The renowned organizational learning expert explains why our actions are often not consistent with our thoughts, and why defensive reasoning is so prevalent in today's organizations.

Thought Leader Interview:

Chris Argyris

By **Karen Christensen**

You have dedicated your career to studying the connections between *thought* **and** *action*. **What are some of your key findings?**
What I am most interested in is how people produce action that is *effective*, and by effective I mean action that leads to the consequences people desire – consequences that persist. In our minds, all human beings hold what might be labeled 'micro theories' of action that specify what 'effective action' is and how to produce it in any type of situation, whether it be as a leader, a follower or a peer. How do we produce behaviour? Through the use of our minds. How does the mind produce behaviour? By designs that are programmed into it, which can be warehoused and then retrieved. These are 'causal' designs, whereby doing one thing will cause something else to happen. It may surprise people, but I have found that we all have a strong propensity to hold inconsistent thoughts and actions, and that we aren't very effective observers of our own behaviour: we tend to judge our behaviour by our intentions, while we judge other people's behaviour by its outcomes.

Talk about the difference between an 'Espoused Theory' and a 'Theory-in-Use.'
Human beings hold two types of theories in their heads: there is the one that they espouse – their stated beliefs and values; and there is the theory that they actually use, which can only be inferred from observing their behaviour. Espoused Theory is what an individual actually believes in. People say to themselves, 'this is what I believe is effective action in this situation, and these are the values that I believe I should express when I manage people or when I manage myself.' This type of thinking mostly works when people are dealing with routine issues: in these cases, what they *say* they believe and how they actually behave is pretty much the same.

However, when it comes to complex issues – issues that can cause embarrassment, or may represent a threat to a person or an organization – espoused theories almost never operate. What does operate is the theory that people actually *use*, which I call their Theory in Use. These are the theories of action that are implied by our behaviour, and they are likely to be unknown to us. We all possess a strong propensity to hold inconsistent thoughts and actions: the difference between espoused theories and theories-in-use applies at the level of national strategies, organizational strategies and small group and interpersonal behaviours. People become skillfully blind about the inconsistency between their espoused theories and their theory-in-use. They may become aware of it afterwards, but while they're producing the behaviour they are rarely aware, and the end result is that our behaviour is often less effective than it could be.

What are 'governing values,' and how do they affect our thinking?
Governing values are the underlying values that people use to design their actions – goals that we seek to satisfy, beliefs we seek to operationalize or defend and values we seek to express. My colleagues and I have found that these values fall under two categories or 'worldviews': Model I and Model II.

Model I represents the actions of almost all human beings. There are four key governing values in this mindset, and we have found that they do not vary by age, sex, culture, organization or wealth. They are:

1. To be in control of one's environment
2. To seek to win and not lose
3. To suppress negative feelings, and
4. To be as rational as possible

The problem is that when they join an organization, individuals using this worldview create what we call 'defensive routines': they sanction and reward self-protective actions and reinforce a unilateral, top-down model. This often leads to skilled incompetence that produces escalating error, self-sealing processes and self-fueling processes. At the same time, people are unaware that they are doing this, and a key cause of their unawareness is the defensive reasoning mindset that accompanies Model I.

What is 'defensive reasoning'?

Reasoning is defensive when its purpose is to protect someone – a person or a group – from being embarrassed or threatened. When people reason in this way, they keep their inferences tacit, lest they lose control; they create 'tests' of their claims that are self-serving and self-sealing, failing to design corrective actions and evaluate the effectiveness of their implementation. The worst part is that the use of defensive reasoning prohibits questioning our reasoning. This leads to self-fueling processes that serve to maintain the status quo, inhibit genuine learning, and reinforce deception. Self-referential logic is a key aspect of this type of reasoning: the logic used to create the claims is the same as the logic used to test them.

Productive reasoning, on the other hand, seeks truth about the effectiveness of what we do and what we claim. It gives rise to questioning causality, testing methodology, the notion of transparency, and so on. Self-referential logic combined with a lack of transparency and bolstered by the belief that we are acting in the name of 'concern' or 'caring' is a recipe for disaster for the learning required to correct problems in an organization. Unfortunately, the prevailing culture today is Model I, and so are many of the organizations and social systems within it.

Can you describe what an 'organizational defensive routine' looks like?

There is a fundamental logic underlying all such defensive routines, and it can be illustrated by one of the most frequently-observed defenses: sending mixed messages: "Mary, you run the department, but make sure to check with Bill"; "John, be innovative, but please be careful." The logic here is as follows:

1. Send a message that is inconsistent
2. Act as if it is not inconsistent
3. Make 1 and 2 undiscussable, and
4. Make the undiscussability undiscussable

Organizational defensive routines are caused by a circular, self-reinforcing process in which Model I theories-in-use produce individual strategies of 'bypass' and 'cover up', which result in *organizational* bypass and cover up – which only serves to reinforce the individual theories-in-use.

What are the consequences of the Model 1 mindset in organizations?

People programmed with Model I theories of action produce organizational dynamics that include avoidance, uncertainty, mistrust, conformity, face-saving and miscommunication. The fundamental consequence of all this is that people withdraw – they play it safe and try not to make waves. In this environment, people hesitate to be honest, and the undiscussable gets covered up. Protection of one's 'bureaucratic skin' becomes critical to survival, driving some of the most important dialogue underground.

Do you feel that most of today's leaders suffer from this mindset?

I'm afraid so. The most typical leadership style is Model I leadership, and the most prevalent action strategies that arise from it are the following:

- Advocate your position
- Evaluate the thoughts and actions of others, and
- Attribute causes for whatever you are trying to understand

Unfortunately, this approach is often viewed as 'strong' leadership – the ability to bully others into agreeing with your way of thinking. The fact is that the job of an effective leader is still to advocate, evaluate and make attributions, but to do so in a way that corresponds to reality, that can be tested. You accomplish this by inviting others to confront your views and conclusions.

What is the antidote to the Model I mindset?

We must help people become skillful at what I call 'Model II' thinking and behaviour. Model II governing values include:

- Obtaining valid information
- Creating conditions for free and informed choices, and
- Accepting personal responsibility for one's actions

Model II action strategies include advocating, evaluating and attributing in ways that combine inquiry and public testing. This is a much more collaborative approach, and much less defensive. Model II allows one to reflect on the self-fulfilling nature of the model itself and to take corrective actions. The end result is the reduction of self-sealing processes and more effective problem solving.

How can managers foster a Model II approach in their workplace?

Any environment that rewards participation, joint problem-solving and openness can be expected to move towards Model II. I am not proposing that people completely drop Model I and accept only Model II: I am suggesting that Model II is important for difficult, unprogrammed, non-routine decisions. Organizations can create conditions that significantly influence what individuals frame as the problem, design as a solution and produce as the action to solve a problem. Moving from Model I toward Model II requires not only changes in actions, it requires changes in governing values and action strategies. This, in turn, requires what I call 'double-loop learning.'

What is 'double-loop learning'?

Model I only allows for 'single-loop learning': maintaining the field of constancy by generating new action strategies to achieve existing

governing values. Whenever an error is detected and corrected without questioning or altering the underlying values of the system, the learning is single-loop. Single-loop learning is appropriate for routine, repetitive issues – it helps get the everyday job done.

Double-loop learning, on the other hand, allows you to tackle problems that are complex, ill-structured, and that change as problem-solving advances. With this type of learning, we learn to change the field of constancy itself by changing underlying values and assumptions: assumptions underlying current views are questioned, and hypotheses about behaviour are tested publicly. The end result should be increased effectiveness and better acceptance of failures and mistakes.

For example, one strategy to suppress conflict in a group might be for a manager to reprimand the people involved for wasting time, and suggest that they get on with the task at hand. This may suppress the conflict and allow feelings of competence in the manager, as the fault has been laid at the feet of the other parties. In such a case, a new action strategy is used in order to satisfy existing governing values ('unilateral control' and 'winning not losing'). This is an example of single-loop learning.

Another possible approach might be to examine and change the governing values themselves. For example, the manager might choose to critically examine the governing value of 'suppressing negativity and conflict,' which may lead her to discard this value and substitute a new value such as 'open inquiry.' The associated action strategy might be to discuss the issue openly. This would constitute double-loop learning, because both the governing variable and the action strategy have changed.

Describe the Ladder of Inference and how it can lead us to 'short-circuit' reality.

Human beings want to make sense out of the world, and we do this by observing and then making inferences as to what is valid and what is not. In doing so, we proceed through a 'Ladder of Inferences': the first step is to observe the real data and experience – taking in the sort of information that would be captured by a movie camera that can't lie. From this we choose a set of selected data and experience that we will pay attention to; to this, we affix meaning, develop assumptions, and come to conclusions. Finally, we develop beliefs, which form the basis of our actions, which create additional real data and experience, completing the circle. This cycle is reinforcing, with each action building on the one before it. The problem is that our beliefs influence the selected data and experience that we decide to pay attention to, which essentially established an internal reinforcing loop that can 'short circuit' reality.

The tendency is to select data to pay attention to that supports our beliefs. As our beliefs become more and more rigid, the data and experience we are willing to pay attention to will become a smaller and smaller portion of reality. By developing an understanding of other people's ladders of inference, we can start to see inconsistencies between the real data and experience and the selected data and experience resulting from their beliefs.

The ladder of inference becomes useful in helping people recognize when both they and others have jumped through several 'inferential steps' to draw a conclusion. When people disagree about a conclusion, what they need to do to make progress is make explicit the data they have selected and the steps in their interpretation process.

How do you define psychological success?

Psychological success means that a person has set a level of aspiration that is always challenging, but attainable. It is never set below being challenged – but at the same time, it is never so high that the person will never reach it. You define your level of aspiration in a way that's always challenging and you accept personal responsibility for your behaviour. In Roger [Martin]'s new book [*The Opposable Mind: How Successful Leaders Win Through Integrative Thinking*], he shows how successful leaders are willing to accept personal responsibility, and are also willing to explore and learn. Much of the behaviour he describes in the book is consistent with Model II, and when it is not, the leader owns up to it. Successful leaders also know that there are times when Model I is the right approach to use. They don't make try to make Model II an ideology, but it is a critical part of their skill set.

What are the first steps for a manager who wants to tackle these issues in their organization?

The key to changing behaviour is not simply changing behaviour, because it is possible to keep the same theory in your head and change your behaviour. The key is to change the way people *reason* about their behaviour, based on the theories in their heads. The challenge is to help individuals transform their espoused theories into theories-in-use by learning a new set of skills and a new set of governing values. Because many individuals espouse Model II values and skills, these traits are not totally new to them; however, the empirical fact to date is that very few individuals routinely act on their espoused values and skills. The criterion for success should be changes in defensive reasoning patterns and the theories-in-use that produce organizational defensive routines.

People can be taught how to recognize the reasoning they use when they design and implement their actions. They can begin to identify the inconsistencies between their espoused and actual theories of action; they can face up to the fact that they unconsciously design and implement actions that they do not intend; and they can learn how to identify what individuals and groups do to create organizational defenses and how they contribute to problems. Change has to start at the top, because otherwise defensive senior managers are likely to disown any transformation in reasoning patterns coming from below.

In the end, the essence of life is what? Understanding? No: it is understanding in order to take action. *R*

Chris Argyris is the James Bryant Conant Professor of Education and Organizational Behaviour, Emeritus, at Harvard Business School. Known for his seminal work in the area of organizational learning, he is the author of numerous books and articles, including *Reasons and Rationalizations: The Limits of Organizational Knowledge* (Oxford University Press, 2006). He is a director emeritus of the Monitor Company.