



The Ladder of Inference

How to Avoid Climbing to Unwarranted Conclusions

By Fred Kofman

Our patterns of interaction with others and the world at large may become "hard-wired" into our brains such that we are oblivious to the process. While some habitual skills are efficient, such as driving a car or tying our shoes, the unconsciousness with which we can rapidly draw conclusions based on a set of observations and then act on those

conclusions can have grave consequences. It can negatively affect our work and our personal relationships.

Such unawareness can lead to what Chris Argyris calls "skilled incompetence": we produce unwanted results with great skill and in a way that makes it impossible for us to recognize that the results are derived from our actions. We typically

attribute the breakdowns and undesired outcomes to anyone or anything but ourselves. If we do not develop an awareness of our thought processes, we remain unable to change recurrent patterns of inefficiency and suffering.

The ladder of inference is a model that describes how we make sequential (and sometimes untested), subjective interpretations or inferences from a set of observations, and then commit to act based on those inferences. Successful use of the ladder of inference allows us to develop greater awareness of our thought processes by revealing the steps in our reasoning.

The rungs of the ladder of inference

The imaginary ladder we propose in this model has five rungs:

- At the first rung, we select observable data–observations–that can be witnessed by others.
- On the second rung of the ladder, we create a story, theory or interpretation about what is happening based on the observable data we have selected.

- On the third rung, we make attributions about others and make further interpretations about the nature of the situation we face. At this stage we construct a problem from the inferences we have made, determine what needs fixing and decide what actions are available to us.
- On the fourth rung, we draw conclusions and make
 - decisions about how to solve the problems that we have constructed.
 - On the top rung of the ladder, we act. We have created a plausible interpretation of reality (without checking for confirming data) and take action according to the conclusions that we have reached.

The unconsciousness with which we can rapidly draw conclusions can have grave consequences.

Typically we travel rapidly up the ladder without being aware of our own process.

To increase your awareness of (and on) the ladder of inference:

- Remember that others can make different and legitimate inferences and assessments about the same situation.
- 2. Become curious about the other person's data, reasoning, and concerns. This calls for an "empathy shift," i.e., abandoning the logic of our view of the world and temporarily adopting the view of the other person.
- Reveal your data, reasoning, and concerns, so that the other person can better understand your thought process.
- 4. Inquire about "low level" data (observations) that supports the other person's perspective, and offer the same kind of data to support yours.
- 5. Share your assumptions and become curious about the assumptions underlying the other person's reasoning.

- Ask for or provide examples and illustrations when you hear an abstract statement. Before you speak about a high-level conclusion provide some concrete instances of what you think.
- 7. Check to see if your mental model is preventing you from hearing the other person's argument.
- Be willing to be mistaken. Admitting that one is mistaken is an honorable option, and can actually provide for a constructive opening for more productive conversations.

Conclusion

 The ability to infer from conversations, information and events is an important cognitive skill; it helps us add

- meaning and context to what we experience. The ladder of inference demonstrates both the power and danger of that ability, and can help us to differentiate between inferences founded on observations and those based on untested premises and faulty deductions.
- We can best improve communication and understanding by sharing our thinking process rather than thinking products thereby constructing a new ladder in alliance with the other person. What we lose in self-righteousness and self-congratulation will be gained in increased effectiveness and improved partnerships.