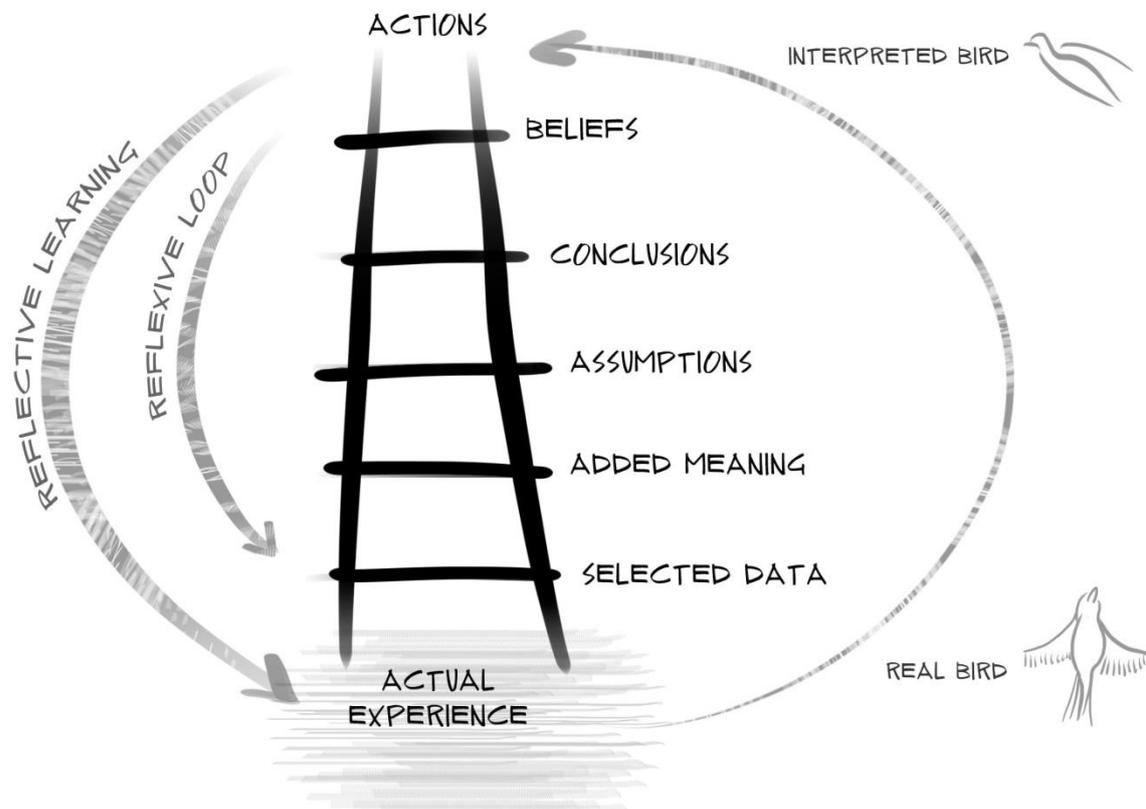# Ladder of Inference

Helping you to thinking more about:

Assumptions; Voices of Fear, Judgement and Cynicism
The impact of our TA preferences
How we can choose to respond and engage differently

Ladder of Inference

The Ladder of Inference: What is real, what are assumptions?

adapted from Chris Argyris and The Fifth Discipline, by Peter Senge, et al. drawing by @kelvy_bird

Enjoy thinking about being more effective as you read the next few pages.

As we move up and down the Ladder of Inference we can see how easily it is to be 'hooked' by the behaviour of others. As we have learned from our work on TA and Adult-Adult response is the place to stop and think about where we find ourselves. The curiosity of Natural Child can also help with the central question:

'What's my part in where I find myself?'

'What am I assuming that is influencing my thinking?'

'How might I check things out with others?'

Ladder of Inference

We live in a world of self-generating beliefs which remain largely untested. We adopt those beliefs because they are based on conclusions, which are inferred from what we observe, plus our past experience.

Our ability to achieve the results we truly desire is eroded by our feelings that:

- Our beliefs are the truth
- The truth is obvious
- Our beliefs are based on real data
- The data we select are the real data

For example; I am standing before the executive team, making a presentation. They all seem engaged and alert, except for Larry, at the end of the table, who seems bored out his mind. He turns his dark, morose eyes away from me and puts his hand to his mouth. He doesn't ask any questions until I'm almost done, when he breaks in: "I think we should ask for a full report." In this culture, that typically means, "Let's move on." Everyone starts to shuffle their papers and these ideas are exactly what his department needs. Now that I think of it, he's never liked my ideas. Clearly, Larry is a power hungry jerk. By the time I've returned to my seat, I've made a decision: I'm not going to include anything in my report that Larry can use. He wouldn't read it, or, worse still, he'd just use it against me. It's too bad I have an enemy who's so prominent in the company.

In those few seconds before I take my seat, I have climbed up what Chris Argyris calls a 'Ladder of Inference,' – a common mental pathway of increasing abstraction, often leading to misguided belief.

- I started with the observable data: Larry's comment, which is so self-evident that it would show up on a videotape recorder …
- I selected some details about Larry's behaviour: his glance away from me and apparent yawn. (I didn't notice him listening intently one moment before) …
- I added some meanings of my own, based on the culture around me (that Larry wanted me to finish up)…
- I moved rapidly up to assumptions about Larry's current state (he's bored)…
- I concluded that Larry, in general, thinks I'm incompetent. I fact, I now believe that Larry (and probably everyone whom I associate with Larry) is dangerously opposed to me…
- thus, as I reach the top of the ladder, I'm plotting against him

It all seems so reasonable, and it happens so quickly, that I'm not even aware I've done it. Moreover, all the rungs of the ladder take place in my head. The only parts visible to anyone else are the directly observable data at the bottom, and my own decision to take action at the top. The rest of the trip, the ladder where I spend most of my time, is unseen, unquestioned, not considered for discussion, and enormously abstract. These leaps up the ladder are sometimes called 'leaps of abstraction.'

I've probably leaped up that ladder of inference many times before. The more I believe that Larry is an evil guy, the more I reinforce my tendency to notice his malevolent behaviour in the future. This phenomenon is known as the 'reflexive loop'; our beliefs influence what data we select next time. And there is a counterpart reflexive loop in Larry's mind: as he reacts to my strangely antagonistic behaviour, he's probably jumping up some rungs on his own ladder. For no apparent reason, before too long, we could find ourselves becoming bitter enemies.

Ladder of Inference

Larry might indeed have been bored by my presentation – or he might have been eager to read the report on paper. He might think I'm incompetent, he might be shy, or he might be afraid to embarrass me. More likely than not, he has inferred that I think he's incompetent. We can't know, until we find a way to check our conclusions.

Unfortunately, assumptions and conclusions are particularly difficult to test. For instance, suppose I wanted to find out if Larry really thought I was incompetent. I would have to pull him aside and ask him, "Larry, do you think I'm an idiot?" Even if I could find a way to phrase the question, how could I believe the answer? Would I answer him honestly? No, I'd tell him I thought he was a terrific colleague, while privately thinking worse of him for asking me.

Now imagine me, Larry, and three others in a senior management team, with our untested assumptions and beliefs. When we meet to deal with a concrete problem, the air is filled with misunderstandings, communication breakdowns, and feeble compromises. Thus, while our individual IQs average 140, our team has a collective IQ of 85.

The ladder of inference explains why most people don't usually remember where their deepest attitudes came from. The data is long since lost to memory, after years of inferential leaps, but we are several steps removed from the data.

Using the ladder of Inference

You can't live your life without adding meaning or drawing conclusions. It would be an inefficient, tedious way to live. But, you can improve your communication through reflection, and by using the ladder of inference in three ways:

- Becoming more aware of your own thinking and reasoning (reflection)
- Making your thinking and reasoning more visible to others (advocacy)
- Inquiring into others' thinking and reasoning (inquiry)

Once Larry and I understand the concepts behind the "ladder of inference" we have a safe way to stop a conversation in its tracks and ask several questions:

- What is the observable data behind that statement?
- Does everyone agree on what the data is?
- Can you run me through your reasoning?
- How did we get from that data to these abstract assumptions?
- When you said "your inference," did you mean "my interpretation of it"?

I can ask for data in an open-ended way: "Larry, what was your reaction to this presentation?" I can test my assumptions: "Larry, are you bored?" Or I can simply test the observable data: "You've been quiet Larry. "To which he might reply: "Yeah, I'm taking notes; I love this stuff."

Note that I don't say, "Larry, I think you've moved way up the ladder of inference. "Here's what you need to do to get down." The point of this method is not to nail Larry (or even diagnose Larry), but to make our thinking processes visible, to see what the differences are in our perceptions and what we have in common. (You might say, "I notice I'm moving up the ladder of inference, and maybe we all are. What's the data here?")

Ladder of Inference

This type of conversation is not easy. For example, as Chris Argyris cautions people, when a fact seems especially self-evident, be careful. If your manner suggests that it must be equally self-evident to everyone else, you may cut off the chance to test it. A fact, no matter how obvious it seems, isn't really substantiated until it's verified independently - by more than one person's observation, or by a technological record (a tape recording or photograph).

Embedded into team practice, the ladder becomes a healthy tool. There's something exhilarating about showing other people the links of your reasoning. They may or may not agree with you, but they can see how you got there. And you've often surprised yourself to see how you got there, once you trace out the links. All of this can be supported by more effective use of advocacy and inquiry.

What follows is a series of tips and hints to support your thinking in different situations.

The purpose of these conversational palettes is to help people learn the skills of balancing inquiry and advocacy. The purpose of the questions is to help you surface assumptions. Use of them whenever a conversation offers an opportunity to learn – which should be most of the time!

Ladder of Inference

ADVOCACY

Expanded from the work of Diana McLain Smith

TELLING

DICTATING – *self focussed, stuck thinking, my way or nothing.* **Negative Controlling Parent**

ASSERTING – *sharing your personal view, stating why you have it.* **Positive Controlling Parent /Adult**

EXPLAINING – *sharing how you see the world and why it makes sense to you with your values.* **Adult**

GENERATING

SKILLFUL CONVERSATION – *powerful questions, genuine curiosity about others' assumptions.* **Positive Natural Child/Positive Nurturing Parent/ Adult**

DIALOGUE – *suspending assumptions, creating a space for collective thinking to emerge.* **Adult**

POLITICKING – *playing the game, pretending to balance inquiry and advocacy whilst being closed minded.* **Negative Adapted Child**

OBSERVING

BYSTANDING – *making comments about the group process, but not content.* **Adult**

SENSING – *watching the conversation flow, not saying much but being aware of what is happening.* **Adult/Positive Adapted Child**

WITHDRAWING – *mentally checking out, disengaging.* **Negative Adapted Child**

ASKING

INTERROGATING – *using questions to demonstrate you are right and the other person wrong.* **Negative Controlling Parent/Negative Adapted Child**

CLARIFYING – *searching for responses, surfacing what is really important.* **Positive Natural Child/Adult**

INQUIRING – *exploring other's thinking* **Positive Natural Child/Adult**

INQUIRY

Ladder of Inference

Making Sense of Advocacy and Inquiry

There are dysfunctional forms of both advocacy and inquiry. For example, in organisations, people can skew the inquiry process by relentless "interrogating," without caring at all for the person being questioned. In the same vein, advocacy can feel like an inquisition if the advocate simply "dictates" his point of view, while refusing to make his reasoning process visible. People who are unwilling to expose their thinking may also "withdraw" into silence, instead of taking the opportunity to learn through observation.

One of the most destructive conversational forms is "politicking," in which there is no overt argument – just relentless refusal to learn while giving the impression of balancing advocacy and inquiry. When these people show up, they cling to their mistaken impression at all costs. Their strategy is disastrous for their team because businesses which remain in backlog don't keep their customers. Nonetheless, these players refuse to consider any other course of play. When people ask them to change for the sake of their teammates, they don't argue back. They simply call attention to their "superior" status: "Look, I've read the book. Trust me. I know what I'm doing."

Assumptions

Nancy Kline has done a huge amount of work through her writing and development programmes to help people understand the impact of assumptions on thinking. In terms of becoming more effective using TA and the work on Advocacy and Inquiry; here are some initial thoughts.

Beliefs and assumptions are different. We know from Transactional Analysis that our values and beliefs can drive our attitude and behaviour. We also know that someone challenging our beliefs can feel threatening. However a question about assumptions feels different. Somehow it is easier to take charge of our assumptions and change those, than it is to consider changing our beliefs.
Assumptions lurk in the shadows of our thinking and can be both helpful and positive and unhelpful and negative in terms of progressing communication. Surfacing your own assumptions and those of others is a really easy way to get yourself to the Adult place and be considered about your communication and response.

Balancing Advocacy and Inquiry

Balancing advocacy and inquiry and exploring assumptions are two ways for you to begin changing your organisation from within. You don't need any mandate, budget, or approval to begin. You will almost always be rewarded with better relationships and a reputation for integrity.

What follows is a series of tips and hints to support your thinking in different situations.

The purpose of these conversational palettes is to help people learn the skills of balancing inquiry and advocacy. The purpose of the questions is to help you surface assumptions. Use them whenever a conversation offers you an opportunity to learn – which should be most of the time!

Ladder of Inference

Improving Advocacy

Make your thinking process visible
As you speak, try to picture the other people's perspectives and assumptions

What to do	What to say
Share your assumptions, and describe the thinking that has led to them.	*"These are the assumptions that I am holding at the moment….."* *"This is the positive impact of my assumptions…."* *"This is the less positive impact of my assumptions which I would like to explore with you…"*
Explain your assumptions.	*"I assumed that…"*
Make your reasoning explicit.	*"I came to this conclusion because…"*
Explain the context of your point of view: who will be affected by what you propose, how they will be affected, and why. Give examples of what you propose, even if they're hypothetical or metaphorical.	*"To get a clear picture of what I'm talking about, imagine that you're the customer who will be affected…"*

Publicly test your conclusions and assumptions	
What to do	**What to say**
Encourage others to explore your model, your assumptions, and your data.	*"How do you feel about what I just said?"* or *"Do you see any flaws in my reasoning?"* or *"What can you add?"*
Refrain from defensiveness when your ideas are questioned. If you're advocating something worthwhile, then it will only get stronger by being tested.	
Reveal where you are least clear in your thinking. Rather than making you vulnerable, it defuses the force of advocates who are opposed to you, and invites improvement.	*"Here's one aspect which you might help me think through…"*
Even when advocating: listen, stay open, and encourage others to provide different views.	*"Do you see it differently?"* *"Can you share your experience with me?"*

Ask others to make their thinking process visible	
What to do	**What to say**
Find out what evidence they have to support their thinking.	*"Tell me what leads you to conclude that?"* *"Can you describe what evidence do you have for that?"* *"What causes you to believe that?"*
Use assertive language, particularly with people who are not familiar with these skills. Ask in a way which does not provoke defensiveness or "lead the witness."	Instead of *"What do you mean?"* or *"What's your proof?"* say, *"Can you help me understand your thinking here?"*
Draw out their reasoning. Find out as much as you can about why they are saying.	*"What do you believe is the significance of that?"* *"How does this relate to your other objectives?"* *"Where does your reasoning go next?"*
Explain your reasons for inquiring, and how your inquiry relates to your own concerns, hopes and needs.	*"What are you assuming that is influencing your thinking?"* *"I'm interested in your assumptions here because I want to go as far as possible to understand your thinking…"*

Ladder of Inference

Compare your assumptions to theirs	
What to do	**What to say**
Test what they say by asking for broader contexts, or for examples.	*"How would your proposal affect…?"* *"Is this similar to…?"* *"Can you describe a typical example…?"*
Check your understanding of what they have said. Listen for the new understanding that may emerge. Don't concentrate on preparing to destroy the other person's argument or promote your own agenda.	*"Am I correct that you're saying…?"* *"It feels as if ….is really important to you…?"* *"I am noticing that you seem overly focussed on …can you say a bit more about that?"*

Ladder of Inference

Improving Inquiry

Facing a point of view you disagree with

What to do	What to say
Again, inquire about what has led the person to that view	*"How did you arrive at this view, what are you seeing that I'm not yet seeing?"* *"What evidence I have not considered?"*
Make sure you truly understand the view.	*"If I understand you correctly, you're saying that…"* *"I can see that… is really important to you?"* *"What more do you think or feel or want to say?"*
Explore, listen, and offer your own views in an open way. Listen for the larger meaning that may come out of honest, open sharing of alternative mental models.	*"Have you considered…"* *"How would you proceed with this if you had full agreement?"* *"What would need to shift to enable you to consider a third way?"*
Raise your concerns and state what is leading you to have them.	*"I am holding an assumption that this course of action is not the best outcome for…?"* *"I am finding it difficult to understand how this will help us to deliver on…?"*

Improving Inquiry

Facing an Impasse

What to do	What to say
Embrace the impasse, and tease apart the current thinking. Look for information which will help move people forward. Ask about possibilities. Listen to ideas as if for the first time.	*"What do we know for a fact?"* *"What do we sense is true but have no data for yet?"* *"What don't we know?"* *"What is unknowable?"* *"What do we agree upon, what do we disagree on?"* *"If we abandoned our positions, what would be possible?"*
Consider each person's mental model as a piece of a larger puzzle.	*"Are we starting from two very different sets of assumptions here?"* *Where do they come from?"*
Ask what data or logic might change their views	*"What would have to happen before you would consider the alternative?"*
Ask for help in redesigning the situation.	*"It feels like we're getting into an impasse and I'm afraid we might walk away without any better understanding. Have you got any ideas that will help us clarify our thinking?"*
Don't let conversation stop with an "agreement to disagree."	*"I don't understand the assumptions underlying our disagreement?"* *"I believe that we have enough common belief to move on from where we are at the moment…?"* *"What would be an agreed first step?"*

Ladder of Inference

Exploring Assumptions
"What positive assumptions are you holding that are influencing your thinking?" "What potentially unhelpful assumptions are you holding that are influencing your thinking?" "What more are you assuming…?" "If you were to suspend that/those assumption(s) for the moment what is possible?" "If you were to reframe that/those assumption(s) what is possible?" "I am assuming… which in turn is having an influence on…" "I believe if we could both assume that we can let go of our positions and focus on… that things will develop in a positive way"