Ladder of Inference

We are hard-wired to leap to assumptions in ways which create tension with others, especially under the pressure of stress and complex problems.

It happens so fast, we are usually unaware it is happening. This hard-wiring derives from ancient parts of the brain which evolved early on to generate automatic survival reactions—flight, fight, or freeze.

Difficulties in modern social situations can activate these pathways and drive us in milliseconds to strong emotions and faulty interpretations.

This happens to everyone. We cannot stop our brains from this quick process. But, we can modify it. One way is through stopping, even for a few seconds, to observe the mind.

The Ladder of Inference (1, 2) is a tool to make visual these rapid movements of the mind and help us pause for reflection before we take ill-advised, rapid action. The bottom rung of the ladder represents all the observable data in a situation. Our hard-wiring leads to rapid selection of part of the data, then "up the ladder" to judgments or assumptions, and finally to conclusions and action at the highest rung. If these actions are based on faulty assumptions driven by our ancient brains, then we are at risk for doing considerable harm.

Ladders can be divided into as many as 7 or more steps to represent schematically the brain’s information processing. There is not one right number of steps. I use four because that is all I can remember in the midst of conflict which is when I use the tool to mentally orient myself. In the example shown above, my brain causes me to get very negative about a colleague, Chris.

- **At the bottom rung is all observable data** I could consider from my working relationship with Chris or even just for this one day.
- **At the next higher rung, the brain selects data out of this pool.** This day, Chris is late to a meeting and does not apologize. Because this has happened before and/or because I am particularly sensitive that day, my brain immediately focuses on that one piece of data.
- **From selected data, the brain moves to judgments, assumptions, and opinions**—i.e. making meaning out of the selected data. In this case, I assume Chris is totally disengaged and not committed to the team.
- **At the highest point of the ladder are conclusions and actions.** In this case, I am so convinced, I don't think I can work with him and that it's time to get rid of him. Or, I might withdraw from Chris, disrupting the flow of work between us. Or I might publicly
attack him for his "bad attitude" (which is, of course, an interpretation which has not been checked out).

**If we keep the ladder in mind, we can step back in self-reflection to observe** our own thinking. Also, we can use the mental image of the ladder to guide conversations with others. We can ask:

- On what data am I/are you basing these conclusions?
- What is my/your reasoning?
- What other data am I/are you not considering?
- Does everyone agree?
- Are there other views being missed?
- What else could be going on?

**Instead of leaping to action**, I might consciously and intentionally use these questions to help me move back "down the ladder" to gather more information—e.g. I might ask Chris why he has been late and what he thinks about its impact on the team. I might ask other people what they have observed about why Chris might be late. A large proportion of unresolved conflict is due to thinking which stays higher on the ladder.

**Research from Gervase Bushe (3)** suggests that about 80% of conflicts at work may occur because people have not checked out their experiences with each other (i.e. moving down the ladder with each other to share observed data and experience). When they do check things out, the conflict often either goes away or the issues are entirely different from what was expected.

**Though simple in concept, sharing experience in this way can be very demanding** because we may be gripped by strong emotion or the stakes may feel high or we may just have a strong need to be "right" at that moment. Then it can be hard to own our contribution to the tension. Slowing down to reflect requires a good deal of self-regulation of emotion and thought.

**The Ladder of Inference reminds us to treat our strongest conclusions as just theories to be tested.** Our first conclusions may just make us part of the problem.

References: “Ladder of Inference”
1. Attributed to Chris Argyris and Donald Schon. See a brief history of the development of the Ladder of Inference in Smith, Diana Mclain *The Elephant in the Room* 2011, pgs. 275 - 276
2. Thanks to the American Academy on Communication in Healthcare for the Ladder of Inference image.
3. Bushe, Gervase *Clear Leadership, Davies-Black, Nicholas Brealey Publishing* 2010

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**About Neil Baker M.D.**

Neil Baker M.D. works with healthcare organizations to enhance leadership and team impact through Leadership and Team Development In-the-Moment. This means making development
as efficient as possible by focusing on immediate work challenges—using any work situation, even the most complex and difficult, as an opportunity to achieve immediate impact on quality of work relationships and on progress toward results.

He has developed these approaches as a leader, speaker, consultant, and executive coach for 30 years. Past positions include serving as Director of Psychiatric Inpatient Services at the University of Colorado Health Sciences Center in Denver, Colorado; Medical Director of Quality at Group Health Cooperative in Seattle, Washington; and faculty and improvement advisor for ten years for the Institute for Healthcare Improvement (IHI) in Cambridge, Massachusetts. Currently, in addition to his consulting practice, he serves as faculty for the leadership track he created for the IHI—Project ECHO collaborative on improving access and office efficiency in primary care.

You can learn more and see client testimonials on his website at neilbakerconsulting.com