

*“We all will make inferences; one aspect of leadership concentrates on minimizing our tendency to drift apart in how we assign meaning.”*

---

## ***LEADERSHIP, SHARED MEANING, AND SEMANTICS***

MICHAEL AYERS\*

“I am saying society is based on *shared meanings*, which constitute the culture. If we don’t share coherent meaning, we do not make much of a society. ... I find that something like [dialogue] is necessary for society to function properly and for society to survive. Otherwise it will all fall apart. This shared meaning is really the cement that holds society together, and you could say that the present society has some very poor quality cement.”

— David Bohm

### **1) Background**

I have invested the most recent half-dozen years of my working life engaged in leadership development in a variety of contexts. I’ve worked as an internal consultant in a Fortune 500 company. I’ve worked as an adjunct faculty member in a liberal arts university. I’ve served as the Board Chair for a regional nonprofit. It surprises some to hear that *semantics* has a role to play in leadership development. The only time most people seem to refer to semantics at all occurs during an exchange such as this:

\* Michael Ayers recently left the world of Fortune 500 companies to start a consulting firm. He has a special interest in leadership development, having spent the last six years working in that area. He especially wants to serve the public schools and the nonprofit sector. He is an adjunct faculty member at Hamline University in St. Paul MN and the Board Chair of a regional nonprofit.

Person A, plaintively:

*I think you've glossed over a key point —  
that's not about leadership, that's management!*

Person B, dismissively:

*Oh, you're just arguing semantics!*

Well, yes, what we mean by the words we use does concern semantics. Furthermore, effective leadership requires a rich understanding of the role semantics plays in everyday communications. Effective leadership requires the creation of shared meanings because, as Bohm points out in the above quote, these shared meanings constitute our collective culture.

The overall framework my colleagues and I created for leadership development used the graduate seminar as the basic model. We would work with adults experienced in the worlds of working and learning. We focused on their learning instead of our teaching. Each group met for a block of time (four-to-five hours) once each week for about twelve weeks. We would deliberately revisit the topic of communications and the particular importance of effective communications. In one particular session, we would bring semantics to the very center of focus. In that session (typically about the fourth) we would turn to two tools, suggesting that the learners consider the connections between them.

Note that although I prefer to include the following exercise within the larger context of our multi-session exploration ("Discovering Leadership"), I have also used it as a standalone exercise taking perhaps 50-60 minutes of elapsed time. I have used it with business people with varying backgrounds (ranging from information technology professionals in staff organizations to research-and-development specialists in line organizations) and varying positions in the hierarchy (from the directors to rank-and-file scientists and engineers). I've also used it with educators (teachers and principals / administrators). The groups have ranged in size from as few as eight to as many as twenty. The settings have included my appearance as onetime "guest speaker" at a routine monthly staff meeting and serving as light entertainment over boxed lunches at a divisional sales meeting.

In this paper, I will describe an exercise which highlights two separately valuable tools — The Uncritical Inference Test and the Ladder of Inference. The exercise integrates them into a critical leadership concept: the central role of clear communications. Then I will add a third tool to enrich the utility of the first two — Thinking Outside the Box.

## 2) The Uncritical Inference Test

According to the copyright information on *The Uncritical Inference Test*, we cannot call it a new invention. William V. Haney created it in 1955. I start this exercise with this tool because of its non-intimidating appearance. Essentially, the Test consists of a very short story followed by a series of statements about the story. Each participant reads the story (as often as desired) and makes a determination about the veracity of each of the series of statements: Based exclusively on the explicit content of the story, do you consider this statement True or False or Unknown?

I first use this tool to create a sense of awareness. I might roughly liken it to traveling on the underground in London with the ever-present message “Mind the Gap” between the platform and the subway car. Here the message becomes: “Mind your Inferences!” I walk through the instructions with the participants and then lead them through a miniature sample. At that point we switch to one of the other stories included in the test, a story containing four sentences followed by 18 statements about that story.

Starting with a lighthearted approach, I want the participants to become aware of the role played by their uncritical inferences. The process contains an element of showmanship in getting the people to announce their True/False/Unknown responses aloud. At first people participate very comfortably — after all, the group consists of intelligent people and they face a trifling assignment! What starts out as almost a parlor game becomes more serious after the participants offer their responses to the first few statements. When it becomes clear that not everyone has interpreted the story the same way, that not everyone has attached the same meanings to the words and phrases, people become reluctant to speak up.

At this point I have to draw them out, making light of their apparent inability to interpret such a simple story in the same way. It becomes a game to see just how many of the statements they agree on. (One statement *exactly* quotes one of the four sentences in the story. About half the time, the participants don't even agree on the truth or falsity of *that* statement!). Most groups achieve unanimity on less than one third of the statements following the story. I try to maintain the focus on just that — unanimity — not whether they got the “correct” answer. With some groups this desire to shift the focus to correctness becomes a powerful distraction. I want them to concentrate on the sense of shared understanding, even if their shared understanding might not match the “correct” answer.

In some cases, we do a second story. I write that second story in advance, keeping to the spirit of the test and appealing to the special circumstances of each group of participants. I use one story for IT professionals related to an assignment to engage in "requirements analysis." Another business story looks at a status update meeting for a project team. A third story prepared for educators takes as its base a newspaper story (only slightly simplified) about the impact of poverty on education.

After completing this part of the exercise, the participants typically have a new awareness of how several people can look at the same story and develop widely different interpretations. One word or phrase or situation can mean different things to different people. I then pose these questions: In how many cases do you get to make interpretations of a story just four sentences long that you can read as many times as you like? How many times instead do you hear rather than read the "story"? How many times does the "story" run on for pages and pages and pages? How many times do you receive several "stories" at the same time, or one "story" with multiple interruptions? Now, how probable do you find it that you and anyone else attending a recent staff meeting or a presentation actually heard the same "story"?

At this point I engage the participants in a brief discussion of the critical role played by leaders in creating a sense of shared meaning for key phrases, key concepts, key events, and key images in play within the organization. We all will make inferences; one aspect of leadership concentrates on minimizing our tendency to drift apart in how we assign meaning. The many decisions made by people within an organization will cohere to the extent that they reflect a shared interpretation of what these things mean to us.

### 3) The Ladder of Inference

While the Uncritical Inference Test focuses on *awareness* about the dangers of inferences, I now turn to a second tool to help us recognize the mechanics by which those dangers develop. I introduce the Ladder of Inference, a concept described by Chris Argyris. I use an expanded version developed by Rick Ross. It features a drawing of a ladder and adds more depth with the clarification of two "rungs" beyond the four Argyris identified. In addition to providing another perspective on inferences, this drawing serves to help the visual learners since the first tool may have appealed more to the auditory learners.

The Ladder has a straightforward premise: The world does ultimately contain an actual base of observable data. We, however, position our Ladders atop this base of data. In our day-to-day activities we remove ourselves from that available base quickly and even unconsciously.

---

*Confronted with an overwhelming base of potentially available data, each of us selects different things to observe.*

---

Imagine a terrifically sophisticated “observing device” that went beyond merely recording the sounds and images in the room. This device could also record the temperature and the aromas, the degree of interpersonal warmth or tension in the air, the background of group morale, the sense of urgency or complacency ... everything that a wide-ranging onlooker could observe. (In my mind, I picture something along the lines of the “Fair Witness” from Robert Heinlein’s classic *Stranger in a Strange Land*.) Confronted with an overwhelming base of *potentially available data*, each of us selects different things to observe. Our selection then serves as our base from here onwards. Some of what you choose to select, I would not even consider including.

Consider an example: Terry enters a partially populated conference room at ten minutes past nine. Deb notices that the arrival appeared unhurried. Pat notices that Terry wears a dark suit. Kelly notices the time: 9:10 a.m. Dave notices that Terry does not carry the case with her laptop computer. Some people have simply noticed what exists (the dark suit, the time) while others bring a sense of larger context and notice what might exist but does not (sense of hurry, computer case).

Let’s concentrate on Kelly for now. Kelly observed the time, but remained oblivious to all the other potentially observable data. Picture Kelly’s private Ladder leaning against a wall. The *selection* process creates the first rung of her Ladder of Inference. Working with what she has selected, Kelly now adds meaning: “Terry didn’t get here until ten after — that means she’s late.” Note that Kelly adds her own interpretation or meaning to the plain observation of “Terry arrived at 9:10 a.m.” The second rung of the Ladder concentrates on the addition of *meaning*.

Climbing further up the Ladder, Kelly reaches a third rung. She thinks, “When I talked to her earlier today, Terry mentioned that she was having car problems. That must be why she’s late.” The third rung focuses on *assumptions* she makes based on the meaning she has added. Now Kelly

climbs to a fourth rung on her Ladder. She draws *conclusions* based on the assumptions she made. She concludes that "Terry has neglected to follow through on getting a new battery for her car."

Kelly moves up to the fifth rung: *beliefs*. "You know, I've always thought Terry didn't give her car proper care." Now Kelly climbs to the very top rung of her Ladder, taking *action*. She says, "Terry, I'll take care of driving to the lunchtime meeting with the clients later today."

The action (taking responsibility for driving) builds on the belief (Terry does not have enough discipline) which builds on the conclusions (Terry has an unreliable car) which build on the assumptions (car trouble) based on meaning (the late arrival) based on selected data (arrived at 9:10). Whew! It takes several minutes to break the steps down this way. In practice, Kelly probably climbed the six rungs of her Ladder of Inference in just a few seconds. As we get farther up the Ladder, we get farther away from that base of "observable" data that our recorder would have tracked.

Suppose now we learn that Terry received some misinformation — someone told her that the meeting started at 9:30. She planned carefully, coming in 20 minutes early to get some reading done. Kelly's climb up the Ladder of Inference went astray at the second rung! Everything from that point upward becomes suspect, based on the meaning Kelly added to the plain observed data.

Note also that the Ladder of Inference highlights a double danger here. Kelly had a pre-existing belief that Terry lacked discipline with things mechanical. That made it easy for Kelly to see this incident as confirming evidence. That is, since Kelly *expected* to see a lack of discipline she had a built-in predilection to see it. She saw it and categorized it with considerable speed. That speed results from the *reflexive loop* built into this Ladder of Inference: our beliefs influence our data filters and our selection process. Then the data we embrace reaffirms our beliefs, in turn strengthening that filtering process. You've undoubtedly heard the expression, Seeing is Believing. Here we see that the opposite holds equally true: Believing is Seeing. If I believe something I will readily accept confirming evidence and readily discount *disconfirming* evidence. (I suspect that this same mechanism supports the reinforcement of stereotypes.)

I've used the Ladder of Inference for a number of years. During those years I've received a number of comments during the ensuing discussions. One person observed that we should not wonder that we each see the world differently since we each stand at the top of a different ladder leaning against a different wall even though they all stand on the same "ground."

Another acquaintance suggested that although the concept holds great value, the name carries a deceptive connotation. After all, with a real ladder people find it easier to go down rather than up. We could call this tool the *Escalator* of Inference because we find it so easy to go up and so difficult to go down. Another person pointed out that each of us, through our attempts at persuasion, tries to push over other people's Ladders and convince them that *we*, in fact, have the *right* Ladder! Yet another person pointed out that we try very carefully to position our Ladders because it hurts to fall off and make contact with that unforgiving ground.

While each of us carries a Ladder with six rungs, some of us seem to have much more space between the rungs — that is, some of us seem to remain naturally closer to the ground while others seem to dwell up in the clouds. Even when we try with great deliberation to get our metaphorical Ladders side by side, they will never stand on the same ground, just as two real ladders cannot occupy one place. Of course, we find it effortless to carry our Ladders since they weigh nothing at all! And, insidiously, without our even noticing, our Ladders change over the course of time: on my Ladder the second rung (Ayers's Meaning<sup>2002</sup> might have evolved from Ayers's Meaning<sup>2001</sup>).

---

*We invent our own Ladders and we can retain  
them or modify them as we choose.*

---

At this point, I engage the participants in a brief discussion about the critical role played by the leader in creating the opportunities for dialogue, permitting the generation of shared meaning. Effective organizational performance requires that members keep their Ladders as fully aligned as possible. Shared meaning keeps the Ladders aligned at least at the second rung!

When I include this exercise in the multi-session development effort, I use several references to highlight the role of dialogue or conversation in the work environment. These include works by David Bohm, Meg Wheatley, and Alan Weber.

In the past, I have used the Uncritical Inference Test and the Ladder of Inference together as a set. But next time I will add in a third tool. This one reminds us that we invent our own Ladders and we can retain them or modify them as we choose.



#### 4) Thinking Out of the Box

While the Uncritical Inference Test addresses basic awareness and the Ladder of Inference addresses the mechanics, Thinking Out of the Box serves as an admonition. This third tool takes a fairly commonplace expression and suggests that our use of that expression reveals an underlying acknowledgment that those inferences can inhibit our thinking.

Many people associate "Thinking Out of the Box" with a particular puzzle. In that puzzle, you see an apparent square: three rows / three columns each containing three dots for a total of nine dots. To solve the puzzle you must connect all nine dots using just four straight lines drawn without lifting the pencil from the paper. You cannot accomplish this goal without giving up an assumption made automatically by most people: you must stay within an imaginary box formed by the eight perimeter dots. To solve the puzzle you must "get out of the box," you must abandon a constraint that never existed in the first place. Ben Zander points out that, like many of the apparent constraints that we face, we have invented this one ourselves.

Perhaps like me, you have heard someone say, "C'mon folks, we need some out-of-the-box thinking here." If I make a minor substitution and bring in the Ladder of Inference, I might say instead, "C'mon folks, we need some off-your-ladder thinking here." We do not need to get outside the box, as though the world had only one. Indeed, each of us lives inevitably in her/his own box. When I admonish you to "think out of the box," I mean out of your box. (Under more sinister circumstances, I also have in mind an unspoken agenda which completes the thought: "... and get into my box with me!")

If we alter the admonition to "think out of the box" to account for each person carrying her/his own Ladder, we can remind ourselves that we, too, carry distinctive Ladders. When you next hear the expression "thinking out of the box," try substituting the image of a collection of people each standing on her/his own Ladder. Each one admonishes the others to get off their Ladders. Does the admonisher also abandon the comfortable heights of the Ladder to get back to the fundamental base of "all potentially observable data"? Or does that person instead speak from the tallest Ladder in sight!

#### 5) Conclusion

The exploration of these three concepts or tools attempts to get across a single idea in multiple ways. The leaders within an organization bear a great responsibility to help the members achieve a strong sense of shared meaning. In my experience, I find the idea quite simple but not especially



easy. The simple part? In order for leaders to have fully effective organizations, they need fully effective communications. The not-easy part? The process of promoting and engaging in dialogue with the resultant co-creation of meaning can appear time-consuming, frustrating, confusing, maddening, and wearisome. That we do not find the process easy, however, does not make it any less important.

### REFERENCES

- Argyris, C. (1990). *Overcoming Organizational Defenses*. New York: Prentice-Hall.
- Bohm, D. (1990). *On Dialogue*. Ojai, CA: David Bohm Seminars.
- Haney, W. V. (1955). *The Uncritical Inference Test*: International Society for General Semantics.
- Heinlein, R. A. (1961). *Stranger in a Strange Land*. New York: Ace Books.
- Senge, P., Roberts, C., Ross, R., Smith, B., & Kleiner, A. (1994). *The Fifth Discipline Fieldbook*. New York: Currency Doubleday.
- Weber, A. M. (1993). "What's So New About the New Economy?" *Harvard Business Review* (Jan/Feb), pp.24-42.
- Wheatley, M. (1997). "Goodbye, Command and Control." *Leader to Leader*, 5 (Summer).
- Zander, B., & Zander, R. S. (2000). *The Art of Possibility*. Boston: Harvard Business School Press.





• LETTERS TO THE EDITOR •

Dear Editor:

In light of the Spring issue's article on autism, I should let you know that I have an autism-related condition called Asperger's syndrome (as does my husband).

We recently gave a joint presentation on Asperger's at a large local conference dealing with autism, and my part of the presentation did mention some helpful mental strategies for dealing with this condition in oneself or others (e.g., one's children/students). Some of the mental strategies I described (and some of the strategies used by others who presented at the conference) "just happen" to make sense in terms of general semantics, and/or to relate to/derive from GS (though I didn't find any opening for saying so at that particular event — I didn't want to get into terminology and "buzzwords" from an unfamiliar field, but I did teach some things — things that "just happen" to exist within GS — as helpful teaching-techniques for compensating for this and related conditions).

KATE GLADSTONE  
ALBANY, NY

Dear Editor:

For what it's worth, I wrote the article, "Leadership, Shared Meaning, and Semantics" (Fall 2002 *ETC*), using E-Prime. My custom involves writing "serious" or formal documents this way. I find it an ongoing challenge, but worthwhile. I think that the only violations you will find involve the use of the phrase "that is" (for which I haven't found a satisfactory substitute) ... and of course in the quoted material!

I actually fell under the influence of E-Prime in 9th grade (1962?), when Mrs. Heggen insisted that in all our writing assignments we banish *amisare-waswerebebeen* (am, is, are ...). In her mind these individual words came together as a single concept. Since I prefer to automate that sort of proofreading, I developed an MS Word macro which searches for those words, tallies them, announces to me how many offenses it found, then positions me at the first one so I can begin the correction process.

MICHAEL AYERS  
Minneapolis, MN

