

# The Art of Systems Thinking

## Flat earth thinking and global thinking

Is the Earth flat? Obviously it is, just look beneath your feet. And yet, if the pictures from space are to be believed, it is round - and international travel confirms this every day. We know (or at least believe) the Earth is round, but for practical everyday purposes, we behave as if it is flat. Too often we become 'flat Earth thinkers' simplifying too much when we need to see the fuller picture.

A straight line is actually a partial arc - one part of a circle, it only looks flat because of our limited view. This brings us back to punctuation - how we make sense of these circles and sequences of events, indeed, whether we see beyond the lines at all to how they connect back to form circles. When you find yourself going round and round in circles in a pattern of miscommunication, and blame, it seems as though straight line is taking you back to where you started. It is only when you can get an outside view of the system that you can see the circle and how to get out of it.

Punctuation is how we make sense of sequences.  
Punctuation changes meaning in language and in experience.

Here's a great example of how punctuation makes a big difference. Two versions of the same letter, all that is different is the punctuation.....

Dear John,

I want a man who knows what love is all about. You are generous, kind, thoughtful. People who are not like you admit to being useless and inferior. You have ruined me for other men. I yearn for you.. I have no feelings whatsoever when we're apart. I can be forever happy - will you let me be yours?

Gloria

Dear John,

I want a man who knows what love is. All about you are generous, kind, thoughtful people who are not like you. Admit to being useless and inferior. You have ruined me. For other men I yearn. For you I have no feelings whatsoever. When we're apart I can be forever happy - will you let me be?

Yours, Gloria

Here is an example of how different punctuation changes experience. George and Jenny had been married for ten years, and have settled into a pattern that neither of them enjoy. Whenever they need to decide something important, they quarrel. Jenny says that George is too overbearing. She says, 'He says what he thinks we should do, and doesn't seem to pay any attention to what I think. And when I suggest some other possibilities he goes huffy and defensive. I wish he would be more open to what I have to say.'

Jenny reacts to George's pattern. Sometimes she even finds herself arguing the opposite point of view when she does not really agree with it, just to be different.

George has a different story. He says, 'Whenever we have a decision to make, it's always me who has to say what I think first. Jenny doesn't seem to know what she wants. But when I do give my point of view, she attacks it, I defend it, and we both end up arguing. I wish she wouldn't attack my ideas.' George reacts to Jenny's pattern despite himself.

In your life, if it seems as though you are continually forced to respond to someone else in a particular way, and neither of you is deriving any benefit from the situation, look for the reinforcing feedback loop, in other words, look at how your actions are influencing the other person to respond in the way that you are reacting to. Is your reaction their trigger?

When you are inside an argument like this, it can go round and round for a long time (and for George and Jenny, it did). From outside, it's a loop: George responding to Jenny responding to George. The difference is that both punctuate differently. Jenny sees George as starting the rally, (by putting forward his view regardless), and George sees Jenny as the instigator, (by attacking his ideas). Starting anywhere, it is a reinforcing feedback loop. There is a further diabolical twist that keeps it in place - both expect the other to argue in a particular way, so both adopt their own way as an antidote. However from the outside, it is not the antidote at all, but the malady. And the situation is undiscussible which keeps the loop even more firmly in place. This like a game that has dreadful rules, but you have to keep playing because there are no rules about how or when the rules can be changed.

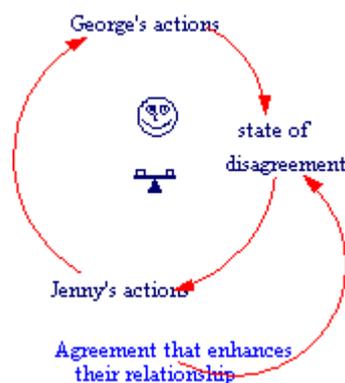
From the outside, both George and Jenny share the same mental model, that is, they both think they are responding to the other and it's the other who starts the ball rolling. So if only the other person would change then it would all be OK. Both have half the picture, but a half-truth can be as misleading as a lie.

The leverage point in this sort of quarrel is to step outside the loop and see the structure of the situation. So we ask the basic question: What stops the situation changing?

First, to keep the loop intact, both parties have to play. If one were to act differently, it would break the circle. Both George and Jenny are reacting to the other, so if one were to change, the other would have to as well. To make the change, one of them has to go outside the loop and question what is happening. Then they can shift the discussion to a different level. For example, Jenny could say, 'It seems to me that whenever we have a

decision to make, we always end up arguing. What can we do that would help us to stop this?' This has to be done carefully. If done during the course of an argument, George may simply put it in the same frame as the rest of the row. He could respond, ' There you go again, leaving it up to me...' Taking a time out is essential. Often parties in these loops do try to step outside them, but all their outside observations are taken by the other party as part of the same loop. This is why an outside mediator is so useful, being by definition outside the loop to begin with.

Once you are outside the system, you have a chance to change it. What is the purpose of the conversation? From George's point of view it is to agree a decision. The same for Jenny. However, neither goal takes the system into account - their relationship. So both have to keep an extra goal in mind - to preserve or enhance their relationship.



These sorts of misunderstandings and quarrels can lead to very strong feelings that make them even harder to resolve. Here is another paradox - because it is unpleasant, both sides try to resolve the situation, but they try to do so by doing more of the very thing that is making the situation so unpleasant. The feelings are caused by the structure of the system. Neither person is to blame.

### **A thought experiment**

You may be part of one of these unsatisfying loops where you and another person just seem to be reacting to what the other says or does, the situation never seems to resolve itself and both of you are dissatisfied. Try this experiment:

Think of the situation.

From your point of view, label the other person's attitude and actions.

Now, make a leap of the imagination, and from the other person's point of view, label how you must appear to them, your attitude and actions as they appear to the other side. This may not be very flattering. It doesn't matter, it is one point of view and no more true of the total situation than yours.

Now take a mental step outside and imagine the two of you engaged in the situation, argument, or conversation. Ask yourself some questions:

What is the relationship between you during the argument?

What are you doing that could be triggering their response?

What are they doing that is triggering your response?

How does your response trigger their response?

What relationship do you want with them?

What response do you really want from the other person?

What could you do that would get that response?

If what you are doing at the moment is not working, what, if anything stops you from doing something different?

In this example, George and Jenny are responding, each in their own way. Each evokes the behaviour of the other, and complements it. This is called a complementary relationship. This contrasts to a symmetrical relationship when both parties evoke the same behaviour from the other. For example, in a symmetrical relationship, the angrier one person becomes, the angrier their opponent becomes. These types of relationships can lead to escalating violence. The arms race between Russia and America in the Cold War was an international example of a symmetrical relationship: whenever America increased their spending on arms, Russia felt threatened and did the same. From Russia's point of view, they were simply responding to provocation by America. From America's point of view, Russia was continually increasing the level and destructive power of their arms, so in self-defence, they had to as well. Both considered they were acting in self-defence, and both considered the other the 'cause' of the trouble.

A symmetrical relationship may escalate all the way to violence, unless one party steps back from the brink, or another balancing loop comes into play (like fear!) In a complementary relationship however, the two parties are not in competition, and they may not escalate the conflict, they just get stuck in a rut where neither one is happy.

Both types of relationship, symmetrical and complementary can be constructive or destructive, it depends on how the parties are relating: exactly what behaviour they are evoking from the other. In practice neither type of relationship is good if taken too far, as they fix roles too rigidly.

### **The Road to Hell**

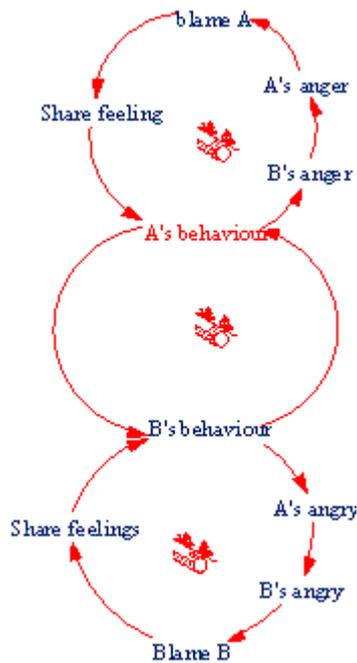
The limiting loops like the one between George and Jenny, only run because each person has trapped themselves inside the system and only sees it from their own viewpoint. According to our own viewpoint of course, what we do makes perfect sense. From another's point of view it may look completely strange. Taking the other person's view does not get you out because the other person's view is also within the system. As long as you are within the system and do not know it, there seems to be only two choices - to carry on as you are, or admit you are wrong and the other person is right. In this system,

neither intends to quarrel, but the result is still an argument. Good intentions are not enough. As the saying goes: ‘ The road to hell is paved with good intentions’.

A further problem is we tend to judge our own actions by our intentions. We usually know what we intend, what we want to achieve, and also we see the barriers that stop us. We judge our actions by what we intend. From our point of view, we do what is reasonable in the circumstances, and if it goes wrong or hurts someone else, we excuse ourselves by saying we did not mean that to happen. We are innocent, unlucky or at worst, thoughtless.

We judge others differently. Not seeing the world from their point of view, we do not judge them by their intentions, but by their results, and we do not see the constraints they are under. If they hurt us, we assume they intended to, or at the very least, were stupid and incompetent. Quite a contrast to the way we judge ourselves. We are mostly unaware that we are reacting to behaviour and not intentions. We think the meaning of our communication is what we intend, but take the meaning of the other person’s communication as its effect on us. This is the road to the hell of misunderstanding and blame... paved with good intentions.

What keeps this situation going? Mostly because it is all done silently within our own world. We rarely communicate what we feel. We know that if we told others of our judgments to their face, it would probably hurt them and make them defensive, and in turn we would be likely to feel hurt and defensive were someone to do the same to us. So we keep quiet, and this keeps the whole process hidden. In the absence of honest feedback, everyone continues down the same road.



### *The road to hell*

Look at the diagram. You are A and your loop is at the bottom. The more B engages in his obnoxious behaviour, the more you become annoyed and the less you credit his intentions as he sees them. The less you understand his intentions, the more you blame him, and the more you blame him, the less likely you are to give him feedback, and the less feedback, the more he is likely to continue doing what he is doing. The same process applies to B in response to your actions in the upper loop. The net result is the reinforcing loop in the middle - the more you make your response, the more they make theirs, and the more they make theirs, the more you respond with yours.

There are two leverage points. The first is in the bottom loop - break the link between your annoyed reaction and discounting the other person's intention. Act as if the other person's action makes perfect sense to them and is trying to get something of value for them in their world. You can then start to explore exactly what they want and find out if there are other ways they can get it without annoying you. The second is in the top loop, where you can sever the link between your behaviour and their interpretations. Focus on what you want to achieve. Act as if the meaning of your behaviour is what the other person makes of it, use their feedback, and be prepared to change what you do as necessary until you achieve the reaction you want. No one is going to understand you as well as you understand yourself.