Circular Questions and Coordinated Management of Meaning Theory

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This essay continues the work of exploring the relationship between the communication theory, "Coordinated Management of Meaning" and "Circular Questions." They share intellectual roots in Human Systems theory, Philosophical Pragmatism, and Wittgenstein's later philosophy. This essay begins with a brief overview of the idea that "meaning is use." It proceeds to a brief discussion of what makes "circular questions" circular and then to a review of the CMM heuristic model. It concludes with a set of sample circular questions articulated to features of the model. Examples are based on application to systemic management and consultation. However, they can be readily applied to other areas of systemic practice such as therapy and community building.

The purpose of this paper is to show the relationship between the systemic interview method Circular Questions[1] and the communication theory, Coordinated Management of Meaning (for brevity CMM).[2] The relationship between the interview method and CMM was first grasped by Karl Tomm. As Cronen remembers it, in 1982 he and Barnett Pearce were presenting some of their work at the University of Calgary where they had been invited by Tomm. During a break, Tomm brought Peter Lang and Martin Little[3] up on stage,

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1. Circular questions were first developed by the Milan team of Palazzoli, Boscolo, Cecchin, & Prata (1977)

2. The reader interested in CMM and its development should begin by referring to the following: Pearce, 1976; Cronen & Pearce, 1980; Cronen, Johnson & Lannamann, 1982; Pearce, 1989; Cronen; 1994; Cronen & Chetro-Szivos, 2001; Cronen; 2004; Pearce & Barge, 2004.

3. Soon thereafter Peter Lang and Martin Little founded the Kensington Consultation Centre, now the KCC Foundation. Susan Lang is Director of Training for the KCC foundation.

introduced them to Pearce and Cronen, and said, "You four have to work together. Go get some coffee and talk during this break." We did as told and that meeting started a long and continuing relationship. Tomm recognized that the way Lang and Little were developing their use of circular questions was an especially good fit with the emerging ideas of CMM. Both Circular Questions and CMM are based on a systemic understanding of social interaction. In addition, both are consistent with ideas about language and meaning common to philosophical Pragmatism and Wittgenstein's later philosophy. In an earlier paper Cronen and Lang (1994) have discussed the use of circular questions in clinical practice and consultation. However, they have not described in detail the fit between the analytic models of CMM and the interview method. That is the work undertaken in this paper. The examples herein are based on systemic consultation and management. However, they can be readily adapted to other domains such as therapy, community groups and educational settings.

Circular questions as originally developed by the Milan Group for systemic therapy started off as a series of questions that were for inquiry purposes. So they were originally conceived of as a way of making sense for therapists, consultants and the like. However, very quickly the members of the Milan group became aware of the more interesting and exciting possibilities of using circular questions. The questions themselves led to change being created in the interview with the family or group. So it was not a method for therapists to gain an understanding and create hypotheses only. Every question, they began to see is a form of co-creation, pointing from past and present into future possibilities for change immediately the questions are asked. The questions they found created insight, changed perspectives, opened up new methods of solving life's challenges and developed future possibilities. The group then moved from questions as information-gathering prior to intervention, to a view that focused the therapist's attention to the ways in which people were affected by the questioning and how the art of questioning was responded to by members of families and significant others. This understanding is influenced by Wittgenstein's notions of the emergence of both meaning and context. So attention to questioning became important as a way of joining families in therapy and creating together through the process of questioning openings for change. Exploring many varieties of questioning or enquiry is what therapists are called on to develop in the light of the possibilities that this creates.

The paper is organized into four parts drawing out how to develop repertoires of connecting as an inquirer through questioning. The first part presents a brief overview of the orientation to management and consultation that comes

from the position that "meaning is use." The second part of the paper provides a brief review of what makes circular questioning distinctive for those who are not highly familiar with the method. The third part is a brief overview of the heuristic models of Coordinated Management of Meaning theory. Finally, the fourth part contains sample circular questions articulated to specific features of the CMM heuristic models.

"Meaning as Use" and the Systemic Point of View

The idea that meaning is use is common to both Dewey's (1916/1960; 1925/1958) and the later Wittgenstein's (1953, # 43) philosophical positions.[4] As Wittgenstein (1953) said, "you know the meaning when you know how to "go on" (#179–188)[5]. By "going on" Wittgenstein meant the ability to respond to another person or situation in a coherent way. John Dewey (1925/1958) expressed it this way: "To fail to understand is to fail to come into agreement in action" (p.179). This approach at once directs us to think about making meaning as something we *do together*. It directs us to patterns of situated action. By contrast, traditional views of meaning such as semiotics and cognitivism treat meaning as individual and representational (Stewart, 1995; Baker & Hacker, 1980). In a representational view, a word is a symbol that represents, literally presents again in another form, an idea or sensation in the individual's mind. Traditionally, meaning is a correspondence between language and a mental sensation or idea. By contrast, the 'meaning as use' perspective says that the meaning of words (and also of gestures, grunts, facial expression, etc.) is the way we use them. Meaning is socially made and making it is a learned "ability." As we communicate with others we learn how to act into the actions of the other. We know we are making sense because we can work together coherently. Meaning, then, is not some "thing" inside individuals' heads that is magically 'encoded' into words when we speak and 'decoded' from the words we hear into mysterious mental objects. [6] In the

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4. We are referring here to Wittgenstein's (1953) later philosophical position, not the one expounded in his *Tractatus* (1921/1971)..

5. References to Wittgenstein's writings will be by paragraph number.

6. Harre & Tissaw (2005) offer the rough analogy of an automobile engine. Suppose we say to a friend that our new automobile "has 300 horsepower." Our friend lifts the bonnet (hood), looks inside at the engine, and asks, "Where is the horsepower? Is it inside this part here, or under there? I see how it works, but where is the horsepower?" Our friend would be making the same kind of mistake as if s/he spoke to you like this: "I want to understand what you mean by the phrase "micro managing." Show me the meaning in your head for which this phrase is code. I don't want a PET scan of your neurological behaviour, I want you to show me the meaning so I can compare it to the words." An important limitation to the automobile analog, of course,

"meaning as use" perspective the distinction between meaning and action is deliberately blurred. For example, Dewey affirms that language is action (Dewey 1952). Moreover, meaning is not a static relationship. The meaning of an utterance or behaviour points into the future, opening and closing possibilities for response. In the meaning as use perspective, there is a different way of talking about "mental" behaviour. By mental activity what we are highlighting is the ability to create an image for use when responding to a situation, or to rehearse bits of discourse in our heads prior to responding in overt behaviour. To be emphasized that such mental creations are incomplete guides to assist us in real behavior. As Wittgenstein (1953) pointed out, no image can fully determine its use. With respect to internal rehearsal of language the situation is similar. We often find that ideas we have thought-through are far less sufficient than we thought when we act overtly via speech, writing or movement. When a person acts into the stream of conversation with another he or she uses learned abilities to act, substantializing (Cronen, 1994) these abilities into behaviors of various kinds. The test for whether an utterance is meaningful, is not how perfectly it corresponds to something else, but rather how well it facilitates coordinated action.

How shall we speak of the learned connections among words, feelings, perceptions, recollections, and movements if we adopt the model of emergent abilities instead of the model of symbols referring to internal sensations and ideas? Wittgenstein (1953) proposed the term "rule."[7] Thus, when we are interested in the meaning of a word, a movement, or a silence, we undertake a "grammatical inquiry" into the rules in use. We want to know a behavior, including language, is connected to various aspects of practice. We are not interested in compiling a list of rules. To use a rule is not the same thing as to know a rule. To know a rule is to be able to report an abstract principle. This may be useful under particular conditions. However, it is possible to create a justification for how most any action can be called consistent with a rule. To use a rule is to be able to respond coherently "in a flash."

Not all connections are "conscious." That is, they are not necessarily reportable in the form of personal or public reflections at a particular moment. How do we know that we are using a rule correctly? We know by the responses we get from others. The idea of meaning as created in situated joint action leads to additional

is the fact the automobile engine does not change and adapt very much to driving conditions. However, our ability to make meaning, is constantly emerging - changing as we act into the actions of others in order to coordinate with them. Learning is not stuffing the brain with some sort of 'mind stuff.' It is a change in the brain itself.
7. Dewey preferred the term 'habit.' It is useful to think of a rule as a summary term for a collection of habits for how to attend, think, move feel, recall, sound, etc. at a particular moment.

conclusions. The phrase, "my meaning" can never be more than partly accurate. Of course, each person will learn to make meaning in a way that is to at least some degree unique because each person acts from a different position in the conversation. However, each person's action is informed (literally, formed from within) by the conditions created by the other, conditions which must be taken into account in order to go on coherently. Because communication occurs in changing situations, meaning can never be completed.

The traditional philosophical position, we believe, misdirects us. It orients our inquiry to questions like these: "What does this employee *really* mean by 'managing'"? "Is his/her meaning the same as mine?" "Does he or she know what managing really is?" Such questions seem sensible if we think that meaning is some *thing* in an individual's head, and that words are representations of it. But look at the problem immediately presented by this traditional view. Even if there were meanings inside a person's head, can one ever get inside to answer questions?[8] From a meaning as use position, meaning is made using our brains as we act into the moment. The following seem to us to be useful and answerable questions. "How does his grammar of managing play a role in the way he leads this team?" "How does her grammar of managing enter into the way she plans this project?" "How are our understandings of 'managing' evolving as we work together?" Another advantage is attained by the 'meaning as use' position. There is no arbitrary line between language and non language. It is just as possible to explore the grammar of silence, an emotional display, or grunt or a movement as it is to explore the grammar of a word or phrase. Then meanings of these nonverbal events *are* the ways they figure in communication.

A systemic orientation to consultation and management assumes that the ways persons think and act are uniquely developed in the course of social interaction and that is what Circular Questions are designed to explore: evolving grammars. They emphasize context, relationship, and communication; in other words, "joint action" (Shotter, 1993, 2005). Focus is neither on individuals in isolation nor on 'messages.' It is on the way one person's actions create conditions that in-form the actions of the other, while anticipating future responses. This is not a machine-like process. Human communication is distinguished by the way each participant takes an interest in the way his or her actions elicit responses from the other and the way the other's actions create a situation in which one's own actions must make sense. This is the foundation of human community (Dewey, 1916/1960, 1925).

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8. Those interested in a fully developed critique of the traditional, representational view should consult Wilson (1999), Baker & Hacker (1980) Harre & Tissaw, (2005)

Features of Distinctively Circular Questions:
What makes them Circular?

"Circular Questions" were first developed by the Milan team of Palazzoli, Boscolo, Cecchin, & Prata (1977) and further developed since that time (Tomm, 1987, 1988; Boscolo, Cecchin, Hoffman & Penn, 1987; Fleuridas, Nelson, & Rosenthal, 1986; Cronen & Lang, 1995; Lang & McAdam, 1997; Lang and McAdam, In Press). Originally developed for use with families and other naturally interacting social units, the method has been adapted too for use with individuals (Boscolo & Bertando, 2002). Practitioners have developed different emphases and variations on Circular Questions. Below are features that we think are common to the use of circular questions in various forms of systemic practice.

Making Connections between the Interviewer and Participant(s)

In Circular Questioning, each of the interviewer's questions is clearly connected to the previous response. The systemically oriented professional explores grammars of action by using the actual terms employed by others in order to understand how words, phrases, and nonverbal behaviours can be sensibly connected in participants' use. This is done by embedding key elements of a response in the next question rather than a paraphrase or an expression more common to the interviewer's own use. For example a manager may be discussing job performance with a new employee. The employee might say in response to the manager's earlier question, "I don't yet feel that I really fit in tightly with my work team." The manager might choose to explore the grammar of the phase, "fit in tightly." If so, the manager's next question could be, "What is going on when you feel that you do not yet fit in tightly?" The manager does not substitute her expression such as, "…feel you don't really belong." That phrase could have different grammatical connections for the employee. The exception to this is when circular questions are used for intervention. In that case the inquirer may deliberately choose to replace a feature of another's response with a different word or phrase to explore the possibilities of new grammatical connections in the respondent's grammar. (See Cronen & Lang, 1994). However, before attempting to reframe, it is important to enter into the clients' grammars in order to grasp how it functions. Gregory Bateson (1972) said that any living system exhibits "perfection." That is, something about the system is working well enough to keep the system going. Therefore, it is important to know how a grammatical connection works in a system before moving to change it.

Making Connections among the Participants

From a systemic perspective, persons in conversation differ from one another while at the same time creating the conditions in which differences and similarities are made. Circular questions are used to make comparisons among persons in such form as, "Who appears most disturbed when John is late for work?" "Who is next most disturbed?" "Who is most likely to encourage the team when things are difficult?" "Who shows the most joy when a project is well done?" or "How does Bill show his excitement differently from John?" Questions like these are often followed by asking another person whether he or she sees the response in a similar way. Bateson (1972) called this looking for "news of a difference". Connections among persons are also made in terms of the sequence of action. A consultant may ask, "After the manager gives the group its assignment, what happens next, who speaks next?" "How did he sound?" "Who was the next to speak?" "What did he/she say?" Perhaps most importantly, circularity between participants directs attention to the way one person's actions both create conditions that inform the next person's responses, and sustain, develop, or change the grammatical abilities of the other. It is in the circularity among persons acting together that meanings and abilities are formed.

Making Connections in Time

Time is important because every utterance has a past, a present, and a projection into the future (Dewey, 1922). All action is intentional in the basic sense that it points beyond itself creating new conditions for action (James, 1908, Dewey, 1922). This pointing beyond the moment of utterance is intrinsic to the meaning of the utterance itself, not a separate consequence. The user of circular questions may compare the past to the present like this: "How are things now compared to how they were before the start of the project?" However, the use of time oriented questions should not be limited to how the past compares to the present. Those interviewed can also be asked to imagine a future based on the assumption that present patterns continue: "If you continue teaching the trainees the same way, how long do you think it will take them to catch on?" or "If things continue as they have been, what will the relationship between your organization and its suppliers be like in two years?"

The foregoing examples are linear with respect to time because they move from the past through the present to the future. However, circular questions can circle back from the present or anticipated future to an earlier time. A client's hopes for a better future might be developed with a series of questions. The developing story about the future could then be connected to the present

via questions like this one: "A year from now, what would you want your manager to be saying about your project team when she/he meets with other managers?" and "In that future, what would you remember about this time that enabled the good things to happen?"

Making Connections among Participants' Stories

When one person acts into a moment of social action, he or she uses learned grammatical abilities. Like other forms of systemic work, CMM oriented inquirers think of individuals' learning as organized for use as stories rather than as propositions or concepts. Stories have a temporal dimension and a richness of detail. For example, as a manager responds to a subordinate's explanation for missing a deadline, the manager is responding not only to the details of the immediate situation, but also, perhaps, to his stories about past encounters with that particular employee, about how to manage successfully, about the expectations of higher management, and/or his career path. There is no universal set of stories associated with systemic practice or CMM theory. The relevant stories have to be identified by interview. CMM oriented practitioners are interested not only in the connections within stories, but also in the connections among stories. We explore the relationships among stories by considering what elements of a particular story might be crucial for the coherence of another. Said another way, we wonder which story contributes vital bits of grammar without which the other would not make sense. For example, suppose a consultant is working with a manager who reports being exhausted by the need to oversee all the details of subordinates' work. The consultant subsequently learns that the manager has overheard a good deal of casual talk about how her predecessor was not up to the job and that women mangers are not tough enough to get things done. The new manager's story about having to supervise every detail makes sense to her in light of the story about how her predecessor lost her job and her own grammar of being "tough."

Persons may employ grammatical connections in one story that are borrowed from another without being conscious of the connection – that is, they are unable to report it. For example, a consultant might ask, "When did you first notice that you were feeling disconnected from your work and colleagues?" When asking this question, the helping professional might have the idea of making a temporal connection between the person hearing she/he was not getting promoted and the person feeling disconnected. The consultant might attempt to make the connection conscious like this: "Help me to understand what has been happening. You first started to feel 'disconnected' from your work and colleagues soon after the bad news about your promotion. Is that right?"

Comparisons across different persons' stories can be very useful. For example, "Your supervisor has described a pattern of 'escalating demands' on your working group. How would you describe that same period of time?" Later the interviewer might ask, "When in that pattern of 'escalating demands' did you first get the idea that your supervisor did not respect your views – what else was going on at the time?"

Making Connections among Person Positions

This kind of circular connection refers to the 'position' in the communication system from which a person speaks and listens, and to the position into which they invite other(s). In John Shotter's (1984) original formulation, position referred to grammatical positions such as first person, second person, second person plural, third person, etc. Shotter was calling attention to differences in responsibility attendant upon taking a 1st person position and a 3rd person position. In a 1st person position one's first obligation is to engage coherently and immediately. That requires connecting with the details of the other person's utterance and the unique features of his or her relationship to the speaker. In the 3rd person position, one listens and responds from a more removed, on-looker's role. In that position the obligation is less to the detailed immediacy of the other's relationship to the speaker and more to an abstract, quasi –objectified role. The technique of "gossiping in the presence of others" reflects the same idea (Boscolo, Cecchin. Hoffman, Penn, 1987). For example, suppose a consultant observes that persons "A" and "B" frequently argue (1st and 2nd person positions) while person "C" listens without comment (3rd person position). Because we think differently from different positions, the consultant might choose to have persons "A" and "C" respond to each other, while "B" observes the interaction.

Person position is, however, more than a matter of pronouns. One can speak in the third person plural, for example as the voice of the institution or perhaps his or her profession. For example, a long time employee might preface a response with the expression: "Here at Dr. Bob's Happy Dental Surgery we work by these principles..." An interviewer may ask questions that invite the same person to take a different position, asking for a response as a representative of a profession rather than the office: "Speaking as a Dentist, what are the best things about working at the Happy Dental Surgery?" Another example would be a request to respond from the perspective of a new employee: "What might a new employee who has just come into the Surgery hear in your remarks?"

The position from which a person speaks invites others to take positions in the system. In Symbolic Interactionism this is called "alter casting."

(McCall & Simmons, 1966). It is useful to observe how participants offer each other positions from which to speak and whether others accept or reject the position offered.

The CMM Heuristic Model

Hoffman (1981) observed that a major development in systemic practice was to move from the idea of a system as interrelated elements connected by feedback, to the idea that the 'connections' themselves could be the primary focus. This refocusing involved the idea that the "elements" of a system are socially constructed, sustained, and changed in the moment-by- moment process of communication among persons. Philosophical pragmatism (Dewey, 1922;1925; 1934) and Wittgenstein's (1953) later philosophy takes us another step. Their work shows that a conversation is not a string of independent messages containing bits of information as Bateson seems to have thought (Bateson, 1979; Sluzki, personal communication[9]). Instead, each behaviour is formed from within by the last utterance, and by anticipation of the next response. This is what John Shotter calls, "joint action" (See Shotter, 1984; 1993a; 1993b; 2005). Of course, a behavior (whether an utterance, a gesture, a facial expression, a feeling, or silence) is also in-formed by the learned abilities a conversant brings to bear at a moment of conversation. Those abilities are themselves treated as evolving, that is, created and recreated in communication.

Abilities refer to more than the machine-like interactions. Dewey (1925/1959; 1934) rightly said that every instance of human communication has two dimensions. He called them the "instrumental" and the "consummatory" dimensions. By "consummatory," he meant the artistic aspect of all sound and movement. Without the ability to co-construct moving moments of experience, organizational life, like personal life is not fully human (see Cronen & Chetro-Szivos, 2001). The artistic side of communication is not to be viewed as a kind of pleasant add-on or side effect. Rather, the artistic feel of communication can be central to meaning. Martin Luther King's "I Have a Dream" speech is spoken in the rhythms of the Blues, and by a minister. This enters directly into the meaning of the words. A consummatory moment in life is one in which multiple threads of experience are brought into harmony in such a way that new possibilities are created for the future (Dewey, 1934).

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9. Some year ago I (VC) was privileged to have a discussion with Professor Carlos Sluzki about this. He showed to me some notes that Bateson prepared in which messages were drawn as circles containing information bits, and accompanying notes that discussed meaning from the viewpoint of mathematical "Information Theory."

The CMM model provides a way to understand the connections among stories, feelings, and behaviors that are formed in communication. As discussed above, CMM does not assume that persons are conscious of all these connections. Some of the best moments of life can only be performed and enjoyed without consciousness of certain connections. One valuable use of CMM is to provide, via its heuristic models, a way to inquire into how consciousness is managed in particular patterns of communication.

It is not our claim that in practice it is always necessary to do detailed inquiry in specific conversation patterns. It is our claim that it can be useful to sort out what is happening by a detailed examination of communication practices. In our experience, doing so can sometimes make sense of what looks like a perplexing set of phenomena.[10]

Functions of the CMM Analytic Models

The CMM heuristic model is shown in figure 1. It is meant to serve the following functions:

1. The model directs the inquirer to a temporal, joint action perspective. Each behaviour is understood to be creating affordances and constraints for the next, while reflexively developing the abilities persons use to respond.
2. The model indicates places to look for data by observations and questions. Part of the way this function is served is by providing a "skeleton" made of language and symbols for organizing important features of communication not explicitly in the model itself. For example, there are no symbols for emotions, moments of artistic consummation, or unconscious connections specific to CMM. However, the model provides a way to place such phenomena in the temporal context of communication.
3. The model helps identify missing data. This can be especially useful, when some interviewees are highly responsive to our questions and others defer to them.
4. The model provides a way to organize data into useful systemic hypotheses showing the relationships among data. In the course of inquiry the models may be used to organize data in several ways forming alternative hypotheses. Doing this not only frees the inquirer from a single line of thought, but also suggests questions to ask that could adjudicate among hypotheses.

10. William James (1890/1950, p.196) identified what he called the "philosophy fallacy" in the practices of his own time. This was to think that principles adequate to describe a finished product would be sufficient to understand the processes which brought it in to existence. If we take seriously the idea that everything that lives does so in a process or adaptation and accommodation with other elements of the world, then we must appreciate the unfinished, dynamic nature of all phenomena.

Person "A's" hierarchically organized
extended stories about relationships,
self, profession, organization, episode etc.

Person "A" extended stories as changed,
developed or sustained in joint action

| ^{MO} Short story: about immediate conditions into which "A" acts.$_p$ | ^{MO} Short story about person "A's" own actions and feelings.$_p$ | ^{MO} Short story about desired and/or anticipated response. | ^{MO} Short story: about immediate conditions into which "A" acts. | ^{MO} Short story about person "A's" own actions and feelings.$_p$ | ^{MO} Short story about desired and/or anticipated re-sponse.$_p$ |

Script   Script   Script   Script   Script

| ^{MO} Short story: about immediate conditions into which "B" acts.$_p$ | ^{MO} Short story about person "B's" own actions and feelings.$_p$ | ^{MO} Short story about desired and/or anticipated response.$_p$ | ^{MO} Short story: about immediate conditions into which "B" acts.$_p$ | ^{MO} Short story about person "A's" own actions and feelings.$_p$ |

Person "B's" hierarchically organized
extended stories about relationships,
self, profession, organization, episode etc.

Person "B" extended stories
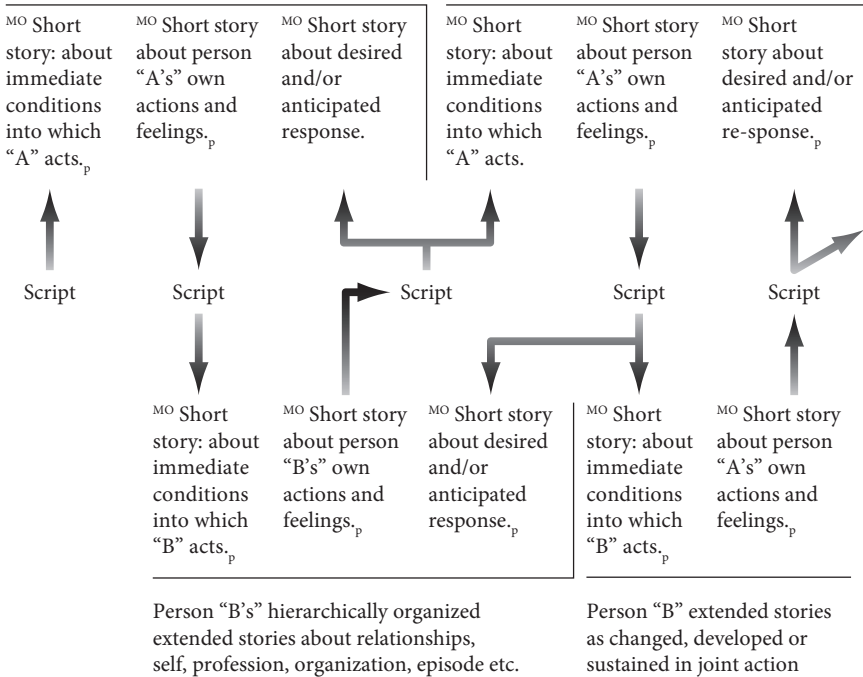as changed, developed or
sustained in joint action

Figure 1: The CMM Heuristic Model

5. The systemic hypotheses suggest places in the system to intervene for constructive change.

Descriptive Data Necessary for Using the Models

In order to analyze the process of a conversation, the inquirer needs to have a useful account of an episode. Sometimes this is easy to attain. The parties involved can simply be asked to give an account of an episode indicating who spoke first, who next, etc. The participants are cautioned not to give at this point a story about what happened, but only the sort of account that a tape recorder would provide. This may take some negotiating among participants. We ask further questions to fill in the details. For example, "Where and when did this conversation take place?" "How did Jim look and sound when he said that?" "Jim, do you agree with that description?" The goal is to produce a short but crucial part of an important conversation in a form close to a play script with

stage directions. Sometimes we ask participants to work together and write such a play script including the stage directions that actors would need to enact their episode. Of course, if CMM is being used as a manager's tools for reflecting on a recent conversation with an employee or customer, it may be relatively easy to recapture the exchange. CMM models provide for a detailed examination of communication practices. This may not be practical to do over the full course of a long episode or for many episodes in organizational life. The episode or portion of an episode to use as the focus for detailed examination must be chosen on the basis of data collected earlier through interviews and observations. What you should be looking for is an episode or part of an episode that illuminates crucial features of the conversational logic participants create together.

A feature of the CMM model that has been very useful is the fact that it allows the professional using them to include his or her own participation in the conversation. That means modeling one's own stories and contributions in the course of talk. That is especially important when using the models to reflect on one' own participation.

Basic Features of the Model

Figure 1 shows the basic elements of the model. Conversant "A" is shown at the top and a second conversant "B" at the bottom. Person "B's" modeling is inverted simply for ease of diagramming. Running horizontally between them is the "play script" of the conversation, the observable events and behaviors. For purposes of explaining the model, we will work with a hypothetical situation. A manager calls an early morning meeting on a day of heavy rain. The manager and all but one of those called arrive a few minutes before the meeting is scheduled to start. The last member, Fred, arrives three minutes later. We arrange the script horizontally to be consistent with the model in figure 1.

Fred: "Whewww! …sorry I'm a couple minutes late… The rain and traffic are awful."	Manager: "Uh huh, yea." [Sounding sarcastic, quickly looks away to others.]	Fred: "Well, ha, next time I won't do my rain dance." [Smiles, takes his seat.]

Extended stories. In CMM, we think of a person in conversation as bringing to bear relevant abilities "in a flash." (Wittgenstein 1953). In the CMM view these abilities include ways of listening, recalling, feeling, thinking, moving and speaking. We further understand abilities to be organiz*ing* around "stories" for responsive action. We like the idea of stories because stories, unlike propositions or beliefs, include details of lived experience. By an "extended story" we mean a story that *could* be relevant to stretches of conversation beyond a particular response to an immediate event. We recognize, however,

that joint action may lead to the rapid change in an extended story. For example, a person may have an extended story about how his or her career develops, moving up in the organization, only to be suddenly told that the company is in financial trouble and he or she is being made redundant.

The markers ¬ are borrowed from G. Spenser Brown (1972) to show hierarchical relationships among stories. However, they treat hierarchy in a different way than did Brown.[11] In CMM, a hierarchical relationship indicates a kind of grammatical relationship. That is, the higher level story contributes grammatical features more crucial for the coherence of the lower level story than the other way around. The stories used in joint action are neither fixed in their hierarchical relationships, nor is there a fixed set of stories to look for. The stories used may be about such themes as one person's relationship to another, being kind of professional, one's own identity, the character of the organization. The one exception is that there must be at least a provisional episodic story because meaningful action requires an idea of emergent context (Bateson, 1979, Cronen & Lang, 1995). All stories contain, or potentially include, a projection into the future. When a story is elicited that does not seem to have a future dimension, circular questions can be used to explore possible futures and the possible connections between those futures to the present and past. The nature of the stories and their relationships must be determined in the course of inquiry. What the stories are, how they are related, and how they may change in the course of a conversation is an empirical matter explored by observation and interview.

It is sometimes relevant to think about different voices within one person's stories. As children we learn by first taking on the voice of adults and later modifying or changing it (Becker, 1971). However, such learning does not end with adulthood. In many stories there are bits of grammar that amount to the embedded voice of another (Bakhtin, 1981). In organizational life it is not uncommon for persons to use others as models. Thus, CMM is concerned with those other voices embedded in the utterances and actions of conversants.

To illustrate modeling extended stories, return to the hypothetical case of a manager who calls an early morning meeting on a rainy day. One of her assistant managers, Fred, arrived 2-3 minutes late. He said, "Whewww! …sorry I'm a couple minutes late…traffic was awful." Then the manager responded saying, "Uh - Huh, yeah" in a sarcastic tone, then looked away from him. Based on data already obtained by interview, we might be able to begin forming an hypothesis by modeling the manager's response Fred's arrival using ideas we have about the extended stories she uses. Assume that data suggests this way of modeling her extended stories:

11. Brown (1972) used the markers to indicate an inside – outside relationship.

A story about how to tell a good employee including the idea that the details of personal life such as promptness, grooming, a neat office indicate the quality of the employee's work. Thinking like this can save a manager's job.

A story about her relationship to Fred including the idea that he is inefficient and does not take responsibility. There will be more trouble with him in the future.

A story of another episode of Fred's personal excuse making and irresponsibility.

It is possible that the highest level story contains the voice of one of the manager's mentors who cautioned her about being the victim of bad subordinates, and about how to spot them.

The hierarchical order of these extended stories is significant. By ordering them this way it is being hypothesized that the manager's story about the episode is importantly informed by her story of her relationship to Fred. That could explain why, on a day of heavy rain, when Fred is only three minutes late, she immediately begins an episode she herself characterizes as about personal responsibility. It is further hypothesized that her story about her relationship to Fred is informed by another story she learned, the highest level of the three, about how to discern good employees from bad ones. It is not always the case that stories form a simple hierarchical order. Stories may be organized in the form of looped relationships (see Cronen, 1984). The nature of the relationships among stories is explored by the kind of questions illustrated in the last part of this paper. Whether this hypothesized set of stories and their relationships will be retained or changed depends on further data developed in circular questioning.

No assumption is made that these stories are necessarily well developed or fully consistent at any particular moment. For that reason it is important for systemic professionals to avoid interviewing in a way that further elaborates a problematic story

Short stories. Returning to figure 1, there are three short stories under person "A's" lowest order extended story. (In the case of person "B" they are diagrammed above the lowest order story.) These three related stories are separated by dashes (-). The first short story is Person "A's" story about the immediate condition into which he or she acts. It is "A's" *understanding* of the immediate situation as compared to the observable behavior in the

"script." The second is person "A's" short story about her/his own feelings and behaviours in that moment of action. The third is person "A's" short story about desired and/or expected responses expected from "B." To illustrate, we will continue with the example of the manager and her late subordinate. We will take up each short story in turn remembering that the manager's behaviours are informed by her extended stories as well her understandings of her subordinate's actions. Fred enters the room, and says something about being late. Below the short story to the left is the manager's understanding of Fred's comment and arrival. The short story in the middle is the manager's story about what she is doing in response to Fred. Finally, on the right is her short story about what she desires and expects from Fred's response to her. By her understanding, Fred responds as she expects, not as she hopes.

Below is the beginning of a systemic hypothesis. Of course it will not be a fully developed hypothesis without our ideas about Fred's Participation:

A story about how to tell a good employee including the idea that the details of personal life such as promptness, grooming, a neat office indicate the quality of the employees work. Keeping this in mind can save a manger's job.

A story about her relationship to Fred including the idea that he is an inefficient and does not take responsibility. There will be more trouble with him in the future.

A story of another episode of Fred's personal excuse making and irresponsibility.

Fred looks a mess. He's making excuses for his typical inefficiency	Let Fred know I am tired of this and do not believe his excuses	Fred looks a mess. He's making excuses for his typical inefficiency
↑	↓	↑ →
Fred: "Whewww! …sorry I'm a couple minutes late… The rain and traffic are awful."	Manager: "Uh huh, yea." [Sounding sarcastic, quickly looks away to others.]	Fred: "Well, ha, next time I won't do my rain dance." [Smiles, takes his seat.]

Figure 2. Extended and Short Stories

The three short stories are all regarded as aspects of "A's" action. Her ways of perceiving, listening, recalling and anticipating are all aspects of action. We are very interested in the fact that out of the complexity involved in Fed's comments, she perceives, recalls and anticipates the way she does. She does not focus on how he looks, on his acknowledgement of a common commuting problem, or on the bit of humor he contributes. The action so far could be hypothesized as extending and developing the negative story about Fred that the manger will bring to the next moment of conversation. Of course, we can expect that Fred will have quite different short stories about his own and his manager's behavior, and that his short stories will be relevant to different extended stories than those of the manager.

Moral Operators [MO]. CMM takes the position that all human action is moral action. That is, the abilities persons come to use have a normative force learned in conjoint action. CMM uses eight terms to describe different kinds and degrees of moral force. These operators are not only relevant to the short story about one's own action, but also to the way one understands conditions and anticipates responses. Conversants may experience and sometimes even describe their own actions as required. In such case CMM uses the description "obligatory." Our fictitious manager in the example above might be asked this question, "Your assistant manager Mary says what she heard in Fred's comment was his sense of humor about difficult conditions. Did you hear some humor in what he said?" Suppose the managers answers, "Perhaps that's what Mary heard, but I, am the manager, and the first thing a manger has to look out for is relying on a bad subordinate." Here the manger is saying that her story about being a manager strongly obligates a way to listen to Fred. (It is also data in support of our understanding of her high level story about successful managing.)

By contrast, persons may experience their actions as a choice among acceptable possibilities, in CMM parlance, "legitimate" alternative ways to perceive, act and anticipate. That which must not be done is termed "prohibited "in CMM, and those actions about which a person is unsure as to their moral status is labeled "undetermined." Persons may report quite honestly that what they do seems beyond their control as when a person says, "That made me so angry I just lashed out". For this use we say that the action is presented as "caused". Similarly, for experiences that have the character of tendencies beyond conscious control the description "probable" is used. Persons may also have the experience of knowing what to do but being unable to do it. For example, a Japanese executive at a meeting of American subordinates may know that he or she should speak first and take control of the meeting at once in American

culture, but find it is difficult if not impossible to do that. The term used here is "blocked". The CMM Moral operators are summarized in the table below:

Presented as within one's control	Presented as outside one's control
Obligatory	Caused
Legitimate	probable
Unknown	Random
Prohibited	Blocked

Table 1. The Moral Operators Used in CMM

The Milan associates[12] sometimes deliberately reframe the moral dimension of what they hear. For example, a person says their colleague "Makes me so angry when he is late that I just lash out." In CMM terms, this person is presenting his actions as "caused." That is, beyond his control and responsibility. Boscolo or Cecchin might respond, "So, when he is late you *decide to show* him how angry you are by lashing out." Later they might ask, "What happens when you decide to lash out, do things go better or not so good?" Notice that the cause – like phrase, "makes me" is replaced with terms that imply choice and responsibility. This is a way to get the interviewee thinking about whether his or her behaviour in beyond control or a choice. Their next move encourages making a conscious connection between the lashing out behavior and responses to it.

Person position [p]. Finally, persons sometimes describe their own actions as unpredictable even to themselves, i.e. "random". The subscript "p" refers to "person position" as described above. It is associated with all three short stories. One listens as well as responds from a position, and has expectations and desires about the position from which other conversants will respond.

Models as Hypothesized Abilities

The CMM heuristic models are hypotheses about how communication patterns are constructed in action. As we have said above, we think of communication patterns as a co-evolving relationship of persons' abilities in joint action. Peter Lang and Elspeth McAdam (2007) have developed techniques that they call "ability spotting" that works well with Circular Questions and CMM. Lang and McAdam note that not all connections

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12. I have observed both members of the Milan Associates, Luigi Boscolo and Gianfranco Cecchin use this technique in a number of workshops over the last 15 years.

are conscious, and that persons can become stuck in the idea that they do not know how to act differently. Lang and McAdam call attention to things persons have done and give a name to that ability. They may ask further about other times the ability has been displayed. For example, "I see that you are quick to notice a difference in your manager's mood. What are some of the best ways you have used this perceptiveness?"

Exploring Connections in the Models

Systemic connections create affordances and constraints in varying degrees. Such highlighting is only a short hand way of pointing to places where interesting connections may be explored.

Storied Coherence

The inquirer is invited to explore the connections inside stories that give them coherence. For example, suppose a small company is caught in spirals of coming together and breaking down in periods of poor coordination. Suppose further, that a consultant's hypothesis includes the idea that crucial persons hold this story in common: Their commitment to the company is based on the idea that it respects and encourages creativity. Exploring the grammar of creativity in that story, the consultant learns that creativity for is connected to the idea that coordination with others reduces one's own "creative space." This might explain why it is that when there is no crisis of coordination, it is "legitimate" (Moral Operator) to go on with one's own work without concern for what others are doing. However, in a crisis, it is obligatory to save the company all pulling together because the company is a safe haven for creativity and creative space. Here we have to beginnings of a hypothesis that may explain why the company moves through cycles of success and crisis. The consultant may choose to focus on the grammar of "creativity" so as to enlarge it to include enriching experience with others. Another choice might be to work on developing the greater ability to notice early when lack of coordination is becoming a problem.

Especially important when exploring connections inside extended stories is to consider the future dimension of them. For example, in a story about the organization, how do members' stories treat the way it might be in five or ten years? In the story of someone's own career, where do they intend to be in the future? It is particularly interesting when stories do not have a future dimension. In such case, a manager or consultant may wish to engage in a conversation about constructing, in Dewey's phrase, "ends-in-view" which may allow exploration of new possibilities about the present.

Short Story Relationships

The three short stories are not independent monads. Each is coherent in light of the others. They are dimensions of a social act. Although arranged in a quasi-temporal order and separately identified for practical purposes, it must be remembered that a person acts into a situation "in a flash." Thus, just as a systemic professional can attempt to change a story by inquiring into the grammar of a particular term within it, he or she might also attempt to change the way someone attends and perceives the immediate circumstances by asking questions designed to expand the interviewee's ideas about expected/desired responses.

The "Logical Forces": The Dynamics of Evolving Systems

"Logical forces" refer to five particular clusters of connections in the models.[13] These clusters of connections are of particular importance because they make the models dynamic. They highlight the idea that there is always movement and change in a communication system. Some movement and change, however is not always in helpful directions. Some is in the service of reconstituting old patterns that may or may not be useful. Together these five clusters focus us on the evolving relationship abilities and behaviours in joint action.

Substantializing Connections. This refers to the mutually adaptive (reflexive) relationship between abilities and their enactment as behaviour. As one person acts into the emergent pattern of communication, the substantializing of ability at that unique moment (Cronen, 1995) produces change in those abilities. The substantialization into behaviour is always via some medium of expression such as talk, writing, gesturing, feelings or awe and consummation, etc. The medium of expression is not, therefore, a mere container or conduit. It is an integral part of the formation and management of meaning. For example, if a group is asked to create a list of abilities learned since working at the corporation, a kind of reflection and refinement is called for that is not necessary when conversing. That is why consultants sometimes ask their clients to engage in a letter writing task. Substantializing abilities as behaviour using different media communication under the specific conditions of situated conjoint action reciprocally influences ability and the behaviour.

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13. We are retaining the terms "logical force" for our readers who have followed CMM's development for some time. Of course, all connections are matters of logical force, and today we would prefer other terms for these five clusters.

Prefiguring Connections. Prefigurative influence refers to grammatical connections as they are prior to the moment of utterance. Referring to the model in figure 1, Prefiguring connections refer to constraints and affordances on action created by the extended stories and short stories about immediate conditions.

Practical Connections. Practical connections refer to the constraints and affordances created by a person's expectations and desires for what will happen immediately after her or his own action. It has been recognized in the earliest CMM work (Pearce and Cronen, 1980) that some persons' actions may be quite independent of any expectation that other's response will be a desirable one. In that case we say there is little practical influence. The inquirer becomes concerned with what other influences powerfully obligate, legitimate or prohibit action, while maintaining autonomy of action and response.

Reflexive Connections (Needs). Reflexive needs refer to the grammatical connections between desired responses and the extended stories. For example, a new employee may use the story that he or she is a "fast tracker," moving up the corporate ladder. Sustaining that story may require that his or her manager take notice of good work and offer praise in particular episodes. It is especially interesting when persons' grammars exhibit functional autonomy between action and desired response (weak practical force), and a strong dependent connection between certain response and the need to sustain or change important extended stories.

Reflexive Connections (Effects). We do not always get what we think we need. Reflexive effects refer the inquirer to how the responses persons get from others change, or develop the stories brought to the moment of communication. If meaning is use, then the meaning of any behaviour is always in process. That is, meaning is being managed and developed as we substantialize our thoughts as overt actions and as others respond to us.

Examples of Circular Questions Organized by features of the CMM Model

What follows in this section are sample circular questions organized around key ideas in the CMM heuristic model. They provide only samples of form divorced from interactive use. For this reason they do not indicate that each question either uses the grammar of those interviewed, or is a deliberate reframing of that grammar. Each question is keyed to a specific aspect of CMM;

however, responses may provide information relevant to other features of the theory. While these questions are obviously for interview research, those that are not meant for intervention can also be used to guide the way a researcher "interrogates" a text that is not the product of circular interviewing.

Questions about the Script

- "The last time you had that kind of conversation, who spoke first?" "What did he/she say?" "How did you respond?"
- "How did ___ sound?" "Who else was present?"
- "At what point did ____ lean back and turn away?" "How was that noticed?"
- "Where were you, what time of day was this?" "What had been going on before this conversation?" "What happened after the conversation?"

Questions about Extended Stories

- "How is your relationship to your subordinate different now as compared to the way it was before ____ happened?" "What do you think he/she would say?" (relationship story)
- "Who do you think has been most affected by the change in the organization of your department?" "Who next most?" "Who least?" "How would ____ describe the difference?" (relationship story)
- "Tell me more about what makes being an engineer unique?" (professional identity story)
- "If nothing changes between you and your manager, how will that relationship be in 6 months?" (exploring the future dimension of a relational story)
- "What happens when you come to a meeting? How does the conversation typically develop?" (episode story)
- "What story would like the CEO to be telling about your part of the organization five years from now?" (developing a future dimension to an organizational story)
- "If your committee is able to get back on track and succeeds, what stories will you be telling about the difficult times you are experiencing now?"

Questions about Relationships Among Stories

- "Suppose these episodes of conflict continue, would your story about the kind of person you are be very different say -- 2 years from now?" (episode- autobiography)
- "If your colleagues showed respect for your work more clearly, how might your ideas about the organization be different?" (Exploring whether

a relationship story is higher order than the story about the broader organization.)

- What was going on in the organization when you first got the idea that you had too much responsibility?" (Connecting the story of role responsibility to stories of others' events.)

Questions about Voice within the Stories

- "When you listen to the way your boss calls you, how does that voice sound?" "Who else does that sound like?"
- "When you listen to your own voice talking to your supervisor, are there other voices you can hear in what you say and the way you say it?"
- "Who in the organization, past or present, sounds most like you do at that moment?"

Questions about Short Stories

- "What kind of response does _____ give when you tell him to get control of himself? "How do you think ____ would describe the way he/she responds?" (antecedent)
- "What ideas do you have about the best thing that could happen next?" "It that likely to happen?" "What would have to change in order for you to get a response like that?" (Desired consequent)
- "What do you expect _____ will do next?" "What kind of response would you like to get?" (expected consequent)
- "Suppose you were someone who was not so concerned about the quality of communication in the records office. What would a person like that hear in x's comments? (Act informs antecedent)
- "Suppose tomorrow you said things that received positive responses from your colleagues. What new understandings of their actions would allow you to get such good responses?" (consequent informs antecedent)
- "Suppose tomorrow you said things to your boss that elicited the kind of praise you want. What new things could you be saying that would get this? What else?" (consequent informs act)

Questions about Silence.

- "Who first noticed that Bob was not saying anything during the meeting?"
- "How would things have been for Jane if she had spoken up then?"
- "Who most wanted to hear from Jane? Who next most?"
- "What changed because the administration did not report its decision when expected? Who most needs to know about those consequences?

Questions about Moral Operators

- A manager says, "What Mr. A does at meetings makes me so angry". The consultant responds, (addressed to Mr. A) "What does your manager exactly do when she *decides* to show her anger?" (Reframing from 'caused' or 'probable' to 'legitimate' or 'obligatory.')
- "Who feels the that they just can't speak when _____ hollers at her secretary?" (exploring a blocked or prohibited condition)

(Note: We can make hypotheses about the influences by observing relevant features of responses to other questions. For example, a manager says, "When my secretary does ___, I have to do what a manager must do" (presentation of obligatory condition). Of course, my secretary acts that way because she has a personality problem" (presentation of behaviour as caused and unchangeable).

Questions about Person Position

- "In these arguments, who most clearly speaks for the profession [workgroup, institution, etc.]?"
- "Who is the chairman addressing in addition to a particular subordinate? Is it young people generally, what is your idea?"
- "For whom do you want your supervisor to speak when asked about the progress of trainees? – for himself, for the trainees, for all supervisors?"
- "When your superior asks you about the status of your project, for whom is she speaking, herself and her interests, the organization, other women in administration or whom? Who most?" "For whom does she expect you to speak when you respond to her, yourself, your work group, whom?"

Questions about Recall, Perception and Action

(The following questions assume a prior move to re-position the respondent in an unfamiliar way. This could include moving him/her to a second person position by asking for a response to another's action when the respondent is usually an observer in such episodes, or perhaps moving the respondent to an unfamiliar third person position by asking for a response to an exchange between other persons. Another way might be to use a fish bowl technique.)

- "What new things do you notice about ___ as you listened that you have not noticed before? What else?"
- "I'm interested in the new idea you have about what ___ is doing. What new ways of talking to ___ are suggested by your observations?"
- "What were you remembering about the way Ms. X works when you decided to confront her directly?"

Questions about Patterns of Emotion

- "During your discussion about ___, how would you describe what you are feeling?" "At what point in the conversation do you begin to feel that way?"
- "When did you first get the idea that what you were experiencing was fear?"
- "What was happening at that time?"
- "How did ___ showing stress play a part in the way his advisor responded to him?"
- "How might the episode have gone if you had experienced the same excitement at completing the task as I did?

Questions about Attention, Consciousness and Recall

- "When did you first begin to notice ____?" "How did you come to be aware of ___?" "At what point in the conversation did you begin to focus on ___?" (attention)
- "How do things go differently when you remembered ____?" "How would things be different in your relationship (autobiography, place in the organization, etc.) if during the conversation you remembered ____?" (recall) at what point in the conversation did you begin to consciously on what was happening? "What did you then do differently?" "What response did you get?" (consciousness)
- "So even though things are going badly... you protect your job by doing what your former supervisor advised." (Making a conscious connection between unsuccessful episodes and a story about past advice)

Questions about Aesthetics

- "When in your work do you have the most moving moments,.when did you feel the best about being there?"
- "What are you doing at the time?" "At what point in the episode do you start to feel that things fit right?" "What does ___ say and who responds?"
- "What was different after you had that great moment?"
- "What is happening at work when you feel the most awkward?
- "Where do your new employees see or hear about older employees getting excited about their achievements?" "Who is involved in these conversations?"
- "Where do they occur?"
- "When someone has a great success at work who do they tell?"
- "What other activities seem to have the same rhythms as this one?"

Questions Connections and Logical Force

- "Do you think your subordinate's story of concern about the future of the organization plays a part in his expressed feeling about his work assignments?" (prefigurative influence)
- "Do you think that if you continue to do ___, your employees will eventually respond the way you want?" (practical influence)
- "How important is it for you to get the desired response to have the kind of career story you want to create?" If that career story develops as you hope how could your work relationships develop? (reflexive influence)
- "When you get responses like that, how does your understanding of your profession change?" (reflexive effects)
- "What did you notice that was different when you put your ideas in writing for the group?" "When you were able to explain your idea about management in a way that they could understand, what else changed?" (substantialization through a particular medium).
- "Ability Spotting"
- "I noticed that you have the ability to tell when others are uncomfortable. Have there been other situations in which you put that sensitivity to good use?"
- "In that episode you used your ability to speak your mind when things need to be said and at other times you know to keep quite. This is an important ability. How could you share it? What could you tell others about making that choice?"

Conclusion

We hope that the forgoing examples will be useful for consultants and managers in daily work as well as in coaching situations. However, they will not be useful if used in a mechanical way that is not consistent with the primary orientation of circular questions. It is important to be aware that, a question asked to inquire into the details of a story may give information about reflexive needs or some other aspect of the communication process. It is also our hope that by showing the relationship between CMM and circular questions more clearly, consultants will find it easier to organize the anecdotes obtained in the process of interviewing and create useful hypotheses to guide interventions. The material presented above is meant to be more probative than definitive. We encourage the reader to take these ideas as a starting place for her or his own creativity both for the development of circular interviewing technique and for the development of theory.

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