# How to question our mental models

Creative and insightful realizations occur when people combine multiple perspectives around a complex issue. But how do we share our perspectives or mental models? Work in the field of organizational learning underscores the importance of three actions: reflection, inquiry and advocacy. **Reflection** involves becoming more aware of your own thinking and reasoning. **Inquiry** involves asking about the reasoning and assumptions behind other people's statements. **Advocacy** involves making your thinking and reasoning more visible to others.

When we are faced with a disagreement we often increase advocacy and decrease inquiry. **Mutual learning** occurs in situations of high advocacy and high inquiry: *I state my thinking, I enquire into your thinking and I encourage you to question my thinking*.

A useful tool to increase awareness of how we construct our mental models is called the **"ladder of inference"** that was developed by Harvard Business School professor Chris Argyris. At the bottom of the ladder is all of the available data. As we are limited in the amount of data we can process, we select some of the data and we ignore the rest. We then add meaning to the data based on our personal beliefs, assumptions, and values. Based on the meaning we add, we form conclusions and then take action based on those conclusions. When we reach the top of the ladder, we feel that our beliefs are the truth, that the truth is obvious, and that it is based on real data. We often think others must see the world as we do, have collected the same data and processed it the same way. Over time, our conclusions form our beliefs, assumptions, and values that in turn filter the data we collect and the inferences we make when climbing the ladder.
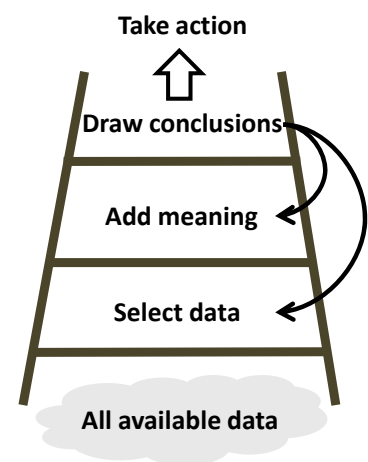
Example: I'm at a project weekly meeting (data). A colleague is using his laptop computer (select data). He must be working on something more important (add meaning). He isn't interested in the project (draw conclusions). I'll tell Nadine not to invite him to future project meetings (take action).

This process happens very quickly and is invisible to others. No-one sees what data you collect and how you add meaning to it and draw your conclusions. All others see is the available data and your actions. We need to ask **directed questions** through **a process of inquiry and advocacy** to understand differences between our mental models.

At each rung of the ladder we need to ask:

1. What information, data and experiences are available to me (you)?
2. What data do I (you) choose to pay attention to? What stands out for me (you)?
3. What meaning do I (you) place on the data I select? How do I (you) interpret this data?
4. What conclusions do I (you) make? What beliefs do I (you) hold based on my (your) interpretations?
5. What actions should we take based on our conclusions?

By acknowledging that our mental models may be flawed, by revealing them and by learning from others with different perspectives, we can begin making an impact on the world's complex problems.

References

Argyris, Chris. "Teaching Smart People How to Learn." *Harvard Business Review* 69.3 (1991): 99-109.

Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday/Currency.