

Working with the Ladder of Inference

- A Psychodramatist's Guide

Peter Howie

Peter is a psychodramatist, TEP and the Director of the Queensland Training Institute of Psychodrama. He works extensively with middle managers in the public service using Morenian methods. He is heavily engaged in a PhD on defining deep learning.

In this paper I set out a simple yet profound model that suggests our actions are determined via a causal loop of inference based on minimal or even absent data (Dick & Dalmau 2001, Argyris 1990, Vickers 1995, Senge et al 1994). It shows how we make snap judgments, responses and reactions. I have found this model enormously useful as a psychodrama practitioner, adult educator and trainer. Others have told me it has also proven extremely useful to them. This is a practitioner's paper designed for practitioners. The academic investigation of this kind of mental model I leave for a later time.

This model describes a process that is woven into the warp and woof of psychodrama theory and practice. It makes sense of some aspects of warm-up, clarifies 'group think', explains how arguments function, clarifies stereotyping and habits, illuminates other's and our own blind spots, is crucial to marketing and other forms of influence peddling, makes sense of stories and narratives, melds with role theory and aspects of tele, and assists in the germination of compassion and love when working with simple or intractable circumstances. Individuals who work with this model gain a fresh insight into how they contribute to stuck or ineffective relationships as well as enlightening ones.

Below I set out a scenario from my work, present

the model and show how it assists to create fresh perspectives. I then demonstrate how I use it in groups. Finally I make a strong case for how this model is another way of making sense of psychodrama. You can check out further stuff at the websites provided.

Jim and Stan

As part of my work in leadership development the following situation emerged:

Jim, a manager at a health clinic, knows he needs to develop a new relationship with one of the clinic workers, Stan, for whom he has no professional respect whatsoever. In fact he thinks Stan is harmful. For some months Jim has noticed Stan acting inappropriately, perhaps negligently with clients. Stan hasn't been doing adequate follow up work with clients. Interactions between the two have not been friendly. Jim's conclusion is that Stan is no good at his job. And he has good data to back up his conclusion. When asked to consider any other possibility Jim is clear that he has a large and cogent body of first hand data and can easily picture this in his mind.

This scenario should be familiar to you to some degree or another. Maybe the details are different but the relationship characteristics are recognisable. Before we return to the next step in this tableau I want to present the model that will assist us to understand how Jim has reached

his conclusion and belief about that dangerous and unprofessional wretch, Stan.

The Ladder of Inference

The ladder is based on how people as a group or individually justify their way of operating in the world, their beliefs about life, the reasons for their actions, values or principles.

As a group we say....
Our beliefs are the truth. The truth is obvious. Our beliefs are based on real data. The data we select are the real data.
Individually I say.....
My beliefs are the truth. The truth is obvious. My beliefs are based on real data. The data I select is the real data.

So we start this journey up *the ladder of inference* by considering in a general sense the experiences of meetings we have with other people. We could start with any of our experiences but the people ones are the most impactful in our lives. Starting at the bottom of the ladder (see Diagram 1. below) there is an event that we are

a part of and that we observe. From there we step onto the first rung and from all the possible things we might observe in that event, we *Select Data*.

In any situation there is effectively an infinite amount of data you can tune into. However none of us do. What we do is select certain data to pay attention too and pay almost no attention to the rest of the data. This is how we stay sane in a world of such diverse and oft times overwhelming data. Why we choose that data and not this data is rarely considered by us. I would suggest that it depends on the role we are in and the world view that accompanies that role. ¹ From that selected data we step up to the second rung and *Add Meaning* to the data.

We notice certain data. And then we create a meaning for that data. Maybe we do both at the same time. A meaning is simply the quality of something or the way it is done, most easily described with an adjective, such as 'loud', 'quick', 'sad', 'tall', 'wrong', 'jerky', 'stylish', 'aggressive', 'arrogant', 'shy', 'seductive', 'thoughtful', 'odd', 'drunken', 'lazy' etc. Often this step up the Ladder of Inference is hard to notice. This is because it is so quick and so

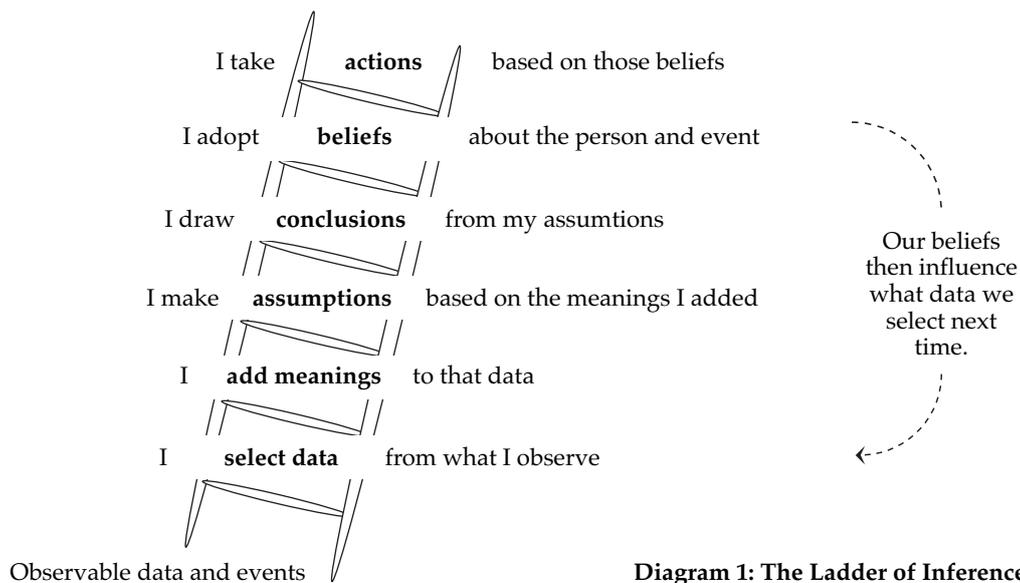


Diagram 1: The Ladder of Inference

obvious, to us. The whole ladder process takes nanoseconds or perhaps pico-seconds.

Let's continue. Once we have selected some data and given it a meaning then very quickly we go to the third rung and make an *Assumption* about this data and its meaning. Then before we know it we are on the fourth rung, coming to a *Conclusion* informed by the assumption. It is then a small step to the fifth rung where we firm up or adopt a *Belief* informed by the conclusion. And generally speaking we are then on the sixth rung and take *Actions* based on our beliefs. Another word for belief is values or deeply held truth or as I playfully like to present it - ruts or habits of mind. The more familiar psychodramatic term might be worldview. These beliefs are not necessarily the big deep super important ones which start with "I believe the world...". They can be the small insignificant, seemingly inconsequential beliefs which sound like "What a loser!".

It is important to note that whether or not we are actively verbalizing or consciously acting on our beliefs we are affected by them and that is often visible or noticeable to others. In an interaction it is easy to imagine that my body language, my responses and my language will all be subtly affected by any beliefs I have about you or you have about me. This is why we often do things which display our prejudices despite consciously trying to be even-handed, friendly, politically correct or a good person. These subtle displays are of course the juicy stuff of psychodramas and are brought to awareness through concretisation, mirroring, maximization and other remarkable techniques.

Beliefs Shape Data

Of course one of the actions most strongly influenced by our beliefs is the selection of data. The data selected will support our beliefs and the data ignored will often disconfirm our beliefs if we paid it any attention. Hence my earlier comment that this model is about how our actions are determined via a *causal loop of inference* based on minimal or even absent data.

Our ideas create a self-reinforcing spiral which may lead to good, bad or indifferent positions.

Beliefs shape the data we select and how we view the data we do select. You will likely be familiar with the common saying, "I'll believe it when I see it." The ladder of inference suggests that the more accurate but counter-intuitive saying would be "I'll see it when I believe it." For instance one person sees a sunset and is elated and filled with humility, thankfulness and reverence for God whose presence is so obviously manifested in the subtle and inspiring colours. Their neighbour sees the same sunset and is filled with reverence for the uniqueness, fragility and impermanence of life in a meaningless universe so obviously apparent in the subtle and inspiring colours of the naive diorama. Same data with different inferences.

Please also note again that this ladder of inference occurs at a great pace. It occurs all the time. It is based on unconscious, non-conscious and pre-conscious processes as well as conscious ones. So while Diagram 1 seems to imply that each rung is individual and takes equal time this is not the case. We all shoot up the ladder very quickly. The media know this well and utilize it ruthlessly. The sound bite and the front page/back page headlines are two simple examples of how a photo, a few words can effect our imagination profoundly. In Australia a photo of an indigenous person and a bottle of booze elicits instant images of hopeless alcoholism whereas the same bottle with a white Australian elicits more images of mateship or larrikinism. A picture of a famous footy player and the word 'drugs' will evoke drugs-in-sport pictures and the whole crooked 'win at any cost' mindset in people's imagination.

Now we return to the original tableau.

Climbing Down the Ladder

I formed a cooperative relationship with Jim. Then through discussion only, I worked back down the ladder of inference. I started with his beliefs and had him state his beliefs about Stan.

I asked what conclusions his beliefs were based on. He told me in a firm voice. I then asked what assumptions his conclusions were based on. Again he told me in a firm voice - after all he was right and could prove it. I then asked what meaning from what data his assumptions originated. He answered in a quizzical voice and squirmed a bit. Only by revisiting the original data could the initial inferences be understood. And they could well have been fine and dandy. We use this process in psychodrama all the time. Especially in original social atom repair where we often unearth the initial biases and warps that develop but make absolute sense at the time.

By investigating how he has come to this conclusion, Jim comes to realise that one brief thirty-second encounter in a staff meeting 6 months previously had led him to make a very big assumption about what Stan is like and what he is capable of. This had never been discussed between them, never been checked out in any form. Since that time Jim had only noticed things about Stan that supported his critical story. As a result of this exploration Jim develops a new warm-up to Stan, a more inquiring response to his behaviour. In fact Jim sees that Stan's behaviour was more normal and in many ways mirrored his own. Their relationship shifts.

As leaders and of course in life, we want to create relationships that reduce the amount of baggage we create day to day and increase our love of life so we can live more easily. To do this we need to do the hard work of getting to know what we each mean and of entering each others' worlds. This is particularly important when we find ourselves in stuck or entrenched positions, in a standoff or in symmetrical roles trying to convince the other they are 'wrong' and we are 'right'. These situations occur every day in every social system, in psychodramas, in groups, between group members and in life. It is so common that we need many ways of understanding this dynamic and of assisting ourselves and others to un-make conclusions they have made and retrieve and own their own

projections.

The Phone Call

Let's look at a second example of the ladder in action. You can try this in any group, pretty much anywhere you like. It will resonate with folks. I have done this maybe 50 times with groups ranging from 12 to 120 and it is always entertaining. I even did this very successfully during a job interview as a demonstration of experiential learning. You can try any number of variations and it will still be fun.

Invite someone to stand in the centre and enact, in any way they care to, being on the phone. Andy volunteers (remember, as you get going, to look after Andy).

Andy holds his hand with thumb and index finger extended. He brings his hand to his ear. His lips are pursed. He moves his shoulders forward and up. He says in a raised voice, in a moderate tempo "Hi there Ken, I wanted to talk to you about this report." As he says this he moves his weight from one foot to the other.

Now the data is available to everyone in the room. The action took less than 10 seconds.

Ask the group "What did you notice about Andy on the phone?" Concretise each response on the stage (have the idea of a number of ladders radiating out from Andy). In this case there were five responses: Andy's lips, voice, shoulder, pace and shifting weight are placed on stage. This is the data selected (see Table 1 below).

In turn, for each selected data, ask "What meaning do you make from this data?" As the group responds again concretise the meaning that is added. For example, from data on Andy's lips, is added the meaning "pursed, tense lips". You begin to build five different ladders of inference around a central event - the phone call.

Build on this by asking "What assumptions

Table 1: Five interpretations of a phone call

The Ladder	Interpretation 1	Interpretation 2	Interpretation 3	Interpretation 4	Interpretation 5
1. Select data	Lips	Voice	Shoulder	Pace of language	Shifting weight
2. Add meaning	Pursed/ tense lips	Loud voice	Hunched stressed shoulders	Speedy talk	Shifty movements
3. Make assumption	He is tense	He is bossy	He has burdens	He is in a hurry	He is tricking someone
4. Develop conclusions	He is really worried about some problem he has created with his client	He is pushy and can be a bully	He is out of his depth	He doesn't care about his client	He has done something disreputable
5. Create/ support beliefs	He really cares about his clients and wants the best for them	He doesn't care about people and always wants his own way	His caring has meant he has bitten off more than he can chew	His client is simply a means to an end - money	He is untrustworthy and not to be relied upon
6. Take action	Notice how much he cares	Notice how uncaring he is	Try and assist them	Notice his callousness	Notice his 'dodgy' behaviour

do you make from this meaning?" Following the ladder arising from 'pursed, tense lips' comes the assumption that "he is tense". This is also concretised. Polite responses will come first, then the more impolite and finally the downright mean and nasty ones. Great fun.

Again build on this by asking "What conclusion do you draw?" The reply is "He is really worried about some problem they have created with their client." From this emerges the belief "He really cares about their clients and wants the best for them."

The action that flows from this is to 'notice how much he cares' and treat him as a caring client-centred person due respect and prestige.

The stage now has five radiating chains, each one a different ladder of inference, (see Table 1). As a result we have five people (at the head of each ladder) who from a short observation of behaviour, respectively believe Andy is:

- A caring client centred person
- An uncaring bully

- An overworked, over committed caring person
- A callous money hungry person
- A con artist

Now invite group members to act as five groups discussing together whether Andy would make a good addition to their work team. Have them chat as separate groups first, enlarging each respective position. Each group will find supporting data for their position - flimsy as it may be. In the large group discussion each one will legitimately dismiss the other's concerns because they had missed that data or else considered that data as irrelevant. Each one will begin to develop peculiar ideas about their team members because of how they see this person. If you have Andy walk through the room people will actually notice data and attribute meaning to the walk that supports their bogus view of him. This can be quite a moment for people. Andy remembers where this has happened to him in life or where he has done it to others.

Don't forget there is more data that we haven't

selected. For example the opening sentence, "Hi there, Ken..." may be a casual form of speaking, or perhaps a friendly way of speaking or perhaps over-friendly, or perhaps a disarming way of speaking or maybe flippant.

Now you will have noticed that the final line in the table above concerns actions taken. There are many actions but the most immediate action is done on a very subtle level. This action concerns the data that is noticed and not noticed once beliefs are formed. The implication of this model is that the data noticed will tend to support your view or the view of the person you are working with and non-confirming data will not be noticed. Simply *imagining* someone as a dodgy con artist is often enough to get this happening as a playful group exercise. Imagine meeting Andy after having been informed he was a bit of a con artist by someone who knew the truth and had data and facts to back it up.

When working with leaders in organisations this becomes a seminal moment for many as they realise that their thinking has possibly let them down. That their perspective on the world, once so clear and concise has now become less dependable. Loss of confidence that leads to a leader engaging and enquiring in a more human and compassionate manner is of great value. We've all heard of false modesty - I work against false confidence.

Applying the ladder of inference as a non-dramatic exercise between individuals requires them to work in a robust manner starting with a particular belief and working back down the ladder to the data. Once the original data has been arrived at, participants need to ask two questions: i) What other data is available that I haven't noticed or valued, and ii) What other interpretation/meaning could be placed on the data I already have. Both these steps are quite hard. As an organisational consultant paid to work in intractable circumstances I usually start with some or other aspect of "What conclusion is that belief based on?" and then work my way back down the ladder of inference with all in

the client group. The original data is rarely more significant than that from the last example.

Role Theory, Stories and Warm-up

In role theory we have the idea of a role cluster - where a group of roles relate together with a central functional gestalt or psychodramatic role. Each role in a role cluster seems to have a similar worldview to the others. The roles operate as though they are a part of a similar system or story. While this process of clustering roles is really a device for making lively sense of a person's functioning, it does allow us to get to a person's pre-disposition to certain ways of seeing the world. When I warm up to a role I also immediately warm up to the worldview, the system, context or the story that attends that role. This warm-up then predisposes me to pay attention to certain data, pay attention to that data in a certain way and not to pay attention to any other data in either my system or the 'real system'. This is of course the essential reason that psychodrama can and does work. It taps into this predisposition and expands and extends it in a dramatic and concrete fashion so that we become aware of the conclusions and beliefs we base our actions on. In this way we can develop a fresh perspective.

In groups I have found that a simple question such as "What story are you telling yourself now?" or "What system are you a part of now?" or "What story do you think they are a part of now?" will often elicit useful self-reflection, and can lead to the understanding that how the way a person believes the world to be is, in fact, the way they see the world. As I noted earlier the ladder of inference suggests that the real story is "If I believe it then I will see it."

We use the ladder when telling ourselves stories of our own lives. We remember the bad times when depressed. We remember the good times when feeling better. We remember the confusion while confused. We select the data of our lives in a way to support our current mood, beliefs and worldview. Once again Moreno's remarkable production techniques enable us to see our

lives from many different perspectives and to generate spontaneity that can bring forward creativity.

Warm-up is often seen as a mysterious process. Much training goes on in Psychodrama Training Institute programs to have practitioners recognise and work with a protagonist's warm-up. This model offers a partial framework for making sense of it. I'll put it this way: when a person is in a particular role they will have a pre-disposition to a belief structure which leads them to see and notice certain things and hence to act in a particular manner. They will have a tendency to *warm up in a particular manner*. This is why we have mirroring, role reversal and other techniques to assist a person to raise their spontaneity enough to see their circumstances from many different roles and worldviews. In addition, the act of seeing circumstances from different roles also raises spontaneity and leads to creative responses.

Directors Taking the Ladder in Hand

As psychodrama directors we utilize a 'ladder of inference type process' all the time. Our training has encouraged us to have a very fluid, nimble and instantaneous relationship with the process discussed here. As we watch, listen and work with a protagonist we are constantly creating pictures, stories and possible worlds that they inhabit; based on minimal data; able to be changed at the drop of a hat; looking to see what they pay attention to, how they select data and the inferences they make from it. We keep a well-greased ladder for our own creative uses. Mind you, we get it wrong; we get it badly wrong at times. "But I can prove I am right because my ideas are based on real data and let me show just what that real data is!" We get supervision and our supervisor can help to unearth the subtle influences that sidelined us from accurate inferences from the data we had or the data we missed.

Conclusion

When things are complicated in a relationship, a group or a social setting or society then what

is going on? I suggest that usually it is two or more people, working from a different street map, involved in a different story or systems, speaking different languages trying to read different song sheets and come up with a workable harmony. To me the miracle is that we all do so well together, not that there are so many problems. The problems are a given, the harmony is remarkable.

Moreno exhorted us all to make the effort to reverse roles with others, enter fully into the other's world, their story of themselves and life, the system they are a part of, the language they use for understanding and the song sheet they are using. The ladder of inference is an attempt to systematize the steps whereby each of us goes about creating such unique worldviews for ourselves and in this way assists us to appreciate perspectives radically different from our own. •

References:

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- Senge P, Kleiner A, Roberts C, Ross R (1994), *The Fifth Discipline Fieldbook, Strategies and Tools for Building A Learning Organization*, Doubleday, New York.
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Websites of interest:

- <<http://www.solonline.org/prs/tool/ladder.html>>
- <<http://www.solonline.org/prs/tool/ladder-ex.html>>

Footnote

- 1 Peter and Diz's Axiom - What we don't know we make up. Corollary A - We usually make up the worst. Corollary B - Sometimes we make up the best, but at the worst possible time.

