

## **Feedback and Breakdowns as Breakthroughs In Dyadic Communication**

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### **Abstract**

This paper shows that viewing dyadic communication from the perspective of servomechanisms and system dynamics rather than the cybernetics perspective (see Richardson, 1991,128) allows deeper insights into the complex process of human conversations. Instead of viewing feedback from the cybernetic perspective as the influence of input back on output (Richardson,128) we view dyadic communication as a closed system, with positive and negative feedback loops. This point of view helps us to better understand how to use feedback to achieve one's communication goals. A case study based on the short story *The Revolt of Mother* by Mary Wilkins Freeman, illustrates the reciprocal (not linear) nature of dyadic communication, and the role of breakdowns in revealing its structure. This analysis has implications for managers who engage in conversation in which they create, take care of, and initiate new commitments within an organization (Winograd and Flores, 1991,151).

## Feedback and Breakdowns as Breakthroughs in Dyadic Communication

The concept of feedback has different meanings for system dynamacists than it does for social scientists. This has been shown clearly by Richardson (1991) who states that the notion of feedback among social scientists tends towards “philosophical and theoretical discussion rather than direct application to societal phenomena”(96). The social sciences, according to Richardson, tend to view feedback in terms of “the influence of output back on input, and in terms of information transmitted in messages” (128). This approach is illustrated in linear, transmission models, like that shown in figure 1 below. In contrast, system dynamicists, led by Forrester, use “a feedback point of view not merely for the analysis of a model, but for model conceptualization and formulation. Feedback is present at the creation of the model and its presence makes a difference in the way reality is perceived. For system dynamacists feedback is “a different sort of lens through which to see the world” (159).

An analysis of the literature on interpersonal communication, particularly dyadic communication, supports Richardson’s statement that social scientists tend to view feedback in terms of information transmitted in messages. In textbooks and journal articles on managerial and business communication, there is much theoretical discussion of feedback, but a notable lack of insight and guidance concerning the direct application of feedback to help one achieve one’s goals in dyadic conversation. The main reason for this, is that the paradigm of all Western theories of communication is based on a **transmission** model of the process. More specifically, it is based on the Shannon-Weaver (1949) model, shown in figure 1 below, which was originally designed to explain the transmission of telephone, telegraph, and radio signals.

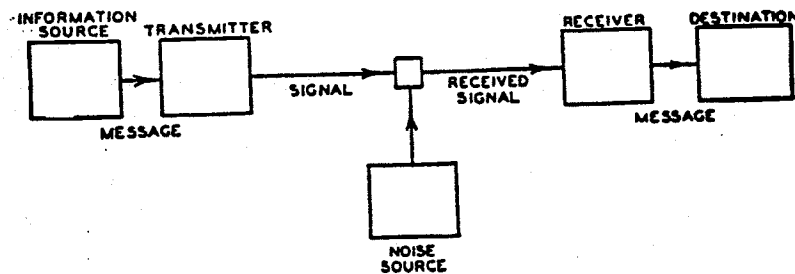


Fig. 1—Schematic diagram of a general communication system.

FIGURE 1. The Shannon-Weaver model.(From THE MATHEMATICAL THEORY OF COMMUNICATION, 1949, 7).

The Shannon-Weaver model “has been pressed into general service because of its seeming simplicity and its foundation in scientific principle”(Bowman and Targowski, 1987, 23). Yet this model, as useful as it was to explain the transmission of electronic signals, is less useful as an aid to understanding interpersonal communication because it says nothing about **meaning**, and because it “ignores the surrounding environment ...[and] assumes that communication is a literal matching [of signals] rather than making [of meaning]” (McLuhan & Powers, 1989,75). .

According to Beamer, the “signifier is the ...sensorially perceived signal without meaning yet attached. The signified is the meaning. The relationship between the signifier and signified is arbitrary”. (287) In other words, the process of dyadic communication is a matter of matching signs and meanings that are held in the “reservoirs” of the sender and receiver. When there is neither identity nor similarity in the signifiers, there is no understanding between the parties.

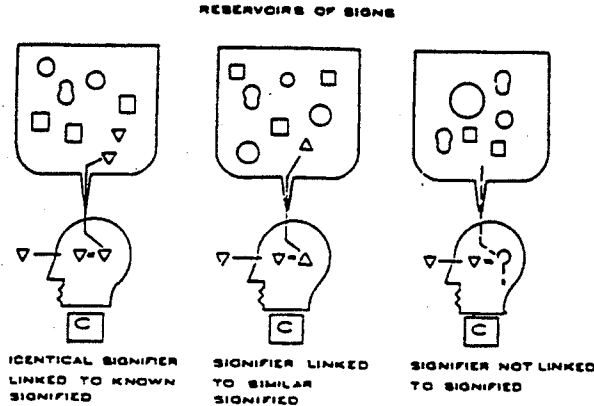


Fig.2.The Cognitive Matching Process

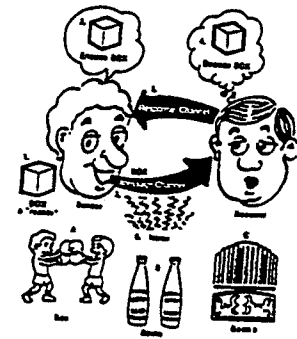


Figure 3. Noise.(Zolten &Phillips (Beamer,288).

Figure 3 illustrates how semantic “noise” inhibits understanding. “The sound ‘box’ could mean (a) two fighters battling it out in the ring, (b) two or more bottles of strong, aged, brown beer, or (c) something that belonged to the great composer, Johann Sebastian Bach.”(Zolten and Phillips, 1985, 4-5).

Like Beamer and Zolten and Phillips, most writers of textbooks and journals on interpersonal communication discuss the process using the Shannon-Weaver linear model; they explain communication in terms of the transmission of signals from one black box , the sender, through a channel, to another black box, a receiver. But while there are distinct senders and receivers in the transmission of electronic signals, in the case of dyadic communication both parties are simultaneously senders and receivers. In fact, interpersonal communication is a “reciprocal process in which both (or all) persons act and react, ‘receive,’ and “send,’ in such detail and complexity that these terms lose their meaning as verbs of individual action”(Watzlawick and Beavin, 1977, 57).

A major weakness of many analyses of dyadic communication -- particularly in their pictorial representations -- is the inadequate attention paid to the role of feedback in the process. When feedback is discussed, and when it is represented pictorially, it is usually subordinated to the sender, the receiver, and the message. (See figure 4 a, b,c, and d below). In both the discussions and in pictorial representations of conversations, feedback is not central, but peripheral. The addition of the feedback element to diagrams of the process are minor variations of the Shannon-Weaver model shown in figure 1.

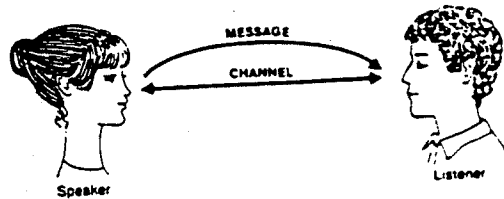


Figure 4a

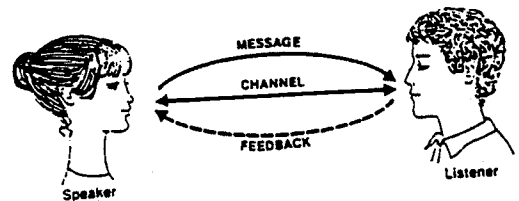


Figure 4b

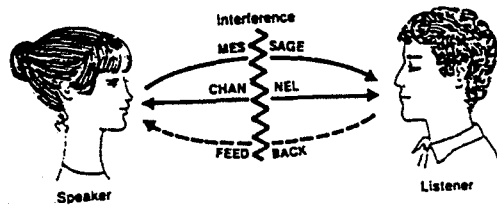


Figure 4c

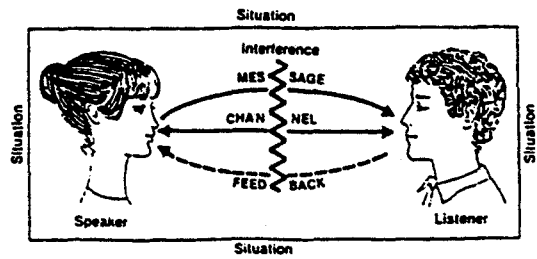


Figure 4d

### A CASE STUDY

To demonstrate that dyadic communication is more clearly understood when viewed as a reciprocal process, and when the patterns of behavior are traced to its feedback structure (Richardson,159), this paper will use as a “case study” the short story “The Revolt of Mother” by Mary Wilkins Freeman. The case shows how a conflict between a New England farmer and his wife was resolved when she found a way out of a positive feedback loop. A breakdown in conversation eventually resulted in a breakthrough, and an achievement of shared meaning or confluence of interpretation.

### ROLE OF CONTEXT & CULTURE IN DYADIC COMMUNICATION

Mr. Penn discovered a difference in his world view or mental model and that of Mrs. Penn, his wife, when she challenged him about building a new barn where he had promised, forty years before, to build a new house. His response was to tell her to go into the house and “tend to [her] own affairs”; after that he said “not another word” (Freeman,32). The domains of responsibility and power are clearly delineated at the outset : In this nineteenth century New England village, farmers wives are expected to tend to cooking, cleaning, and sewing inside the house, while their husbands are expected to make decisions about when to buy more cows and when to build more barns. It is significant that Sammy, their young son, still a schoolboy, knew about Mr. Penn’s plans three months before Mrs. Penn found out. And she found out not because her husband discussed his plans with her, but rather when she observed workers digging a cellar for the new barn.

But Mrs. Penn knows her place, and is resigned to the fact that, in their culture, women know nothing more than men think they do. When her daughter, Nanny, protests that her fiancé would not be as deaf to her requests as her father is to Mrs. Penn’s, the latter explains to her that wives ought to “reckon men-folks in with Providence, an’ not complain of what they do any more than ...of the weather”(Freeman,33). Mrs. Penn knows it is useless to complain because men “don’t look at things” the way women do (Freeman,33). In other words, she recognizes that there are basic differences in the way men and women view the world. Yet she is determined to try to show her husband that it isn’t right for him to build a larger barn when what the family really needs is a larger house.

After dinner that day, when the children have gone out and they are alone, Mrs. Penn again tries to plead her case for a larger house. She first points to the tiny size and shabby condition of their parlor-dining room, which is the only room Nanny has to have her company in and have her wedding in. She also shows him her “small ill-lighted pantry”(Freeman,36) which is all the space she has to store food, dishes, and the milk-pans where she has been taking care of the milk of six cows. How will she manage, she asks him, when he buys more cows and gives her more milk to process in her tiny buttery? Then she asks him to look at the two unfinished attic rooms, not as warm and tight as his horse’s stall, which are all Sammy and Nanny have had as bedrooms. “You’re lodgin’ your dumb beasts better than your own flesh and blood,” she tells her husband. I want to know if you think it’s right”(Freeman,37). After she presents her arguments he responds stubbornly, “I ain’t got nothin’ to say”(37).

Mrs. Penn saves her strongest suit for last : her concern that Nanny is too frail in health to take on the workload of a farmer's wife. "I've always took the heft of everything off her," she says, worrying that her daughter will be "all worn out inside of a year"(37). If they do not build another house, Nanny will have to live far away from them, and Mrs. Penn doesn't think she could accept that because she would then be unable to help her daughter with the heavy work.

"She had pleaded her little cause like a Webster... [but] her opponent employed that obstinate silence which makes eloquence futile with mocking echoes." Mr. Penn's response to his wife was simply, "I've got to go off after that load of gravel. I can't stan' here talkin' all day"(37).

As is common in many long-term relationships, Mr. and Mrs. Penn are trapped in a positive loop, a reinforcing, vicious circle. The more she challenges her husband's decision to build a new barn instead of a new house, the more he digs in his heels, asserting by his actions and his refusal to talk about it his prerogative as head of the family to make that decision unilaterally. Both know that the traditions and mores of the community will support Mr. Penn's actions, and it appears that Mrs. Penn will have to swallow her resentment, and submit to her husband's will.

But let us look again at the conversations between the couple. When Mrs. Penn first questioned her husband about the men digging a cellar, he told her to mind her own business, which meant taking care of the house and the children. The second time she challenges him, he seems not to **hear** any of her arguments, saying he can't waste time talking all day. Ironically, he has not said a word. According to his mental model, men act -- they load and unload wagons, they build barns, and they buy more cows and horses. Women, in contrast, "yak." Certainly he understands the literal meaning of all of Mrs. Penn's words and sentences, but against a social background that expects men to be decisive and act with resolution, and women to be submissive to their husbands, he knows he does not need her approval. He allows her to air her complaints, but her assertions have little validity for him because, after all, women don't know much about running a farm.

No amount of talking or complaining by Mrs. Penn will change Mr. Penn; on the contrary, her "yakking" reinforces his view that though she (and women in general) may have time for palaver, he "can't stan' here talkin' all day"(37). And his reply to Mrs. Penn's entreaty that he "have a house built there instead of a barn" elicits only another, "I ain't got nothin' to say"(38).

This breakdown, however, turns out to be a blessing. As some researchers into the nature of cognition and communication have correctly observed, we do not observe the structure of language activity when we are engaged in "successful" conversations. The "structure becomes visible only when there is some kind of breakdown"(68)... [Thus] "breakdowns serve an extremely important cognitive function, revealing to us the nature of our practices....In this sense they function in a positive rather than a negative way" (Winograd and Flores,77-78).

### REFRAMING THE STRUCTURE OF DYADIC COMMUNICATION

Re-framing, or seeing the conflict from a different perspective, takes place at more than one level for Mrs. Penn. Initially, her daughter's pettish remark that they might have the wedding in the new barn instead of their tiny, shabby kitchen sparks Mrs. Penn's imagination. She begins to see the barn as their new house, rather than **instead** of their new house. At another level, seeing the impossibility of reaching shared understanding by talking to her husband (who has no respect for women's talk), she decided that she needed to take resolute action.

The opportunity to act decisively presented itself when the barn was completed, the day before Mr. Penn planned to move his stock into it. On that day he received a letter from Mrs. Penn's brother in Vermont, informing him of a chance to buy just the kind of horse he'd been looking for. As he was leaving on his three or four day trip, he told his wife that she should have Sammy put the new cows in the new barn. It is clear Mr. Penn regretted not being there to lead his new cows into his new barn, and to enjoy the admiration of his neighbors for his "fine edifice"(38).

After preparing Mr. Penn's Sunday suit and his lunch, and bidding him a safe journey, Mrs. Penn returned to her kitchen to continue her baking. When she noticed how pale and sickly Nanny looked, the mother made up her mind to seize her chance. She reasoned that her husband's being called out of town at this moment was an act of providence, an "unsolicited opportunit [y]" and a "guide-post of the Lord to the new roads of life"(40). Strong in her conviction that she is doing what is best for her family, and that she could persuade Mr. Penn that her action is justified, she takes the

outrageous step of moving her dishes, her furniture, and her children into the new barn. Frustrated because her husband refused to see it was not right to house his livestock better than his children, she appealed to a higher authority. After taking the matter to the Lord in prayer, she, like their Puritan ancestors, acted on the basis of faith in her own interpretation of Scripture and of God's will. As a faithful Protestant she knows that her primary responsibility is to obey her own conscience; that "nobody but the Lord is goin' to dictate to [her]"(43).

Before the next morning everyone in the village knew she had moved into the barn, and everyone had something to say about it; some thought her insane, others lawless and rebellious. Clearly, she had violated the mores of her community by disobeying her husband; consequently, the minister was sent to chastise her, lest other women follow her example. But her dignified, determined demeanor and her argument that the matter was between her and God and her husband made the minister retreat apologetically.

When Mr. Penn returned with his newly purchased horse, he found the door of the house fastened, and no sign of his family, until he opened the barn door. When he asked why they were there, his son said they had come there to live. His wife maintained they had as much right to live there as new horses and cows, and that he would need to put in some windows and buy new furniture. Then she helped him get ready for supper. He was so shocked to see his family housed in the barn, and supper served there, that he had to be reminded to say the customary grace before meals.

After supper he sat down on the step in front of the smaller door of the barn and wept. "Why mother," he said hoarsely, "I hadn't no idee you was so set on't as all this comes to"(45").

#### LIMITATIONS OF LINEAR COMMUNICATION MODELS

In the end, Mr. Penn does receive the message that Mrs. Penn was really "set" on the need for a larger house for the family. But the linear, transmission model which dominates the literature is limited in showing how she achieved her goals.

The case of the Penns illustrates some of the limitations of linear, transmission communication models. For example, as we look again at the Shannon-Weaver schematic of a general communication system, and their discussion of three levels of communication problems, we see that they were primarily concerned with the technical problem of matching the transmitted signals with the received signals. Only secondarily are they concerned with the semantic problem of "[h]ow precisely...the transmitted symbols convey the desired meaning" and only thirdly do they ask "How effectively does the received meaning affect conduct in the desired way?"(Shannon and Weaver, 1977,4).

According to Weaver, "In oral speech, the information source is the brain, the transmitter is the voice mechanism producing the varying sound pressure (the signal) which is transmitted through the air (the channel). So where did Mrs. Penn fail in transmitting her message to Mr. Penn? Was there noise in the farmyard so he could not hear her words? Or was the "noise" in Mr. Penn's head, i.e., in his preoccupation with loading and unloading his wagon? Or was the problem that the signal or symbols or words she used were not in the reservoir of meanings of Mr. Penn? (see figure 2 above). Certainly, Mr. Penn knows what his wife means by the words and concepts barn, house, and horses. It is equally clear that he understands his wife is upset about his building a new barn, for he indicates as much to his son. But he also indicates he does not understand the reason for her distress.

Linear models of communication show input and output and channels and noise, but they do not show adequately how "behavior is continuously controlled by conditions and conditions are in turn continuously altered by behavior" (Richardson,77). For that we need models that more clearly show dyadic communication as a reciprocal, recursive process. Moreover, it is a process that takes place in a social context, in a society, and is influenced by the mores and traditions of that society. And it is only in the context of human social groups that we can speak of making meaning, and sharing meaning.

There is a radical difference, argues Jerome Bruner, between "the construction of meaning" and "the processing of information". He maintains that in the ruling metaphor of computer science, "information comprises an already precoded message in the system. Meaning is preassigned to messages"(Bruner, 1991,4). In contrast, he says, in the realm of human development and human

nature, we cannot realistically discuss meaning apart from culture. Meaning is constructed within human cultures. Quoting Clifford Geertz, Bruner agrees “there is no such thing as human nature independent of human culture”(12). It is only “by virtue of participation in culture [that] meaning is rendered *public* and *shared*. Our culturally adapted way of life depends upon shared meaning and shared concepts and depends as well upon shared modes of discourse for negotiating differences in meaning and interpretation”(13). The interaction between Mr. and Mrs. Penn takes place in a culture, a community which subscribes to a system of values and beliefs. This culture is represented in figures 5 and 6 below by the box labelled ‘ENVIRONMENT.’

In order to achieve her communication goals, Mrs. Penn, thinking about the breakdown of discussions on the matter of the new barn, reframes the conversation. She examines the problem and the possibilities from new perspectives, and designs a strategy that will both provide her family with the sorely needed large house and will engage her husband in **meaningful** conversation. Heretofore, there has been no meaningful dialog with Mr. Penn on this matter. “Meaning is created by active listening...rather than [by] conveying information” (Winograd and Flores, 57). In the earlier verbal encounters (not dialogs) between Mr. and Mrs. Penn, it is clear that Mr. Penn is not an active listener. He merely allows his wife to vent while he is thinking about his busy schedule and his unfinished chores. We see more clearly how Mrs. Penn achieved her communication goals by looking at the feedback loop shown in figure 5 .

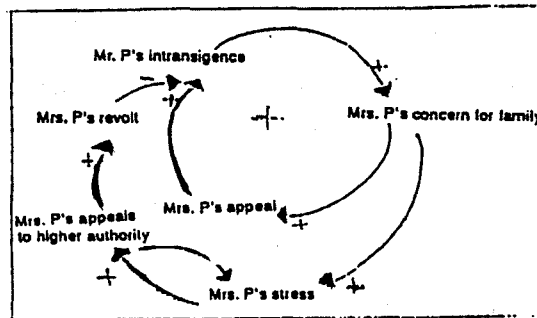


Figure 5. Mrs. P.'s strategy

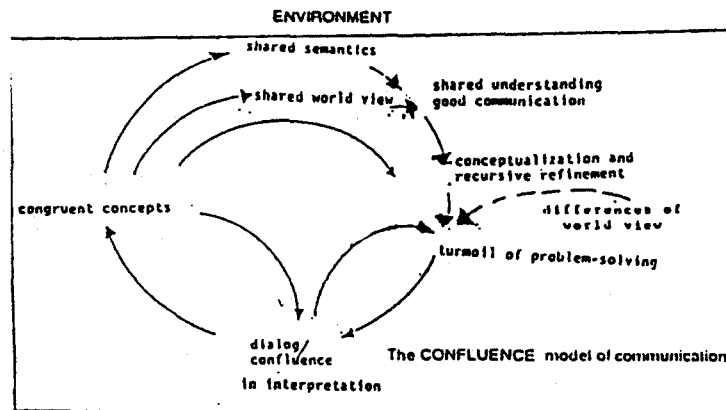


Figure 6. CONFLUENCE model

As her concern for her children's well-being increases--particularly with the upcoming wedding of her daughter--her appeals to her husband to reconsider his plans to build a barn become more impassioned; and as she appeals again, and even more passionately, Mr. Penn becomes more intransigent. We see that Mr. and Mrs. Penn are caught in a positive loop, a vicious circle. Their dilemma exemplifies the observation by psychologists that "in most ongoing relationships, it becomes obvious on examination that the behaviour of each participant is predicated on that of the other"(Watzlawick and Beavin, 1977, 56).

The more the wife pleads her cause, the more the husband deliberately tunes her out; and the more he tunes her out, the more motivated she is to get him to listen to her. Eventually, Mrs. Penn stops talking to her husband about the barn. But when he is called away for three or four days on the day the construction of the barn is completed, she takes this as an act of providence, and a sign from the Lord to take advantage of this "unsolicited opportunity" to find a new path, a new approach to the problem. As her concern for her family, especially her daughter's health increases, Mrs. Penn's stress increases, motivating her to take her appeals to a higher authority than her husband, namely, to the Lord. Specifically, she prays about whether she should countermand her husband's instructions to move the cows into the barn, and move her children and herself in there instead. Acting on her belief that she is acting according to God's will, and to what her conscience tells her is **morally right**, she revolts against her husband's will, and the mores of her community. It is important to remember that the religious traditions she invokes are also those to which her husband and the rest of the community subscribe.

The "revolt of mother" earns her the attention of the whole community. More important, it wins her Mr. Penn's serious attention, and a commitment to listen empathically to her arguments on behalf of the family's needs. In the words of Mary Wilkins Freeman, Mr. Penn "was like a fortress whose walls had no active resistance, and went down the instant the right besieging tools were used"(45). The breakdown was an opportunity for Mrs. Penn to understand that the practice of trying to talk to her husband about the barn was being perceived as meaningless jawing, typical female complaining. She needed to design "the right besieging tools" to tear down his prejudice about the value of what his wife had to say. Her revolt, it appears, was justified, for in the end, Mr. Penn's intransigence crumbles, as he promises to put up the partitions in the barn and do everything his wife wants to make it a comfortable home.

## CONCLUSION

This analysis of dyadic communication, using the case of Mr. and Mrs. Penn, shows how they escaped from the "vicious circle" typical of so many long term relationships, in families, as well as in business organizations. By seeking and receiving approval for her actions from a higher authority than her husband, Mrs. Penn ultimately achieved her communication goals. Her strategy has implications for managers.

First, good managers recognize that meaning is created in committed dialog, where the parties are pledged to work toward consensus, toward shared understanding. They know that meaning is created in empathic listening, and that creating meaning is not merely conveying information. An ancient proverb explains that we have only one mouth but we have two ears because we should devote more attention to listening than to speaking. That Mrs. Penn knows this is clear from her decision to end her futile appeals to Mr. Penn, and to focus her efforts on finding a way to make him listen empathically. In real life, effective managers know how to listen empathically, and to create an environment of trust and openness so that parties espousing different views will feel comfortable about sharing their ideas in order to work toward consensus. As we saw in the case of the Penns, the process requires patience, and recognition of the proper time and place for appropriate action. When Mrs. Penn served her husband a hearty supper in the new barn, now their new home, Mr. Penn was ready to listen.

Secondly, effective managers sometimes find that by imaginatively and creatively reframing the situation, heretofore unrecognized solutions to problems emerge. For example, when Mrs. Penn began to see the barn as a new house, rather than instead of a new house, she also found the means of reframing or restructuring the context of the dialog with her husband. By **acting** instead of **yakking** she won his attention, and was then able to carry on a meaningful dialog with Mr. Penn. Like Mrs. Penn, creative managers can sometimes find new uses of existing



facilities and new applications of existing resources.

Third, real life managers often find ways of achieving their goals by manipulating political alliances and by networking with others to circumvent the constraints of "the system," and avoid going through the formal chain of command of the organization. In addition, like Mrs. Penn, they may invoke higher ethical or cultural values to oppose programs they find offensive to their moral sense. Mrs. Penn was able to achieve shared understanding with her husband by appealing to values and systems of belief to which he and her whole community subscribed. In other words, while her revolt temporarily scandalized her community, she eventually persuaded them, (especially after she won her husband's support) that she had acted in accordance with their highest values.

A generic model of communication illustrating the recursive, and essentially labor and time intensive process of working towards shared understanding, is shown below in figure 6. This CONFLUENCE model of communication shows some of the dynamics of the process of problem-solving in situations where the parties involved approach the case at hand from different world views. The model is based on the premise that the parties are committed to work toward consensus, regardless of the turmoil and cost in effort and time. While initially, and on the surface, it did not seem that Mr. and Mrs. Penn made a conscious pledge to work toward shared understanding on the matter of the new barn, it is clear that they were both committed to do what was best for the welfare of the family. The challenge for Mrs. Penn was to show her husband that a larger house, rather than a larger barn, would best serve the needs of the family.

According to the confluence model of communication, the parties, as they engage in dialog, trying to solve the problem at hand, approach a confluence of interpretation; in other words, their "streams of consciousness," for the moment, are flowing together. Eventually, they may arrive at congruent concepts and shared semantics. In the case of the Penn family, Mr. Penn agreed to put up partitions to make bedrooms for his children instead of stalls for his stock. Most significantly, the parties finally seem to approach a more closely shared world view, and have developed better communication skills to further refine their shared understanding in a continuous recursive process, as new problems, new differences, and new breakdowns emerge.

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