 111) disputes John's 'description.' John, however, interrupts both times ("Oh no, I'm not talking about that..."), evidently not too interested in knowing what's unfair about his behavior - at least, not as interested as in what he is talking about.

On another point, John's phrase "directly observable behavior" suggests that there is such a thing as uninterpreted direct observation which serves as irrefutable data and to which John has access. This whole exchange suggests, to the contrary, that there is not such a thing as uninterpreted data, and that John's difficulty in hearing others' interpretations of what Susan's comment meant to them is reinforced by his belief that he has access to irrefutable data. This is a particularly dysfunctional twist in the conversation, not only because it keeps the conversation cycling rather than proceeding, but even more importantly because it potentially serves to discredit the notion of using illustrations from current behavior to test persons' inferences, yet this procedure is one of the most powerful that action science offers for making people aware, precisely, of their interpretations. In *Action Science*, Argyris, Putnam, and Smith carefully speak of "relatively directly observable data" (emphasis added). Without this emphasis, this validity-testing procedure can veil a speaker's Level II re-truing process, as it appears to this reader to do in this instance.

The session ends, just as in John's earlier story about another incident, with a woman weeping.

How Happily They Lived Ever After

Pat discontinued participation in the meetings after the foregoing session, on the grounds that neither he himself nor other members of his organization could learn to

reconsider their overall approaches under conditions as tense, competitive, and harsh as this meeting generated.

All of the other members continued. The later meeting when the transcript was reviewed was also marked with tension. But other meetings, such as the very next meeting after this dialogue when Terry presented, were not as tense. So, the session presented above is not representative of all 'community of inquiry' meetings in this respect.

The assignment for the second meeting was to review the summary and the transcript, with each participant asking how she or he might act differently in retrospect. At the outset, Greg said that his central concern was to explore what John had done that he called "unfair" in the first meeting and whether his own reaction was over-protective of Susan. Gwen said that her central question is what she was trying to do early in the first session, why she gave up, and how she might have addressed John about the unfairness she too was experiencing. Susan said that she reviewed the transcript trying to find out how she came to feel as thoroughly incompetent, unethical, and stupid as she did at the end and what she learned from this experience. She identified John's use of highly charged analogies ("She's selling a pill... and she'd be in jail this moment if we ever applied the rules of pill making") as one of the factors. John said that he liked all those topics and hadn't developed any introductory comments of his own. Cy said that he wondered how he could have been more competent at influencing John in the first meeting, but that he found his attention straying all the time to the shape and power of John's interventions, which irritated him and unfocused him from his own question.

As the second session continued, Greg suggested that Susan may have been hurt

by the confrontations during the first meeting and then responded by polarizing and magnifying the issue beyond what was said. He tested with her whether his attribution was correct. He also reminded the group of occasions when John said he was not altogether dismissing the developmental approach, when he used specific, concrete evidence from the dialogue, and when he asked questions that invited others to disconfirm his point of view. Cy said he experienced Susan as open to learning and as actively struggling to learn during the first meeting. By contrast, he experienced John's overall manner - including the number and length of his comments (John made the most comments at each meeting, 31% each time) and his pace - as indicating an unwillingness to look at the question of whether he has something to learn about his whole style. John, Gwen, and Greg told Cy that he had become too prosecutorial in this second session, moved too quickly among issues, and did not use sufficiently concrete data from the dialogue to be maximally helpful. Cy told John, "I am trying to mirror yourself to you."

Later in the second session, John said that he experienced the other members at the first meeting as defending Susan and as "anything from mildly to very pissed off at me. ...What I heard was, 'If you would just shut up, John, we could learn.' And I wasn't about to be shut off." Still later, he said to Gwen, "Let me ask you, because if you're right, first I've really screwed it up, and second it would have been very helpful for you and your colleagues to say, 'Wait a minute.'" Gwen began to offer an illustration of how she did so, but was interrupted by John.

At the end, someone suggested that the group would never have explored this issue of how to help so intensively had it not been for John's strong insistence on his points during the first meeting, and that John himself did not indicate an openness to

possible negative effects of his approach until late in the second meeting, after Cy had insisted with comparable strength on questions about John's approach.

Two years later, Susan described instances in her consulting work when she had been helped by remembering the issue raised so vividly in the foregoing dialogue. She now asks herself, as she works, "In talking with clients about how to deal with conflict, am I myself toning down conflict (and thus not modeling what I am advocating)?" However, she also says that the provocative analogies, the 'heat,' and the pace of this session were not useful to her.

Final Reflections

The analysis of John's actions during the first meeting has taken on a prosecutorial tone similar to that with which Cy was charged at the second meeting, so it probably comes as no surprise to most readers that Cy is the pseudonym for this author. The suggestion at the end of the second meeting that the dogged confrontativeness of both John at the first meeting and Cy at the second meeting may have been the "prime movers" of major learning leaves me with an ongoing conundrum about how to act in my efforts to participate in the creation of communities of inquiry. Since I felt primarily critical, especially late in the first meeting, about John's 'frozen' perspective, and since I achieved a similar degree of combativeness only as a desperate ploy to mirror John to himself, what should this experience teach me about my efforts to play a constructive role in helping my family, my academic department (see Chapter 13), and other settings evolve toward transforming communities of inquiry?

I think it tells me that those of us who deeply pursue the discipline of second-person research/practice must, not only develop a system, like the seven guidelines of action science, for testing validity in dialogue and avoiding Level I re-trueing, but must also be alert at a trans-cognitive level for occasions when the validity-testing system itself may generate dysfunctional Level II re-trueing and when true learning will be heightened by stepping beyond the system. In my case, this may mean stepping beyond my “constructive, diplomatic” personality at times.

To cite a much more all-encompassing example, the most serious and systematic effort to avoid re-trueing in modern times has been the development of mainstream scientific method. However, since mainstream scientific method is based on treating the scientist as a pure observer, detaching him or her as completely as possible from the observed action, it cannot validly test, but only re-true, the proposition that a participant in action cannot, finally, know objective truth about the current situation as it unfolds. This accords with our ordinary experience of wiser and cooler thought after the fact. Centuries ago, Adam Smith, in *The Theory of Moral Sentiments* (1759/1969) eloquently expressed the dilemma so:

When the action is over... and the passions which prompted it have subsided, we can enter more coolly into the sentiments of the indifferent spectator. ...But our judgments now are often of little importance in comparison of what they were before, and can frequently produce nothing but vain regret and unavailing repentance, without always securing us from like errors in time to come. It is seldom, however, that (we) are quite candid even in this case. ...He is a bold surgeon they say, whose hand does not tremble when he performs an operation on his own person; and he is often equally bold who does not hesitate to pull off the mysterious veil of self-delusion which covers from his view the deformities of his own conduct (p. 262).

Yes, pulling off the veil of self-delusion in the midst of action is certainly difficult. But then, so too is learning and practicing mainstream scientific method as we

now know it. The questions that mainstream science dismisses because of its systematic assumptions, without really addressing, remain. *Is there a kind of scientific inquiry that participants in action can conduct at the time of action? And, more particularly still, is there a kind of scientific inquiry participants in the action can conduct at the time of action without necessarily falling prey to the systemic re-truing of assumptions that occurs in modern science?*

This chapter at one and the same time illustrates how difficult it is to accomplish this aim, yet argues that the answer to both questions is "Yes." In *Action Science* (Argyris et al, 1985), seven rules are offered for testing validity in the midst of action (p. 258ff), and the first two are clearly guidelines that can help a practitioner do Level I validity testing. They are "*Rule 1: Combine advocacy with inquiry... (and) Rule 2: Illustrate your inferences with relatively directly observable data...*" As we have already seen in our protracted illustration, however, Level II validity testing - testing the validity of our theory-in-practice system as a whole - is profoundly more difficult because: 1) a true validity test at Level I may mask re-truing at Level II; and 2) a lot of re-truing at Level II is functional (no system can test its own systemic validity at every move), so the real questions at Level II are whether a system ever truly tests Level II validity and whether it does so in a timely way.

Two of the seven *Action Science* rules pertain to such systemic validity testing, and the reader will see that they are inherently more complex than the Level I rules mentioned above. The two rules are: "*Rule 3: Make your reasoning explicit and publicly test for agreement at each inferential step... (and) Rule 7: Design ongoing experiments to test competing views...*" Although these two rules are complex enough to implement as stated (even with the elaborations provided in *Action Science*), they do not address the

questions of when and how they should be followed and how to interpret the results. Nor do they raise or address the question of whether these very rules, as a system, retrue themselves.

As stated near the outset of this chapter before there was a context to make it meaningful to the reader, the Argyrisian version of action science ignores issues of trans-cognitive awareness, of timing, and of how to balance validity-testing with other life concerns. Whereas systematic thought - even systematic thought about an action science - operates within assumptions that inevitably frame it and are inaccessible to it, a Level III trans-cognitive awareness that can hold lightly all one's changing thinking, acting, and inquiring perceptions thereby transforms assumptions into potential variables (see Figure 1, Chapter 5; also, Torbert, 1973, 1994, 1998). Just as a systematic Level II approach to validity testing in action, like action science, is necessary in order to reduce Level I re-trueing, the Developmental Action Inquiry paradigm introduced in Chapter 5 proposes that a Level III, triple-loop learning process is necessary in order to actively reduce dysfunctional Level II re-trueing. Intellectually, this means holding more lightly one's theoretical orientation and one's systemic, Level II validity testing process. This, in turn, permits one to tolerate, appreciate, and truly invite Level II questions, challenges, and modifications.

When persons feel - no matter how sophisticated their theory and their practice - that their ability both to know what is occurring at the moment and to act lovingly moment-to-moment is radically incomplete, they embark upon a transformative journey toward Level III conscious awareness, often seeking help from awareness-transforming spiritual practices (Alexander et al, 1990; Heron, 1998; Pascual-Leone, 1990; Wilber, 1998). To make this effort is to do the task which Adam Smith characterized as *pulling off the mysterious veil of self-delusion* in the midst of action. Mainstream science forswears this task, and Argyrisian action science addresses it only incompletely. Each person initiates and sustains this effort voluntarily. But, to cross the theory/practice

divide successfully in universities and communities where individuals and groups begin from highly divergent models of inquiry and action, this effort is required.

Notes

1. These participants had all agreed to the taping of meetings and to the use of the tapes by any members who so chose for research purposes, with the qualification that the other members would be invited to offer feedback on drafts of any articles or chapters, as they have been in this case. Two drafts of this article have been reviewed by the five most active participants, and they have made numerous comments resulting in changes. The participants chose to be represented by pseudonyms in this article, with the additional suggested precaution of altering the gender-identity of one or more members.

2. In developmental theory, Stages 3 and 4 are called, respectively, "Conformist" and "Conscientious" (Loevinger, 1978), "Diplomat" and "Achiever" (Torbert, 1987), or "Interpersonal" and "Institutional" (Kegan, 1982).

3. See footnote 1. Although analogical consistency between espoused theory and current practice is a primary value in action science, the question of how to determine the validity of analogies between a there-and-then situation and the current situation has yet to be addressed. (Abbott [1991] addresses the related issue of the validity of stories and analogies used in political theorizing.)

References

Abbott, P. 1991. Story-telling and political theory. *Soundings*: 74, 3-4, 369-398.

Alexander, C., Davies, J., Dixon, C., Dilibeck, M., Drucker, S., Oetzel, R., Muehiman, J., & Orme-Johnson, D. 1990. Growth of higher stages of consciousness: Maharishi's Vedic psychology of human development. In Alexander, C., & Langer, E. *Higher Stages of Human Development* New York NY: Oxford University Press.

Alexy, R. 1990. A theory of practical discourse. In S. Benhabib & F. Dallmayr (Ed.s), *The communicative ethics controversy*. Cambridge, MA: MIT Press.

Argyris, C. 1994. *Knowledge for Action*. San Francisco: Jossey-Bass.

Argyris, C., and Schön, D. 1974. *Theory in practice: increasing professional effectiveness*. San Francisco: Jossey-Bass.

Argyris, C., Putnam, R., & Smith, D. 1985. *Action Science: Concepts, Methods and Skills for Research and Intervention*. San Francisco CA: Jossey Bass.

Evered, R. & Tannenbaum, B. 1992. A dialog on dialog. *Journal of Management Inquiry*, 1, 1, 43-55.

Heron, J. 1998. *Spiritual Science: Person-Centered Study of the Spiritual and the Subtle*. Ross-on-Wye UK: PCCS Books.

Kegan, R. 1982. *The Evolving Self* Cambridge MA-. Harvard University Press.

Kegan, R. 1994. *In Over Our Heads: The Mental Demands of Modern Life*. Cambridge MA: Harvard University Press.

Kegan, R., & Lahey, L. 1984. Adult leadership and adult development: a constructivist view. In Kellerman, B. (Ed.). *Leadership: Multidisciplinary Perspectives*. Englewood Cliffs NJ: Prentice-Hall.

Loevinger, J. 1978. *Measuring Ego Development, Vols 1 & 2*. San Francisco CA: Jossey-Bass.

Pascual-Leone, J. 1990. Reflections on life-span intelligence, consciousness, and ego development. In Alexander, C. & Langer, E. (ed.s) *Higher Stages of Human Development*. New York NY: Oxford University Press.

Schön, D. 1983. *The Reflective Practitioner*. New York NY: Basic.

Souvaine, E. 1985. Creating contexts for effective action and the development of meaning-making. *Qualifying Paper*. Cambridge MA: Harvard Graduate School of Education.

Souvaine, E., Lahey, L. & Kegan, R. 1990. Life after formal operations: implications for a psychology of the self. In Alexander, C. & Langer, E. *Higher Stages of Human Development* New York NY: Oxford University Press.

Smith, A. 1759/1969. *The Theory of Moral Sentiments*. Indianapolis IN: Liberty Classics.

Torbert, W. 1973. *Learning from Experience: Toward Consciousness*. New York: Columbia University Press.

Torbert, W. 1976. *Creating a Community of Inquiry: Conflict, Collaboration, Transformation*. London: Wiley.

Torbert, W. 1991. *The Power of Balance: Transforming self, society, and scientific inquiry*. Newbury Park, CA: Sage.

Torbert, W. 1994. Cultivating post-formal development: Higher stages and contrasting interventions. In M. Miller & S. Cook-Greuter (Ed.s) *Transcendence and Mature Thought in Adulthood*. Lanham MD: Rowman & Littlefield.

Torbert, W. 1998. Developing wisdom and courage in organizing and sciencing. In S. Srivastva & D. Cooperrider (Ed.s). *Organizational Wisdom and Executive Courage*. San Francisco CA: The New Lexington Press.

Torbert, W. 1999. The distinctive questions Developmental Action Inquiry asks. *Journal of Management Learning*. 30, 2 189-206.

Wilber, K. 1998. *The Marriage of Sense and Soul: Integrating science and religion*. New York NY: Random House.

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