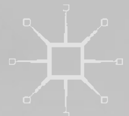
SENSORY TEMPLATES AND MANAGER COGNITION

Art, Cognitive Science and Spiritual Practices in Management Education

CLAUS SPRINGBORG



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Claus Springborg

Sensory Templates and Manager Cognition

Art, Cognitive Science and Spiritual Practices in Management Education

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Preface

This book is essentially an inquiry into the mechanisms underlying humans' participation in the creation of their own experience through their acts of comprehension. In this way, it builds on Michael Polanyi's inquiry into the personal nature of knowledge. The central theme in the book is the importance of thoroughly examining which parts of our sensorimotor experience are caused by the environment and which are caused by our own acts of comprehension. Reacting to the latter as if they were the former leads to no small variety of problems. Clearly recognizing that aspects of our sensorimotor experiences are not caused by the situations we are in, but are the very substance of the tools we use to comprehend these situations, can clear up much confusion both for the practitioner grappling with a problematic situation and for the theoretician engaged in formulating explanatory theories for various learning processes. The concrete stage for this inquiry is managerial work in organizations and the problems managers face on a daily basis, which they perceive simultaneously as of the utmost importance and as unsolvable. Such problems, as will be shown, can be solved simply by realizing which sensorimotor states the managers use to comprehend the problematic situation—and changing these.

Furthermore, the book is in a sense an attempt at building a bridge between the world of religion and science. From a young age, I loved natural science, particularly physics. I found the insights into the secret

mechanisms of the universe and the precision and beauty of the theories magical and captivating. However, when my natural curiosity became engaged by matters of human happiness and purpose, I found that physics (and natural science as a whole) had very little to contribute. So I turned to psychology and art and later to spirituality and religion in search of answers. I was fortunate enough to find teachers with great practical knowledge and with depth of understanding of scripture. After years of study and practice, I experienced the impact on my own life and I wished to make this beautiful knowledge available to others. In particular, I wanted to make it available to people whose minds are shaped by (and sometimes stuck in) the paradigm of natural science. In particular, I wanted to make the knowledge available in a way that does not require people to throw away the real beauty and value of natural science, which I knew so well. This, I came to believe, can be accomplished by finding a suitable vocabulary and by substituting teleological explanations often found in spirituality with mechanistic explanations found in natural science. It is a challenge to do this without losing the depth of the spiritual teaching. However, I have found that when one succeeds in this endeavor, it both makes the spiritual teaching more communicable and brings clarity, precision, and increased depth to this teaching. Furthermore, having a clear mechanistic explanatory theory supporting one's spiritual practice can safeguard it against gradually changing into something that is less efficient in reaching its purpose, or even harmful in that it will bring about the opposite of what we aim for. An example of the latter is given in Chögyam Trungpa's book *Cutting Through Spiritual Materialism*.

There are many people, including my students, teachers, friends, and family, who have played important roles and contributed much (knowingly or unknowingly) to the production of this book and to whom I am deeply grateful. I would like to mention a few of these here. First, I would like to thank Donna Ladkin who gave me the opportunity to spend four years exploring this topic in a PhD—an opportunity I had been looking for for seven years prior to meeting her. I have learned much from both Donna's skill in relation to academic inquiry and writing and from her rare gift of seeing other peoples' uniqueness and particular beauty. I would also like to thank Steve Taylor and Samantha Warren for encouraging me to write this book and providing me with the opportunity to do

so. Furthermore, I would like to thank Steve and Samantha together with Katja Larsen for providing useful feedback on the manuscript during the process of writing. I would also like to thank my spiritual teachers: Velusia Van Horssen, Jeremy Klein, Faisal Muqaddam, Claudio Naranjo, and Chökyi Nyima Rinpoche. Without their generosity and profound teaching of spiritual doctrines and practices, the writing of this book would not have been possible. Finally, I would like to thank the 60 managers who shared their time and troubles with me over the course of my PhD research.

CoCreation, Copenhagen, Denmark Claus Springborg
November 13, 2017

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1

Solving the Unsolvable

How can I motivate employees who are always complaining? How can I make sure that managers from other departments commit to the decisions taken in the management team? How can I keep my highly skilled employees once they are good enough to start their own business? How can I make unpopular decisions and retain the trust and good working relationship with subordinates? How can I prevent human vices such as greed and hubris from leading to flawed strategic decisions?

All managers encounter problems which have a negative impact on organizational performance—bottom line or working climate—and which defy all the managers' attempts at solving them. Such problems are often human, rather than technical. This is sometimes humorously expressed in the phrase: Management would be easy if it weren't for people. Sometimes you may find yourself in a situation where everybody in the organization seems to agree on doing something but for some inexplicable reason, it just never gets done. For example, if you are a manager in a cleaning service organization, you may want employees to systematically carry out cleaning controls as a way to secure quality. Everybody in the organization may agree that this is important. Yet, it always gets left out or down prioritized, and nobody knows why. There just never seems

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to be time to carry out the controls. At other times, you may find yourself in a situation where you feel you understand all stakeholders' interests and it is clear to you that there are conflicts inherent in the system of stakeholders which simply cannot be solved. For example, nurses have chosen their vocation because they want to help people to the best of their ability, and through their education they acquire knowledge about what today's medical technology can do for each patient. However, when they start working, they discover that due to limited resources they will often have to do what is second (or third) best for their patients. This can be profoundly discouraging to them and make them feel that they are doing a bad job as a nurse. As their manager, you may understand the problem as the inevitable result of the clash between professional and economical interests, which can never be fully solved. Yet at other times the problems are internal to the manager. For example, you may be a manager of a one-man organization. On the one hand, you know that you need to take time to follow up on potential customers and to collect and label invoices for your accountant. On the other hand, every time you engage with such administrative tasks, you feel restricted and bored as if all life has been drained out of you. Or maybe you are the manager of a team of employees, and sometimes you get angry with them, but you feel this is an inappropriate feeling for a manager to have toward employees. You cannot help it—only hide it.

This book is about those seemingly unsolvable problems managers face every day. It is about the problems which persist year after year; the problems which persist even after you have tried all the tips and tricks provided by teachers, colleagues, friends, and books; and the problems which are immune to the MBA toolbox.

This book presents a new approach to dealing with such problems. This approach is based on recent research and theoretical developments in cognitive science (Barsalou 2010; Lakoff 2012; Wilson 2002; Johnson and Rohrer 2007; Johnson 2007), which shows that cognition is metaphorical and embodied in nature, that is, we represent more abstract phenomena, such as social interactions, power, motivation, commitment, success, negotiation, communication, and value, as analogous to more concrete sensorimotor experiences. In other words, we use the structure in concrete sensorimotor experiences to give structure to more

abstract phenomena. I call the sensorimotor experiences used in this way "sensory templates".

For example, you may be faced with the problem of having a demotivated team of employees, who keep being demotivated no matter what you do. Every time you address one reason for their demotivation, another one emerges. You may feel the situation is like a tug-of-war where the employees pull in the direction of discontentment and you in the direction of contentment. Or you may feel that the situation is like Sisyphus work where raising the contentment is like pushing a large boulder up the mountain and every time you leave the employees the boulder tumbles back down into the valley of discontentment. Or you may feel that dealing with the employees is like riding your bicycle toward contentment with the breaks of discontentment on. Thus, you may use different sensorimotor experiences, such as engaging in a tug-of-war, pushing a boulder up a hill, or riding your bicycle with the breaks on, as tools to understand what kind of situation you are dealing with.

Depending on which sensory template managers use to represent a problematic situation, they will be able to imagine very different ways in which they can act in this situation. Using the tug-of-war template, a manager may try to pull harder. Using the Sisyphus template, a manager may try to find ways of making the boulder stay at the top of the mountain. Using the bicycle template, a manager may try to identify and remove the cause of the friction.

It may seem that it shouldn't matter which of these sensory templates you use. However, in this book I argue that it matters a great deal. In fact, seeing the problematic situation as analogous to one particular sensorimotor experience may result in the problem appearing unsolvable, whereas seeing the problematic situation as analogous to a different sensorimotor experience can result in the problem becoming an easy thing to deal with. The reason the use of a particular sensory template can make a situation appear unsolvable is that none of the possible ways of acting afforded by this sensory template work. In the example with the discontent employees, it is possible that no forms of pulling, such as monetary rewards, acknowledgment, threats of sanctions, and highlighting successes, will ever make them content. In such situations, a solution can be found by changing the sensory template you use to imagine possible actions in

the situation to one that *does* afford efficient ways of acting. In the example with the discontent employees, it is possible that no forms of pulling will work, but detecting and removing forms of friction may.

The starting point of this book is Chris Argyris and Donald Schön's work on managers' theories of action (Argyris 1976; Argyris and Schön 1974; Schön 1986). In short, Argyris and Schön claim that managers' actions are guided by unconscious assumptions about markets, the organization, what motivates employees, and so on. They call these assumptions theories-in-use. What theories-in-use managers operate from can be deduced from their concrete actions and may be very different from the theories the managers consciously believe they are following, their espoused theories of action. Sometimes managers' theories-in-use are detrimental to their efficiency as managers and consequently to organizational performance. Thus, it is important to change such theories-in-use to increase managers' efficiency. However, this can be very difficult to do (Argyris 1990). In Chap. 2, I present Argyris and Schön's work and, drawing on a range of relevant psychological theories, I elaborate on why becoming aware of, testing, and changing one's theories-in-use is both useful and a formidable challenge.

In Chap. 3, I present new research and theoretical developments in cognitive science. I focus on Cognitive Metaphor Theory (Lakoff and Johnson 1980; Lakoff and Johnson 1999; Grady 1997; Grady 2005) and embodied cognition (Barsalou 1999; Barsalou 2008; Barsalou 2010; Wilson 2002; Johnson and Rohrer 2007; Lakoff 2012). These theories show that some of the fundamental theories that guide individuals' actions are metaphorical links between abstract concepts and sensorimotor experiences. In this chapter, I develop the concept of sensory templates as referring to the way managers model their social interactions as analogous to physical interactions, like pulling a rope, pushing a boulder up a hill, riding your bicycle with the brakes on, removing stones to let a river flow more easily, and so on.

In Chap. 4, I describe nine cases from my own research to illustrate how working with sensory templates can help managers solve seemingly unsolvable problems. I describe the cases in some detail, as it might be interesting for managers reading this book to follow the learning processes of the research participants.

In Chaps. 5 and 6, I look at two new trends within management education, namely the use of art (Taylor and Ladkin 2009) and the use of religious and spiritual doctrines and practices (Delbecq 2013). I argue that the concept of sensory templates can greatly develop our understanding and use of these approaches to management education.

In Chap. 5, I argue that art-based methods can be used both for making managers aware of the sensory templates they use (projective technique) and for finding new sensory templates they can think with—either in classical works of art (illustration of essence) or in the experience of being engaged in art creation for its own sake (making).

In Chap. 6, I focus on the use of religious and spiritual doctrines and practices. As an example, I examine the use of teaching on vices and virtues as it appears in Greek philosophy, Christianity, and Tibetan Buddhism. It has been suggested that cultivation of virtue is important to managers as a means of preventing internal forces of human vices in the individual manager from leading to flawed strategic decisions detrimental to the organization, its environment, and the manager's own career (Delbecq 2006). The main argument in this chapter is that cultivation of virtue is not primarily a matter of adhering to a morally good code of conduct, but rather of adopting specific sensory templates from which virtuous acts follow spontaneously and without any effort. Drawing on Tibetan Buddhism, I consider which sensory templates have this effect.

In Chap. 7, I present a collection of practices for working with sensory templates through the use of language and exercises aimed at increasing managers' sensory awareness. I call these practices Somatic-Linguistic Practices.

This book is written for managers, academics, and management educators. The individual reader may belong to one, two, or all three of these categories. Chapters 2 and 3 lay the theoretical foundation for the following chapters. These are written primarily for academics. Chapter 4 contains detailed descriptions of real-life cases. This chapter is primarily written for managers, but will also interest academics who wish to use the detailed case descriptions to further their own theoretical work. Chapters 5 and 6 are written primarily for academics in the fields of art-based methods in management education and management spirituality and religion

respectively and for management educators working with such methods. Chapter 7 is dedicated primarily to practitioners involved with management education. However, all chapters deepen the content of the other chapters.

The ideas presented in this book have been developed through the weaving of my personal experiences in (at least) three areas: my doctoral work with art-based methods in management education, my work as a dance teacher, and my work as a psycho-spiritual teacher/therapist. As it can be useful for the reader to know a bit about my background, I will briefly describe my experience with these three areas.

I did my doctoral work at Cranfield School of Management from 2010 to 2014. The goal of this work was to develop an explanatory theory for the learning processes which can be facilitated by art-based methods in management education. I worked with 60 experienced managers from both public and private sector organizations. My interest in this area arose in 2004, while I was working as a musician and a choral conductor. At the time in Denmark, there had for some years been a considerable political interest in exploring the possibilities of educating artists to facilitate innovation processes in organizations (and other kinds of collaboration between art and business in general). At first, I was very skeptical about this idea. However, by chance, I got the opportunity to facilitate a few innovation processes, and I was struck by how some of the managers present seemed to lack the fundamental ability to get inspired by each other and to capture and develop the ideas which emerged in the moment when meeting new people. I saw how many managers would have formulated ideas in advance which they saw as profitable for their organization and how they would try to push these ideas on the other participants instead of exploring what new possibilities could arise from the meeting. This was a stark contrast to the collaboration processes I knew from co-writing songs and other forms of artistic collaboration and it convinced me that one does, in fact, learn something important from working with art that can be useful to managers. I decided to find out what that something was. After some years of reading and talking to people, I wrote a paper for a special issue of the academic journal *Leadership*. When it got published, one of the editors, Donna Ladkin, offered to be my supervisor and helped me get a Ph.D. position at Cranfield School of Management, an opportunity for which I'm very grateful.

After the first year of studying at Cranfield, I began to get many offers to teach dance (tango and contact improvisation) at various schools and festivals in both Eastern and Western Europe. This led me to embark on a three-year tour around Europe as a dance teacher while simultaneously working on the Ph.D. I used the dance workshops as an informal space for exploring and developing ideas about the links between concrete sensorimotor experience and abstract concepts. In particular, the highly focused contact improvisation practice known as the Underscore (Koteen and Smith 2008, 90–98) had great influence on my thinking. In this practice, dancers are improvising together for several hours. As preparation for this improvisation, the dancers are introduced to 40 or 41 hieroglyphs which refer to different aspects of the dance experience, such as attraction, repulsion, coincidence, confluence, empathy/resonance, collision, engagement, development, resolution, disengagement, streaming, the gap, telescoping awareness, listening, and witnessing, to name a few. I noticed that through the Underscore practice, such concepts can become firmly and consciously grounded in physical experiences of moving bodies. Furthermore, I noticed how the experiences of dancing would appear in other contexts as inner representations of these concepts. For example, the moment I decided to engage with someone at a conference, I felt the familiar inner sensation of moving toward someone and making physical connection which I had become familiar with through contact improvisation. Such experiences led me to develop workshops where managers could learn to develop their understanding of the concepts of leading and following through engaging with exercises normally used to teach tango and contact improvisation (Springborg and Sutherland 2014; Springborg and Sutherland 2015).

Another significant influence on the present book is my work as a psycho-spiritual teacher. Since 2005, I have studied Buddhist meditation and therapeutic processes based on various spiritual practices and on the development of somatic awareness. I studied with teachers such as Claudio Naranjo (Enneagram and Buddhist meditation); Chökyi Nyima Rinpoche (Tibetan Buddhism); and A. H. Almaas, Faisal Muqaddam, Velusia Van Horssen, and Jeremy Klein (Diamond Approach/Diamond Logos). Since 2010, I have taught the doctrines and practices I learned from these teachers to managers, therapists, and spiritual practitioners in London,

Edinburgh, Copenhagen, the Findhorn Foundation, and Warsaw both in group settings and in one-to-one sessions. Doing this work in parallel with my doctoral work made it clear to me that spiritual teaching can be understood as a matter of changing the sensory templates individuals use to experience self, others, and life. Just like the managers who participated in the Ph.D. research experienced that severe organizational problems dissolved when they changed the sensory templates they used to understand these problems, so much of the suffering humans experience is due to the sensory templates they use to understand self, others, and life. In particular, Buddhists hold that seeing phenomena as permanent and as possessing a self-existing substance is a mistaken ontological view (ignorance) and that this is the root of suffering and of vices such as greed and hatred.

It is my hope that this book can be of use to managers as well as researchers and anyone else who wishes to develop deeper experiential insight into their own participation in the problems they face in everyday life and through such insight realize greater degrees of efficiency, freedom, and well-being.

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Part I

Theory

2

Increasing Leadership Effectiveness

Managers operate from assumptions about markets, the organization, what motivates employees, and so on. These assumptions guide managers to act in ways that are more or less profitable for the organization. In order to be efficient, managers need to be able to continuously evaluate how efficient it is to operate from their current assumptions and change them when necessary. Unfortunately, it is not possible to simply read what the best assumptions are and adopt those at will. Furthermore, it is not easy for managers (or humans in general) to become aware of the assumptions they operate from.

In this chapter, I will present a range of psychological theories which make clear why testing the efficiency of one's assumptions and changing them if necessary is both useful and difficult. In short, it is useful because operating from certain assumptions can create more problems than it solves. There are three main difficulties. First, managers usually believe they already know which set of assumptions they operate from (their espoused theories of action). However, these are often different from the assumptions they actually operate from (their theories-in-use). This discrepancy between espoused theories of action and theories-in-use derives from the fact that theories-in-use arise automatically and

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unintentionally from experience. Thus, the formation of assumptions about action is largely an unconscious process. Second, theories-in-use are self-concealing and self-confirming, because they highlight aspects of our experience which can be taken as evidence of their validity. Third, managers (and humans in general) seek coherence between their beliefs and actions through rationalizations. Thus, when actions seem at odds with espoused beliefs, this discrepancy is explained away.

I will present the psychological theories together with descriptions of some of the seminal pieces of research through which these theories have been formulated and tested. I do this for two reasons. First, it provides examples of a skeptical and critically exploratory mindset which is useful for managers to learn if they wish to develop the skill of discovering, testing, and evaluating the assumptions they operate from. Second, it offers an example of transparency in reasoning, that is, openly presenting the evidence upon which a claim is made. Such transparency makes it possible for others to make their own critical evaluation of the strength of the claims given the evidence they are based on and the method through which this evidence was produced. This attitude of being transparent about the process through which one arrives at one's beliefs is also useful for managers to learn as it provides a way of inviting others to participate in the process of discovering, testing, and evaluating the assumptions behind strategic decisions and other managerial actions.

2.1 Managers' Assumptions and Efficiency

In the late 1960s, there was a company whose core product was mechanical calculators. They also produced typewriters and office furniture. They had been successful in the business for 50 years and had great confidence in their core product. However, the 1960s saw the invention of the electronic calculator. The board of the company was aware of this new invention, but they *assumed* that people would only slowly take on board this new technology. So the board decided to keep focusing on manufacturing high-quality mechanical calculators at a low price. This had been their recipe for success for the past 50 years. When profits decreased, they decided to do what many organizations might

do: focus on their core product, the mechanical calculator. They closed down their production of typewriters and office furniture. They even rejected including in their line of products the electronic calculators some of their own employees had designed. However, as we know today, their *assumption* about the market for mechanical calculators was wrong. People quickly adopted the new technology, and after a few years of losses, the owners had to sell the company.

This story (Nystrom and Starbuck 1984) shows that managers' behavior is guided by assumptions about the organizational reality and that operating from the wrong assumptions can lead managers to behave in ways that are detrimental to the organization. The situation is similar to the situation where you have not updated the map in your SatNav. If no changes have been made to the roads since last time the SatNav was updated, it will still guide you successfully to your destination. But if roads have been closed and new ones built, your SatNav might end up guiding you to a dead end.

However, the story also shows how assumptions, behavior, and environment (as perceived through assumptions) can be self-fulfilling and self-reinforcing. The managers' assumptions made them believe that focusing on the core product was the appropriate response to decreasing revenue. Doing so caused even further decrease in revenue, which in turn was taken as evidence that it was indeed difficult times and that they therefore needed to focus even more narrowly on their core product. Thus, unlike the SatNav, when assumptions become obsolete, this may not be immediately apparent because these same assumptions are used to interpret what one experiences from the environment. In other words, a dead end may not be recognized as a dead end.

It may be obvious that managers operating on wrong assumptions about the market can have disastrous consequences for the organization. However, in the above story, it was not only the managers' assumptions about the market that led to the downfall of the organization. It was also their assumptions about the nature of technological and social change, namely that people would be slow to adopt new technology, and their assumptions about knowledge and learning, namely that they knew more about the business than their employees and therefore did not need to listen to the employees, who were pushing to get electronic

calculators accepted into the organization's line of products. Likewise, managers hold assumptions about how to handle conflict; about decision-making processes; about whether humans are fundamentally caring and industrious or selfish and lazy; about the nature of power, motivation, commitment, and efficiency; about what constitutes organizational and personal success; about what constitutes valid information; about the value of failure and of negative emotions; and so on. All such assumptions guide managers' behavior and will therefore affect organizational performance.

Most such assumptions are unconscious and have emerged automatically and unintentionally from previous experience. For example, the assumptions the managers in the above story held about the market, technological and societal change, and knowledge and learning all came out of the managers' previous experience. They had all been valid and offered good guidance in the past when society and technology changes were much slower than in the 1960s and 1970s, and management was more about designing and maintaining efficient production processes than about managing change.

Finally, it may sometimes be difficult to ascertain whether assumptions are right or wrong. For example, assumptions about human nature or about how to handle conflicts may not be squarely right or wrong. However, such assumptions can still be evaluated according to how useful they are in guiding managers' behavior and securing organizational success.

2.1.1 Espoused Theories of Action vs. Theories-in-Use

In 1974, Chris Argyris and Donald Schön published a book called *Theory in Practice: Increasing Professional Effectiveness* (Argyris and Schön 1974). This work has been massively influential in the field of management education. It deals with the conscious and unconscious reasoning processes underpinning managers' behavior. In particular, they deal with the following questions:

1. How can we identify the assumptions which guide managers' behavior?

2. How can we facilitate an ongoing learning process through which managers can become conscious of and critically evaluate these assumptions?
3. Which assumptions block/support such an ongoing learning process?

Regarding the first question, Argyris and Schön showed that there is often a difference between *espoused theories of action*, which are the assumptions, worldviews, and values managers *believe* guide their behavior, and *theories-in-use*, which are the assumptions, worldviews, and values which *in actuality* guide managers' behavior. They write:

> … espoused theory of action … is the theory of action to which he gives allegiance, and which upon request, he communicates to others. However, the theory that actually governs his action is his theory-in-use, which may or may not be compatible with his espoused theory; furthermore, the individual may or may not be aware of the incompatibility of the two theories. (Argyris and Schön 1974, 7)

For example, a manager may state that he[1] deals with conflicts by bringing together all stakeholders so they can work out a solution through open dialogue. However, in actuality, this manager may simply use his organizational authority to make unilateral decisions based on his own viewpoint. Another example could be a manager stating (and believing) that her actions are guided by a concern for providing the best possible service to the customers, when in fact her actions are guided by profit maximization—often at the expense of good service. A third example could be a manager who praises the value of meetings with his colleagues from other departments to coordinate and create coherence, but in actuality he never has time to show up for these meetings, showing that he does not value these meetings in practice. A fourth example could be a manager who claims to be very open to hearing other peoples' opinions, but when she is contradicted she gets defensive and uses sarcasm and ridicule to advocate her own point of view. A fifth example could be a manager who proclaims that it is important for organizations to take risks and who sees himself as a bold and daring manager, yet in his actual management decisions he may be very risk averse.

Argyris and Schön emphasize that the managers in such examples are not necessarily dishonest. They may genuinely believe they are following their espoused theory of action while being unaware of the theory-in-use which *actually* governs their actions. One important consequence of this is that it is possible to change espoused theories while keeping one's theory-in-use. Managers may, for example, after a management course adopt the management theories taught there as espoused theories of action, while their concrete actions keep being informed by the same theories-in-use they used before attending the course. They may genuinely believe that they are using the new theories to guide their actions while remaining unaware of the theory actually guiding their behavior. Therefore, it is difficult to create courses which will affect managers' behavior (and not merely their rhetoric) once they are back at the workplace. It is also difficult to study managers' theories-in-use by *asking* them about what assumptions, worldviews, or values govern their behavior. Instead, to obtain knowledge about which theories-in-use govern managers' behavior, it is necessary to observe their behavior and engage in a joined process of making inferences about what theories-in-use led the manager to behave in the observed manner.

Argyris and Schön believe that manager efficiency comes from congruency between espoused theories of action and theories-in-use. In other words, an important part of increasing managers' effectiveness is to assist them in becoming aware of the theories-in-use which guide their actions. In doing so, managers acquire the possibility of testing and evaluating the effects of their theory-in-use. If they become aware of what they do, and they *experience* for themselves that their behavior has negative consequences that are unacceptable to themselves, and they do not perceive that the negative consequences as caused by something other than their own behavior, their theories-in-use can automatically adjust. Thus, helping managers become aware of their theories-in-use and consciously experiencing the consequences of operating from these theories-in-use is an important job for management educators.

2.1.2 Single-Loop and Double-Loop Learning

Regarding the second question, Argyris and Schön, drawing on Gregory Bateson's work on the logical levels of learning, introduced the distinction

between single-loop learning and double-loop learning. When the actions of a manager do not achieve the desired objective, the manager can try to employ different strategies to achieve the same objective. Argyris and Schön call this kind of trial-and-error process single-loop learning. However, if the manager consistently fails to achieve the objective regardless of which action strategy she uses, she may begin to question the objective itself. This process of questioning the formulation of objectives themselves is what Argyris and Schön call double-loop learning.

They illustrate this by referring to a thermostat that is set to keep room temperature at a fixed temperature, say 22 °C. The thermostat monitors the room temperature and acts accordingly. It turns on the heater when the room temperature drops below 22 °C and switches the heater off when the room temperature rises above 22 °C. This is single-loop learning. If the thermostat should begin pondering whether 22 °C is the right temperature for the room, this would be double-loop learning. Similarly, a manager may always strive to appear competent in any situation. He may employ a number of strategies in pursuit of this objective. He may say little in order not to reveal lack of competence. He may engage in constant studies so as always to have something intelligent to say about any situation, giving the appearance of competency. Or he may ridicule or demote people who openly question his competency. Learning new ways of maintaining an appearance of competency would be single-loop learning. Questioning whether it is always good to appear competent would be double-loop learning. Another manager may believe it is good to suppress conflicts. She may avoid topics she knows to be conflict material, punish employees for engaging in conflicts, and so on. Learning to become better at suppressing conflicts would be single-loop learning. Questioning whether conflict is necessarily a bad thing that should be suppressed would be double-loop learning.

Because managers' deeper assumptions can often be formulated as assumptions about the importance of keeping certain key variables within a certain range (just like a thermostat keeps the temperature within a certain range), Argyris and Schön call these deeper assumptions governing variables. In the examples above, the managers would keep the variable of others' perceptions of their own competence high and the variable of conflict low.

Argyris and Schön argue that double-loop learning leads to more efficient strategic decisions about how to design and implement organizational actions than single-loop learning. In other words, being willing to examine, question, and potentially change the governing variables they pay attention to and what ranges these variables should be kept within leads to better informed actions than being concerned solely with learning new ways of keeping the same governing variables at the same levels.

2.1.3 Models I and II

Regarding the third question, Argyris and Schön propose that whereas there are many possible espoused theories, the theories-in-use one encounters in practice are very limited and can be grouped in to two categories: those that inhibit double-loop learning (model I) and those that support double-loop learning (model II).

Model I is characterized by notions, such as managers should try to achieve objectives in the form the manager himself sees, winning is always better than losing, and negative emotions should be repressed and rationality emphasized. Such notions are enacted through strategies of unilateral control and self-protection. Managers will, for example, avoid or hide embarrassing facts to save face, treat their own views as obviously true, make claims that are not based on real inquiry, and not be transparent about the basis of their claims. Thus, this model inhibits the possibility of double-loop learning.

Model II is characterized by emphasis on valid information brought about through bilateral control and transparency about beliefs, feelings, intentions, and transparency about what one's beliefs are based on. The actions of model II include surfacing conflicting views and public testing which enables inquiry and the possibility of disconfirming one's beliefs and ideas. In model II, managers will combine articulate advocacy of their own views with openness and interest in understanding the conflicting views of others. Thus, this model supports the possibility of double-loop learning.

Changing from model I to model II is difficult because for the defensive model I strategies to work, they have to be self-concealing. The result

is that these strategies make it very difficult for the individual manager to discover the defensive attitudes which underpin their actions. Managers operating from model I will often claim that they are acting from model II. Doing so is in itself part of the defensive attitude. Claiming that one is operating from more socially accepted assumptions and values can be an efficient way of defending against expected attacks. Revealing that self-protection, unilateral control, and the wish to win at all costs are the true drivers behind one's actions leaves one open to attack—in particular from others who operate from model I. Defending oneself by claiming to operate from model II is most efficient if the defense mechanism is unconscious, that is, if the manager genuinely believes that he is acting from model II. This is why model I inhibits double-loop learning, which is based on revealing and evaluating the true theories-in-use. Model I can even be institutionalized in organizational routines and policies:

> whenever human beings are faced with any issue that contains significant embarrassment or threat, they act in ways that bypass, as best they can, the embarrassment or threat. In order for the bypass to work, it must be covered up … Organizational defensive routines are actions or policies that prevent individuals or segments of the organization from experiencing embarrassment or threat. Simultaneously, they prevent people from identifying and getting rid of the causes of the potential embarrassment or threat. Organizational defensive routines are anti-learning, overprotective, and self-sealing. (Argyris 1990, 25)

2.2 Theories-in-Use Emerge Automatically and Unintentionally from Experience

How is it possible that managers consciously believe they are following one set of assumptions and values (espoused theories of action) while actually following a different set of assumptions and values (theories-in-use)? Why is it so difficult to engage in double-loop learning and to shift to the model II belief system if we know that this is more efficient? As mentioned above, Argyris and Schön suggest that it is a matter of avoiding threats and embarrassment. However, this explanation on its

own may be too simplistic. After all, if by avoiding double-loop managers risk bankruptcy, it can be argued that this is both a big threat and quite embarrassing. Looking at theories of learning can deepen our understanding of why there is often a discrepancy between espoused theories of action and theories-in-use.

Below I propose three reasons: that theories-in-use are formed largely through unconscious, automatic, and unintentional processing of experience; that theories-in-use are self-fulfilling and self-reinforcing, that is, they create environments which seem to confirm their validity; and that humans seek to create coherence between their beliefs and actions through rationalizations.

Whereas espoused theories can be acquired through conscious and intentional processes in theoretical education, in the first of these reasons theories-in-use are more likely to be formed automatically and unintentionally from *experience* through processes like associative learning and social-cognitive learning. Thus, theories-in-use are only indirectly affected by what is learned through theoretical education.

Associative learning is the process through which different elements in our experience get coupled, so the presence of one element will make us assume the presence of another element and *act* accordingly—even if we do not immediately perceive this second element. If you take out the leash, your dog may associate this gesture with going for a walk, and it may start to wag its tail in excitement. If someone stretches out their hand, you may assume that they want to greet you and you may react by grabbing their hand, shaking it and greeting them back, since you associate the outstretched hand with this social ritual. In these examples, behavior is caused by one element that is present because it is associated with another element which is not (yet) present. The dog reacts to the leash because it is associated with walks, and you react to the outstretched hand because it is associated with handshakes. Associative learning enables us to predict consequences and to know things about a situation beyond what is immediately perceivable with our senses. We learn to associate two elements if over time they consistently appear together in our experience. If every time we let go of an apple it falls to the floor, we come to expect apples to fall when we let go of them. If every time the boss calls us to her

office she shouts at us, we may start feeling bad when scheduling a meeting with the boss, because we expect to be shouted at.

Theoretical education can only influence associative learning insofar as this education results in the individual trying out courses of action which will highlight certain consistencies in the individual's experience that the individual had not previously noticed. Repeatedly noticing a new consistency between two elements in one's experience will over time generate an association between these two elements in the individual. A manager may hear about the Hawthorn experiments from the 1920s and 1930s and about how taking an interest in his employees' general well-being can increase productivity. If being presented with this theoretical knowledge leads the manager to spend time talking to employees about their general well-being and if he verifies through his own experience that the team consistently performs better whenever he does this, then the association can form over time. It is the repeated, experiential verification of a theoretical link which makes our brain form associations that will guide our actions. Without repeated, experiential verification, the manager may *believe* the theoretical idea, and even find it attractive or admirable, but it will remain an espoused theory, that is, something the manager says he believes in when asked, rather than a theory-in-use, that is, something that guides the manager's actions even when he is not consciously making an effort to follow the theory.

Social learning is the process through which we pick up ways of responding (in thoughts, emotions, or actions) to particular situations from observing role models' behavior. Role models can be individuals who are important to the learner. Children copy gestural, emotional, and verbal patterns and patterns of reasoning from their parents. Managers copy the mannerisms of leaders they look up to. Role models can also be groups of people. If a boy grows up in a culture where crying is seen as unmanly, he will learn to hide sadness. If a girl grows up in a culture where assertiveness is seen as not feminine, she might learn to hide her vitality. If everyone in department A feels animosity toward people in department B, newcomers to department A may, through social learning, adopt this general sentiment of animosity toward the people working in department B.

Theoretical education can only influence social learning insofar as this education affects the manager's choices of which people she looks up to

and spends time with. For example, a manager after hearing about the Hawthorn experiments may choose to become a member of a group of managers who, as part of their managerial practice, talk to their employees about their general well-being. Or the manager may choose to become a mentee of an experienced manager who believes in the importance of talking to employees about their general well-being. In this way, theoretical education may influence what social contexts the manager chooses to expose herself to and thus influence what she will pick up through social learning. On the other hand, it is possible to imagine a manager who, in spite of a sincere wish to incorporate attention to the general well-being of her employees into her management practice, chooses to remain surrounded by colleagues who do not pay attention to the general well-being of their employees. For this manager, the theoretical teaching may lead to changes in her espoused theories, but not in the theories-in-use that she adopts through social learning.

To understand the processes of associative and social learning, it is instructive to look at some of the research which led to the scientific formulation of these learning processes.

2.2.1 Dogs and Bells: Mental Models Formed Through Associative Learning

Behaviorists have studied associative learning by looking at how observable behavior is shaped by various forms of conditioning. Behaviorist studies include Pavlov's (1927) and Watson's (1924) work on classical conditioning, that is, the formation of associations between external stimuli and involuntary behavioral responses; Thorndike's (1928) work on connectionism, that is, the formation of associations between stimulus and response; and Skinner's (1953) work on operant conditioning, that is, the formation of associations between our own voluntary behavior and consequences, which in turn means that behavior is strengthened when followed by rewards and diminished when followed by punishment.

The research program of behaviorism was based on empiricism, that is, the idea that all valid, scientific knowledge must come exclusively from sense experience. Therefore, behaviorists claimed that for psychology to be a rigorous, empirically based science it must study only what is

possible to observe, namely behavior. Behaviorism rejects any psychological explanations, including explanations of learning processes, which refer to unobservable cognitive and emotional states. Thus, behaviorists would reject the idea of a mind in which associations would form—and would probably not be happy about having their research referenced in a chapter on the formation of theories-in-use through associative learning.

Today the behaviorist theories of associative learning have been found too simplistic, and there is a general agreement that cognitive and emotional states are both relevant and possible to study in scientific ways. However, the experimental work done by behaviorists is still highly relevant and can shed light on how managers' theories-in-use emerge in unconscious, automatic, and unintentional ways through associative learning. Even though the behaviorist theories are rejected, any alternative theory of learning has to be able to account for the results of the behaviorists' experiments. In the following, I will introduce some of the key experiments from behaviorism.

Classical conditioning is the formation of associations between external stimuli and *involuntary* behavioral responses. In his famous experiment on the digestive glands of dogs (Pavlov 1897), Pavlov sounded a buzzer every time he fed a dog. When the dog was presented with food, its natural (involuntary) reflex was to start salivating. Pavlov observed that after a period of consistently sounding the buzzer every time the dog was fed, the sound of the buzzer alone was enough to trigger the salivating reflex. This phenomenon became known as classical conditioning. If a sensory stimulus triggers a physical reaction in an individual and this sensory stimulus over a period of time consistently occurs simultaneously with another sensory stimulus, the second sensory stimulus can after a while become associated so strongly with the first sensory stimulus that it can trigger the physical reaction—even in the absence of the first stimulus.

In another classical, although ethically dubious, experiment, Watson showed a similar effect in humans. Watson first presented a toddler, little Albert, with several objects, including a burning newspaper, a Santa Claus mask, a monkey, a dog, a rabbit, and a white rat. Albert was not afraid of any of these objects. He was allowed to play with the white rat, which he particularly liked, but every time he reached for it, Watson would make a loud noise behind Albert by striking a steel bar with a

hammer. After some time, little Albert began to show signs of fear, rather than pleasure, when he saw the white rat. Watson took this as evidence that Albert had become conditioned to exhibit a fear response at the sight of the rat. Furthermore, at this point in the experiment, Albert also showed signs of fear at the sight of other furry objects, such as the rabbit, the dog, and even the bearded Santa Claus mask. This study has *many* methodological problems, which leaves its conclusions somewhat dubious. However, it has been highly influential. When it was published, it was taken as evidence that the classical conditioning Pavlov had observed in dogs could be used to explain human behavior. The claim that all human behavior can be explained as the result of conditioning was later proven to be false. However, most managers will be familiar with the effect of conditioning from their own work experience. A manager once told me a story about having gone through a particularly stressful time at work. Every time his company phone rang, it would be someone who was angry about something. He eventually left the organization, but for years after he had left, he still cringed whenever he heard the standard Samsung ringtone, which had been the ringtone of his company phone during the stressful period.

Operant conditioning is the formation of associations between external stimuli and *voluntary* behavioral response. These associations link together stimuli, behavioral responses, and consequences. If I see a piece of chocolate (stimulus) and I eat it (response), I will feel pleasure (consequence). If I see fire (stimulus) and I touch it (response), I will feel pain and possibly have to go to the hospital (consequence). Skinner studied how behavior can be shaped through schedules of reinforcement (reward) and punishment. He used pigeons, not humans, as test subjects. For example, Skinner showed that he could make pigeons *increase* a particular behavior by consistently rewarding them when they exhibited this behavior. The reward could either be offering something pleasant to the pigeon (positive reinforcement) or removing something that was unpleasant to the pigeon (negative reinforcement). In organizations, monetary bonuses could be an example of positive reinforcement, and rewarding a hardworking employee by taking them off the nightshift schedule or relieving them from certain tedious administrative obligations could be examples of negative reinforcement. Skinner also showed that he could make pigeons *decrease* a certain behavior by consistently punishing them when they exhibited this behavior. The punishment could either be doing something

unpleasant to the pigeon (positive punishment) or removing something that was pleasant to the pigeon (negative punishment). Having managers explain themselves publicly when they underperform could be an example of positive punishment and cutting managers budget or other resources when they underperform is an example of negative punishment.

Skinner experimented with a variety of reinforcement schedules, such as:

1. Continuous reinforcement: giving a reward every time a pigeon exhibits the desired behavior
2. Fixed ratio reinforcement: giving a reward every fifth time a pigeon exhibits the desired behavior
3. Fixed interval reinforcement: giving a reward every five minutes if the pigeon has exhibited the desired behavior within those five minutes
4. Variable ratio reinforcement: giving a reward after an unpredictable number of times the pigeon has exhibited the desired behavior

Through these and similar experiments, Skinner made a number of interesting observations. For example, he observed that reinforcement was more efficient in shaping behavior than punishment. He noticed that different reinforcement schedules made the pigeons adopt the desired behavior faster or slower (response rate). Similarly, for different reinforcement schedules, there would be a difference in how long a pigeon would keep exhibiting an acquired behavior after the researcher had stopped rewarding the behavior altogether (extinction rate). For example, if the pigeon had been consistently rewarded with food for pushing a lever, the pigeon quickly stopped pushing the lever when it was no longer rewarded with food for this behavior. However, if the pigeon had been rewarded in an unpredictable manner for pushing a lever, the pigeon would keep exhibiting this acquired behavior, and even increase the behavior long after the rewards were no longer given. I will return to this last result later.

Even though the behaviorist program has been found to be too simplistic in its exclusion of mental states, the results of the research described above are still interesting. Even if the behaviorists' own interpretation of the research is questionable, any theory of how learning works will still have to account for these research results. If we thus reinterpret these results through the lens of Argyris and Schön's theories of action, they can be taken to suggest that when an individual repeatedly experiences

that a certain behavior is followed by a certain reward or punishment, this connection will be incorporated into the theories-in-use which guide his behavior. In other words, theories-in-use can emerge automatically from experienced connections.

Furthermore, behaviorist research on conditioning has shown that certain kinds of conditioning can lead the individual to behave in ways that produce experience which in turn reinforces this conditioning. In the words of Argyris and Schön, we may say that certain kinds of conditioning can lead to self-fulfilling and self-reinforcing theories-in-use, that is, theories-in-use that lead the individual to behave in ways that produce responses from the environment which are taken as evidence of the validity of these theories-in-use, efficiently closing off the individual to information that would challenge the theories-in-use they operate from. I will discuss three such experiments (intermittent reinforcement, learned helplessness, and anticipatory-avoidance learning) in Sect. 2.3.

First, however, I will look at the second source of theories-in-use mentioned above, namely social learning.

2.2.2 Beating Bobo: Theories-in-Use Formed Through Social-Cognitive Learning

In the 1960s, Albert Bandura, a highly influential psychologist, was studying the acquisition of novel behavior through social observation. One of his most famous experiments was the Bobo doll experiment.

In the Bobo doll experiment, 72 children, age 3–6, were divided into three groups (equal number of girls and boys in each group). The children were then taken individually through three rooms. In the first room, the children in the three groups were exposed to different experiences. The children in the first group would play with toys for about ten minutes while watching an adult being physically and verbally violent toward a one-meter tall clown doll named Bobo. The adult would hit the doll in the neck with a hammer and shout certain words. The children in the second group would instead watch an adult play with toys while ignoring the doll. The children in the third group (the control group) did not watch any adult while playing with their toys. In the two following rooms, children from all groups were treated the same. The second room contained

some very nice toys, but when the child began playing with the toys, a researcher told them that these toys were the best ones and that they were reserved for other children. This was done to trigger a mild level of aggression in the children. The third room contained some ordinary toys, a Bobo doll like the one in the first room and some aggressive toys, such as a hammer, darts, and a toy gun. The children were observed through a one-way mirror. In this room, children from the first group, who had watched the adult beat up Bobo, were far more likely to physically and verbally attack the Bobo doll than the children from the other groups. Their attacks would in many cases imitate the attacks of the adults.

In a later experiment, Bandura found that observing the consequences of the adult role model's aggressive behavior also had an impact on whether the children would imitate the adult's aggressive behavior in the third room. In this experiment, all children would watch an adult attack Bobo in the first room. Children who observed the adult being praised for the aggressive behavior toward the Bobo doll were more likely to exhibit aggressive behavior toward the Bobo doll in the last room. Children who observed the adult being scolded for attacking the Bobo doll were less likely to attack the Bobo doll later.

While these results may not be surprising today, the experiments were highly significant at the time, because they challenged the dominant behaviorist view. As mentioned above, the behaviorists believed that behavior was determined by environment through the process of conditioning, that is, individuals repeat behavior for which they have been rewarded in the past and avoid behavior for which they have been punished. Behaviorists believed that cognition did not play any part in this process of shaping behavior. Through his experimental work, Bandura demonstrated that behavior can come from observation rather than from personal trial and error. The children did not rehearse the aggressive behavior but simply copied it from what they saw. Furthermore, the experiment demonstrates that cognitive processes *do* play a part in learning. For example, children can *retain* mental images of observed behavior which they can later *reproduce*. Children can also form expectations about whether the observed behavior will be punished or rewarded by watching others being punished or rewarded for this behavior (Bandura called this *vicarious reinforcement*). Imagined rewards for certain behavior can

motivate the child to model the behavior, and for a child to model a behavior they need to pay *attention* to this behavior, and motivation among other factors influences which behavior the child pays attention to. Thus, many different cognitive processes play a part in the development of behavioral patterns.

Bandura called such learning through copying observed behavior social learning (or social-cognitive learning). In the words of Argyris and Schön, we can say that the Bobo experiments demonstrate how theories-in-use can emerge from observation of how others behave and of how this behavior is responded to. In short, theories-in-use can form through social learning.

One concept that is central to the work of Bandura is *reciprocal determinism*. In short, this is the idea that the cognitive and behavioral processes (attention, retention, reproduction of behavior, and motivation) and the environment all determine each other. An individual may observe others having fun dancing lindy-hop (environment) and decide to start taking lindy-hop classes (change in behavior). Learning to dance lindy-hop will motivate the individual to pay attention whenever they observe someone dancing and attempt to retain mental images of the lindy moves in order to reproduce these later (cognition). Inversely, taking classes in lindy-hop (behavior) may lead the individual to go out dancing, travel to lindy-hop festivals, and generally hang out more with lindy-hoppers (change in environment). Another example of how reciprocal determinism works could be an alcoholic who may be treated with pills causing nausea when he drinks alcohol. From a purely behaviorist perspective, the experience of the unpleasant nausea would condition the alcoholic to stop drinking. However, the knowledge that the nausea is caused by the pills rather than the alcohol (cognition) may override this conditioning and affect behavior in different ways, such as drinking in spite of the nausea or stopping the pills. Thus, it is not simply environment that determines behavior (the behaviorist view). Cognition, behavior, and environment can all determine each other.

Reciprocal determinism shows that it is possible to develop self-reinforcing loops between cognition, behavior, and environment. For example, being in an environment where aggressive individuals dominate can lead to the belief that aggression pays off and that if one does not behave aggressively one will become the victim of others' aggressive

behavior (cognition). Such beliefs can lead to developing aggressive ways of acting (behavior). Such behavior can lead to aggressive push-back from the environment, which can reinforce the initial belief that aggression is necessary to avoid becoming the victim of others' aggressive behavior. Argyris and Schön's models I and II can be understood as descriptions of self-reinforcing loops of cognition (governing variables), behavior (strategies), and environment (consequences as interpreted through the manager's assumptions). Model I is characterized by beliefs such as it is important to win at all costs and it is important to suppress negative emotions since such emotions make one vulnerable. Holding these beliefs leads to controlling, self-protective, and emotionally insincere behavior. Such beliefs also lead to defensive relationships with other people, since it is assumed that others, like oneself, are out to win at all costs and that they secretly harbor negative emotions even if on the surface they seem to be friendly. Living in an environment characterized by such relationships supports the initial belief that one needs to win at all costs and suppress negative emotions to survive in this world. Model II is characterized by beliefs such as it is important to produce valid information and to share control. Holding these views leads to openly exploring opposing views through public testing. This behavior can lead to collaborative and trusting relationships. Living in an environment characterized by such relationships in turn supports the initial belief that openly sharing control in pursuit of valid information is good.

Bandura's work is linked to the work of Lev Semyonovich Vygotsky on Social Development Theory and Jean Lave on Situated Learning. Both these theories hold that learning occurs through participation in social contexts. Thus, what beliefs and behaviors an individual learns is profoundly influenced by which environments he chooses to participate in.

Vygotsky holds that individuals learn new skills by interacting with more knowledgeable others, for example an adult or a peer who already possesses this skill. He writes:

> Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological) and then inside the child (intrapsychological). (Vygotsky 1978, 57)

Similarly, Jean Lave (Lave & Wenger 1991) holds that learning occurs through a process where the learner participates in a social and cultural context which Lave calls a community of practice. As the individual learns, that is, adopts the beliefs and behaviors of the community of practice, she will move from holding the more passive and peripheral position of the newbie or novice in the community toward the more active and central position of the old-timer or expert. Again, one can think about learning lindy-hop through participating in the lindy-hop community. Over time, one may begin to embody more and more of the skills and attitudes central to this community of practice and thus develop from a newcomer to an old-timer. One can also think about one's time at any school. As one progresses from being a new student to being an older student, one learns how the school works, where the different classrooms are located, which dishes are good in the canteen, how to deal with the personalities of different teachers, and so on. Similarly, one can think about being a new manager in an organization. Again, over time one learns the ins and outs of the organizational community and gradually picks up the beliefs and behaviors necessary to function in the community.

An important point about the social-cognitive perspective on learning is that learning is usually automatic and unintentional, that is, it occurs all the time, even if the individual is not intent on learning anything in particular. This phenomenon is known as latent learning (Blodgett 1929; Tolman 1948). For example, when we participate in a community of practice we learn how this community works even if we are not actively trying to learn this. Latent learning was first demonstrated in an experiment which let rats wander around a maze without giving them any food rewards at the end of the maze. When researchers began to place food at the end of the maze (from the 11th day onwards), the rats that had been allowed to wander around the maze were quicker to find their way through to the food than rats that had not been in the maze before. This experiment demonstrates that the rats, even without any incentives, formed mental maps of the layout of the maze while they were simply wandering purposelessly around in it (Blodgett 1929; Tolman 1948).

If we look at the social-cognitive research in terms of Argyris and Schön's theories of action, we see that theories-in-use can form based on observation of other peoples' behavior and responses to this behavior by the environment. We can also see that operating from

particular theories-in-use can lead to patterns of behavior that elicit certain responses from the environment, which in turn can be perceived as evidence of the validity of these theories-in-use. In short, theories-in-use can be part of a self-reinforcing system of cognition, behavior, and environment. Finally, we see that theories-in-use can be learned automatically and unintentionally when an individual participates in a particular social context and that the beliefs and behaviors an individual learns from participating in such a social context are determined both by what the individual pays attention to and what beliefs and behaviors are present in this particular social context.

In the next section, I will take a closer look at three experiments that illustrate the formation of self-reinforcing systems of cognition, behavior, and environment, which lead the individual to believe that certain behavioral patterns are useful, even though in reality they are unhelpful to the individual or even prevent the individual from reaching their desired objectives. In short, I will look at the experiments which show how theories-in-use can appear as good guides for one's behavior—even when they are not.

2.3 Theories-in-Use Can Appear to Be Good Guides for Behavior Even When They Are Not

The second reason that there can be a discrepancy between espoused theories of action and theories-in-use is that theories-in-use can be self-fulfilling, self-reinforcing, and thus self-concealing. As we saw above, theories-in-use arise from experience. At the same time, theories-in-use function by directing the individual's attention toward the aspects of experience which it is important to be aware of (and away from things which it is important to be aware of) according to the theories-in-use.

This is similar to the way Facebook's feed, Spotify's Discover Weekly, and several other internet services work (including Google, Amazon, Netflix, Yahoo! News, and the *Washington Post*). These services present us with lists of things they think we will find interesting based on our past internet behavior. If we click on cat videos in our Facebook feed, we get more cat videos in the feed. If we listen to a lot of Balkan swing on

Spotify, our Discover Weekly list will become full of Balkan swing. This is good insofar as it aids us in finding more of what we are interested in—from news stories to consumer goods. However, because these lists present us with a limited selection of what to watch, read, or listen to, there is the risk of getting caught in what Eli Pariser fittingly calls a filter bubble (Pariser 2011). If we regularly click on news and videos representing one political view, we will over time no longer be presented with news and videos representing opposing political views. This in turn is likely to solidify rather than challenge and expand our political views.

In the same way, theories-in-use can create filter bubbles in our minds. Because theories-in-use both arise from experience and select what experience the individual pays attention to, theories-in-use can become self-confirming and prevent the individual from noticing information that would challenge the theories-in-use. This is particularly problematic in cases where the particular theory-in-use is a poor guide for action.

In the following, I present three famous pieces of research which illustrate how this works.

2.3.1 Intermittent Reinforcement

As mentioned in the section on operant conditioning above, Skinner found that variable ratio reinforcement (inconsistent and unpredictable patterns of reward for a given behavior) would make animals both acquire a behavior quickly (quick response rate) and continue the behavior long after the researcher stopped reinforcing the behavior (slow extinction rate). The variable ratio reinforcement schedule, also known as intermittent reinforcement, has been used to explain how people can get addicted to gambling, abusive relationships, and other phenomena where reinforcement is given inconsistently and unpredictably. If an animal is consistently rewarded for a certain behavior (continuous reinforcement), the animal will form a theory-in-use according to which this behavior is consistently rewarded. When the researcher stops rewarding the behavior, the experience of not being rewarded will immediately challenge the theories-in-use and the theory will therefore quickly be revised. However, if the animal is rewarded for a certain behavior in an unpredictable

manner, the animal will form a theory-in-use according to which the behavior is not rewarded each time but repeating the behavior enough times eventually leads to being rewarded. In *these* cases, when the researcher stops rewarding the behavior, the absence of reward will not contradict the theory-in-use. According to the theory-in-use developed through intermittent reinforcement, absence of reward is to be expected and will only confirm the theory that the animal has to repeat the behavior until a reward is eventually given. Experiments have shown that intermittent reinforcement leads to something like obsessive behavior. Most people can relate to this pattern by thinking of how easy it is to get addicted to checking for emails or text messages on smartphones. Getting a message feels like a positive reinforcement, but it doesn't happen every time we check the phone. This intermittent reinforcement is what can lead us to constantly check our phone for messages.

Experiments with intermittent reinforcement provide an example of how theories-in-use which are poor guides for action can lead to problematic behavior—in this case, obsessive and addictive behavior. The problem is that when our behavior fails to deliver the desired outcome, it is not taken to be a sign of a flawed theory-in-use, but actually confirms the theory-in-use and simply prompts us to repeat the behavior more. Thus, the theory-in-use becomes self-fulfilling, self-reinforcing, and self-concealing.

2.3.2 Learned Helplessness

Another interesting (although unethical) behaviorist experiment showed that conditioning can lead to learned helplessness, that is, learning that it is pointless to even try to escape an unwanted condition (Seligman 1975). In the experiment, Seligman first fitted dogs with collars and every time he rang a bell he would give the dogs an electrical shock through their collar. As Pavlov's work on classical conditioning predicted, after a while the dogs would react to the bell as if they had already received an electrical shock. Seligman proceeded to place the dogs in a room with a low fence. On one side the floor was electric and on the other side it was not. Dogs that had not participated in the experiment with the electric collar would quickly jump the fence to escape the shocks. However, dogs that *had*

participated in the experiment with the electric collar would not try to escape the electric floor, but simply lie down on it accepting the electric shocks. Seligman concluded that the dogs would not try to escape an unpleasant stimulus if in the past they had experienced/learned that it was impossible to escape electric shocks.

Researchers have also studied learned helplessness in humans (Abramson et al. 1978). They found that humans would stop trying to escape undesirable conditions even when this was possible if they from past experience had learned that the causes of those conditions were *internal* to themselves, *stable*, they that is, unchanging over time, and *global*, that is, applicable to many situations. For example, a female manager may believe that the reason she has not advanced beyond a particular point in the managerial hierarchy is that she is a woman and that women are not good leaders. Because this reason is *internal* to herself, *stable* over time, and *global* insofar as it applies to leadership in many situations, this woman may stop trying to advance even if she could. If this manager instead believed that the reasons she is not advancing are external, not stable over time, and local, such beliefs would not stop her from trying to advance to higher positions. She may, for example, believe that her lack of promotion is (a) due to prejudice against women held by the male board members (not internal), (b) due to her lack of leadership skills (not stable over time, since such skills can be acquired through courses and with experience), or (c) due to her being unable to fulfill the particular requirements of high management positions in her current organization—but not in other organizations (local). The point of this example is not to suggest that either of the scenarios above is true. The point is that if individuals *believe* that the reason for an unwanted condition is internal to themselves, stable over time, and global, they will also believe that there is no point in trying to change this unwanted condition. And if an individual stops trying to change an unwanted situation, it is unlikely that they will experience anything that could challenge their learned helplessness. If the manager stops trying to advance, she is likely to remain at a certain level of the organization, and this would support the belief that it is impossible for her to advance.

Experiments relating to learned helplessness are therefore yet another example of how theories-in-use, which are poor guides for action, can lead to behavior which in turn elicits responses from the environment that can be taken as evidence of the validity of these theories-in-use, making them self-fulfilling, self-reinforcing, and thus self-concealing.

2.3.3 Anticipatory-Avoidance Learning

One last (need I say ethically dubious?) experiment of interest to our present exploration showed that conditioning can lead to anticipatory-avoidance learning—yet another form of learning which is difficult to alter because it leads to self-reinforcing behavior (Solomon and Wynne 1953). Solomon and Wynne placed a dog in a room with two compartments separated by a barrier. The height of the barrier corresponded to the back of the dog, making it somewhat difficult but not impossible for the dog to jump over it. Each compartment had a light in the ceiling and a metal floor. Every three minutes the light would be turned off in the compartment the dog was in and ten seconds after the floor would give an intense electric shock. The dog learned, not surprisingly, to jump the barrier whenever the light was turned off. When the dog had acquired this behavior, that is, when the dog jumped ten out of ten times in ten trials, the floor stopped becoming electrical after the lights went out. However, the dog kept jumping. In this experiment, the non-occurrence of pain was the negative reinforcement of the jumping behavior. Therefore, the dog experienced negative reinforcement of its jumping behavior whether or not the floor gave an electrical shock after the light was turned off. Once the dog has learned to jump every time the light goes out, it will never discover that the floor has stopped giving electrical shocks, and every time the dog does not feel the electric shock, it will strengthen the dog's theory-in-use that it needs to jump when the light goes out to avoid the electric shock.

Similarly, a manager may insist on taking precautions which once were necessary but no longer are. However, if the stakes are high, the manager may be unwilling to test his assumption that these precautions are necessary—better safe than sorry.

To sum up, the experimental work relating to intermittent reinforcement, learned helplessness, and anticipatory-avoidance learning shows that certain kinds of conditioning can generate patterns of behavior in the individual which are very difficult to change because these behaviors block learning, which could lead to the alteration of these patterns of behavior. Using the language of Argyris and Schön, we can say that certain kinds of experiences can lead to the formation of theories-in-use,

which in turn lead to behaviors and responses from the environment which from the viewpoint of the theories-in-use look like evidence of the validity of the theories-in-use and thus reinforce them.

Intermittent reinforcement can create addictive behavior because when rewards are given inconsistently the absence of rewards is expected and not seen as evidence of the futility of the behavior—but rather the absence of reward fits the theories-in-use that the behavior will be rewarded in an inconsistent and unpredictable manner. If the individual experiences that punishment is unavoidable (e.g., because the reasons for punishment are internal, stable, and global), it will make sense for the individual to stop trying to avoid punishment, which in turn reinforces the belief that punishment is unavoidable. If behavior is learned through negative reinforcement (absence of something unpleasant), then it will be difficult to discover when a certain behavior stops being necessary, since the absence of negative consequences is taken as proof that engaging in the avoidant behavior brings the desired outcome.

These behaviorist experiments were primarily performed with animals, and it is not self-evident that the results are valid for humans. Argyris and Schön argue that what enables humans to escape from self-fulfilling, self-reinforcing, and self-concealing theories-in-use is reflection, that is, a process of actively becoming aware of the theories-in-use that guide one's actions and testing them.

2.4 Further Obstacles to Changing Theories-in-Use

In the above, we have seen two reasons why it is difficult to become aware of and change theories-in-use. First, theories-in-use emerge automatically and unintentionally from experience. They are therefore often unconscious and individuals can hold mistaken beliefs about what their theories of action are. Second, theories-in-use can be self-reinforcing and therefore appear to be good guides for our behavior, even if they are not. So even when an individual is conscious of his theory-in-use, he may still be unaware that following this theory-in-use is preventing rather than enabling the achievement of his objectives.

A third reason it is difficult to become aware of and change theories-in-use is that these theories are used in many different areas of our cognition, and therefore changing them will often necessitate more elaborate changes of our cognitive structure. For example, when the managers in the story at the beginning of this chapter believed that they knew more about the business than their employees, this belief may not only have guided their way of interacting with employees but may also form part of how they understand their own competency as managers. If a manager thus believes that knowing more than her employees is part of what makes her a competent manager, then admitting that she does not always know more about the business than her employees will necessitate not merely a change in her interaction with her employees but also a change in her understanding of her own competency as a manager. Changing the foundations of the cognitive edifice is more difficult and necessitates more elaborate reconstruction than adding an extra floor or wing to the edifice. Thus, even when a manager is conscious of which theory-in-use she follows and that following this theory-in-use leads to behavior that is problematic, she may still be reluctant about changing her theory-in-use, because it also provides benefits.

This difficulty has been described from slightly different angles in learning theories such as Jean Piaget's theory of assimilation and accommodation (Piaget and Inhelder 1969), Leon Festinger's theory of cognitive dissonance and rationalization (Festinger 1957; Festinger and Carlsmith 1959), and David Perkin's theory of troublesome knowledge (Perkins 2006; Perkins 1999), which has been elaborated in Jan Meyer and Ray Land's theory of threshold concepts (Meyer and Land 2003; Meyer et al. 2010; Cousin and Academy 2006; Cousin 2006).

2.4.1 Assimilation and Accommodation

Jean Piaget (Piaget and Inhelder 1969), a developmental psychologist who studied the cognitive development of children, distinguished between two types of learning processes which occur throughout life. He called these two processes assimilation and accommodation. These two

processes are not unlike single-loop and double-loop learning. Assimilation is the process through which mental maps are expanded or refined as new information is assimilated into previously acquired maps. An example of assimilation would be learning to walk after learning to crawl or learning to plan a budget after learning arithmetic. The skill of walking builds on the skill of crawling. Learning to plan a budget builds on and will not alter the previously acquired rules of arithmetic. Because assimilation integrates new information without having to change previously acquired knowledge, it is a relatively easy process. In fact, having previously acquired knowledge (or "schemas" to use Piaget's term) makes assimilation of new knowledge faster. For example, it is much easier to learn to use the twentieth new computer program than it was to learn the first computer program. Similarly, it is easier to learn the third foreign language than to learn the first foreign language. When seasoned managers after a management course say "It was all the same, just with new words", this is a sign that the learning they experienced at the course was assimilation of new information into previously acquired schemas.

However, sometimes new information cannot be assimilated into previously acquired schemas. Sometimes new information requires that previously acquired schemas be changed. It occurs in situations where one realizes that things are not as one thought they were. A manager may be convinced that the reason employees in a different department consistently fail to meet deadlines is that the employees in this department are incompetent and lazy. Based on this belief, the manager may decide that the best course of action is to punish the employees for failing to meet deadlines or even threaten to fire them. However, one day he may for one reason or another need to spend some time working directly with the employees from this department and he may discover that the computer programs they work with have severe flaws and that the failure to meet deadlines is not caused by incompetence and laziness but by the extra time the employees have to spend working around these flaws in the system—and that they show extraordinary competence and ingenuity in doing so. In the light of this new information, he may change his view and see that the employees are, in fact, hardworking and highly competent. Furthermore, he may see that his habitual idea that failure to meet deadlines generally is due to laziness and incompetence is overly simplistic.

However, as we saw in the previous chapter, it may not be easy to discover that one's beliefs are invalid and that one is following theories-in-use which are not good guides of one's behavior. Therefore, accommodation is often preceded by frustration, since it is very frustrating to act in ways that one believes should realize one's objectives only to find that one's objectives are not reached. If the manager in the example above had not discovered the flaws in the computer systems, he could have continued punishing the employees every time they failed to meet a deadline. However, since this would not have dealt with the real problem, it would not have produced the desired effect. The manager's frustration would therefore increase until the point where he would decide to explore the matter in depth and (hopefully) realize his mistake. Many managers know situations where it seems obvious that a certain course of action should bring about a desired result yet for some inexplicable reason this does not happen. As we shall see in the next chapter, this situation, unfortunately, often leads to rationalization—rather than to real inquiry.

The distress felt when new information cannot be assimilated into previously acquired schemas is illustrated well in yet another classical experiment. In this experiment a dog was conditioned to press a round button, rather than an elliptic button, to be rewarded with food. Once the dog had acquired this behavior, that is, it had learned that pressing the right button was key to success, it was represented with sets of buttons where the button that gave the food reward gradually grew flatter and the other button gradually grew more circular. At some point, it was impossible to distinguish between the two buttons. At this point, the dog began to show signs of distress. Another dog, which had not been conditioned to get food by pressing the round rather than the circular button, was then presented with the same two indistinguishable buttons. This dog happily pressed the two buttons at random and was content with getting food once in a while. This experiment illustrates how encountering situations which do not fit our previously acquired schemas can be distressing, even if there is nothing inherently distressing about the situation itself, that is, the dog which had not acquired the view that it had to distinguish between the two buttons showed no signs of distress.

In the words of Argyris and Schön, accommodation requires that we let go of theories-in-use which have served us well in the past.

Accommodation is more difficult than assimilation because it involves letting go of the abilities afforded by these theories-in-use. Even if a manager realizes that a certain theory-in-use no longer enables her to reach a desired objective, she may be unwilling to let go of it, because she has no alternative way of reaching this objective. The more important or valuable the objective, the more uncomfortable it will be to let go of the way in which she is trying to achieve it—even after realizing that her current method is inefficient.

2.4.2 Cognitive Dissonance and Rationalization

Accommodation is not only difficult because we have to relinquish a theory-in-use that has served us well in the past, but also because the same theories-in-use are often used in several different areas, and humans do not like to use one set of values in some situations and others in other situations. Inconsistency between different beliefs and ways of acting is felt as painful. Leon Festinger named this type of pain "cognitive dissonance" (Festinger 1957).

Festinger initially formulated his theory of cognitive dissonance when he studied a cult that believed the end of the world was coming at a certain date in the form of a great flood. Festinger observed that when the flood did not come on the expected date, the more peripheral cult members would simply state that they had been deceived and that their belief in the end of the world had been foolish. Thus, these cult members accommodated their beliefs to fit the new information: that the world didn't end in a flood. However, the cult members who were more invested in the belief system of the cult and who had left their jobs and homes to prepare for the flood would state that the end of the world had been avoided due to their piety. Thus, they assimilated the new information into their preexisting beliefs and kept these beliefs intact.

Festinger's theory of cognitive dissonance states that humans experience a kind of pain when they experience that their behavior is not consistent with their beliefs and they will therefore be motivated to resolve this inconsistency (or dissonance). This can be done in three ways: One can change the belief to fit the behavior, one can change the behavior to

fit the belief, or one can change one's attitude to the behavior so it appears to be in accordance with one's beliefs—that is, one can rationalize the behavior that is inconsistent with held beliefs. Since important beliefs are not easily changed and since the behavior that is inconsistent with one's beliefs may nonetheless bring real benefits, the last option is widely used.

Cognitive dissonance theory brings deeper insight into why double-loop learning is difficult. For double-loop learning to occur, managers will have to become aware of their theories-in-use and thus face the inconsistency between their espoused theories and the theories embedded in their actual behavior. Like the cult members, managers may be highly invested in their espoused theories of action and therefore be motivated to keep their beliefs about what they do. At the same time, their theories-in-use may bring real benefits and the managers will therefore be motivated to keep acting the way they do. According to cognitive dissonance theory, once managers notice such inconsistency they will use rationalization to diminish the cognitive dissonance. For example, a manager may believe in the ideal of managing through shared control and believe that he is not a controlling kind of person. Yet, he may discover that some of his actions are unilaterally controlling. He can try to resolve this dissonance between belief and behavior in the three ways mentioned above. First, he could change his belief and start professing the usefulness of unilateral control, stating that this is necessary for the well-being of the organization. However, he may be deeply invested in keeping his current belief and the related self-image and worldview. Second, he can change his behavior and start actually inviting shared control. However, unilateral control has many advantages that he may not be willing to give up. Finally, he may *rationalize* his behavior in a variety of ways. He may find reasons why unilateral control is necessary in particular instances. He may state that in order for shared control to be possible, the other has to believe in this too. He may deny that he was controlling and instead state that he actually did invite shared control, but that the other simply agreed with his view after a bit of persuasion. Or he may state that in the particular case, inviting shared control is not so important, since the decision that needed to be made was a minor one.

Leon Festinger and James Carlsmith (1959) tested cognitive dissonance theory in what is now a classical psychological experiment. They wanted to explore what happens to individuals' opinions when they are rewarded for publicly contradicting this opinion. They used 71 students for the experiment. All participating students were first asked to carry out very boring tasks for one hour, such as using one hand to individually turn 48 square pegs one-quarter turn clockwise—repeatedly. They were told that the experiment had to do with performance measurement and a researcher would sit next to them making notes and stopping and starting a stopwatch to give the impression that this was really the experiment. After one hour, the students were told a story about the research: students were told that the research was about the impact of expectations on performance and half of the participants would be asked to carry out the task without any expectations (like the student had experienced), while the other half would be asked to carry out the task with the expectation that it would be a lot of fun. To create this expectation in half of the participants, the researchers normally used a student who did not participate in the experiment. This fake participant would act as if they had just been in the experiment and tell one of the real participants how much fun participating had been. However, the student that they normally used could not make it, and therefore they asked the student who had just done the experiment to take his place. Thus, they asked the student to go in and tell the next participant (which was in actuality not a real participant, but a fellow researcher) that the experiment had been a lot of fun. Some students were offered one dollar for this while others were offered 20 dollars (which in the 1950s was quite a lot of money). After having paid the student to state that what he must have experienced as a very boring task was really a very fun and exciting task, they asked the student to evaluate his experience of participating in the research. They told him this was to improve research experiences in the future and invited him to be completely honest.

Cognitive dissonance theory would predict that the students who were paid only one dollar would experience greater cognitive dissonance than the ones who were paid 20 dollars since they would have less reason for their behavior: Telling another person that participation had been fun was neither true nor profitable. Because these

participants experienced more cognitive dissonance, they would, according to the theory, be more likely to rationalize their behavior. The experiment proved this to be true. The students who were paid one dollar to lie about their experience would in the following interview rate their participation in the experiment as significantly more enjoyable than the ones who had been paid 20 dollars to lie. This result was particularly interesting, because the behaviorist view, which was dominant at the time, predicted the opposite, namely that the participants who got the larger reward would rate their experience of participating as more enjoyable.

Because we use rationalization to diminish cognitive dissonance, that is, we change our views of our behavior to make beliefs and behavior *appear* congruent even when they are not, it can be very difficult to notice when we behave in ways that are inconsistent with our beliefs. Thus, to engage in double-loop learning, it is necessary to deal with cognitive dissonance without escaping through rationalizations.

2.4.3 Troublesome Knowledge and Threshold Concepts

In management education (as in much other education), it is popular to use methods, such as problem-based teaching, case-based teaching, and other forms of experiential learning, where students learn core concepts of a given discipline by engaging in active, social, and creative tasks. These teaching methods are often classified as constructivist teaching methods because they support the learners in constructing knowledge for themselves through these tasks. The rationale is that this makes the knowledge acquired by the students more personally meaningful, applicable to practice, and memorable.

David Perkins has studied such constructivist teaching methods and observed that:

> Asking learners to discover or rediscover principles can foster understanding, but learners sometimes persist in discovering the wrong principles … Although ardent constructivists may argue that process is all, others believe

> that one way or another, students need to arrive at an understanding of the best theories propounded by the discipline. (Perkins 1999, 8)

To explain this phenomenon, Perkins introduces the concept of troublesome knowledge.

He proposes that some knowledge can be difficult to construct because it appears absurd when the student first encounters it. Sometimes knowledge is troublesome because it runs contrary to what the student believes based on reasonable but mistaken interpretations of everyday experience. For example, the first law of Newton states that objects will be at rest or in uniform motion along a straight line unless acted upon by some force. However, based on our everyday experience, we may believe that objects in motion slow down when no force is acting upon them. We know that if we want a billiard ball to keep moving, we have to keep pushing it. We know that cars will stop moving if we turn off the engine and so on. Based on these experiences, it may be reasonable to conclude that objects slow down when no force acts upon them. However, this is a mistake, because the reason the billiard ball and the car slow down is because the force of friction is working on these objects. However, the force of friction is often not visible in our everyday experience. Other times knowledge is troublesome because it comes from socio-cultural perspectives, which conflicts with the learners' own perspective. For example, it can be difficult to understand certain historical political decisions because they were motivated by values and perspectives that were dominant in a culture and a historical time that is foreign to the learners' own.

The concept of troublesome knowledge has been elaborated further in a large national research program in the UK (Meyer and Land 2003). This program ran from 2001 to 2005 and sought to produce practically applicable knowledge about how to create better teaching-learning environments in undergraduate courses. In particular, the objective was to find ways of aligning intended learning outcomes with teaching and assessment methods. The project focused on the five subjects: electronic engineering, biological sciences, economics, history, and media studies. This allowed teaching and learning to be contrasted and compared in pure and applied subjects as well as humanities and social sciences. The data collection involved interviews with 90 staff members in 20 departments, interviews

with 668 students, and 6488 questionnaires collecting data about 1950 students' experience of the first and final years of their education.

One important insight that emerged from this study was that for each discipline it is possible to identify certain core concepts which are both particularly difficult and particularly important to grasp. Acquiring these concepts unlocks abilities related to the discipline that cannot be achieved without grasping these concepts (Meyer and Land 2003; Meyer et al. 2010). Meyer and Land describe such threshold concepts and link them to troublesome knowledge in the following way:

> A threshold concept can be considered as akin to a portal, opening up a new and previously inaccessible way of thinking about something. It represents a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress. As a consequence of comprehending a threshold concept there may thus be a transformed internal view of subject matter, subject landscape, or even world view. This transformation may be sudden or it may be protracted over a considerable period of time, with the transition to understanding proving troublesome. (Meyer and Land 2003, 412)

Meyer and Land offer several examples of such threshold concepts in different disciplines, including the concept of "opportunity cost" in economics, "controlling the rate of heat transfer" in cooking, and "signifiers" in literature. To this list one could add the concepts of "no absolute space" in Newtonian mechanics, "no absolute time" in Relativity Theory, "probability amplitude" in quantum mechanics, and the concepts of "emptiness" and "dependent origination" in Buddhism. All of these concepts may appear absurd or counter-intuitive when learners are first introduced to them, but truly grasping them effects profound shifts in the way the individual views the world and himself.

When the layman calculates the cost of a particular activity, for example a vacation, he may include the price of plane tickets, accommodation, and food. However, when an economist calculates the price of an activity, he also includes the price of the most valuable alternative action. Thus for the economist, the price of taking a vacation also includes the money one could have earned by working instead of taking a vacation.

Grasping this concept profoundly changes the way individuals understand their own choices and the choices of others. For example, it leads to the somewhat counter-intuitive notion that doing nothing is not free—the cost of doing nothing is equal to the value of the most profitable action one could have performed instead of doing nothing.

When the layman learns to cook a new dish by watching a professional chef on a cooking program, he may primarily pay attention to ingredients and how these are prepared and mixed. However, an important part of cooking is the ability to control the rate of heat transfer. The time it will take something to heat up or cool off depends on heat transfer, which is a function of temperature differences (the hotter a substance is compared to the surrounding air, the faster it will cool down) and the insulating properties of the containers used. Once this concept is understood, one will begin to pay attention to new elements, such as how the master chef selects containers and times the mixing of hotter and colder substances.

As these examples illustrate, threshold concepts have a number of properties through which they can be identified and distinguished from other core concepts in a discipline.

First, threshold concepts are transformative. Grasping a threshold concept effectuates a significant shift in how individuals perceive a subject matter, the cost of choices in economy, or the importance of temperature differences and material of containers in cooking. This transformative shift may include values, behaviors, emotions, attitudes, and even identity. Second, threshold concepts are irreversible. Once grasped the individual cannot return to see the subject the same way as before they realized the threshold concept. Third, they are integrative. Grasping a threshold concept will make previously hidden connections and interrelatedness visible to the individual. Fourth, Meyer and Land propose that in some cases threshold concepts are bounded, that is, they may be particular to a specific discipline. Fifth, threshold concepts are inherently related to troublesome knowledge in that they represent or lead to knowledge which is counter-intuitive or foreign to the learner's perspective.

Argyris and Schön's concept of double-loop learning fits the criteria above and can as such be considered a threshold concept. Grasping this concept leads both to a new level of competence and efficiency that cannot be reached without grasping this concept and to a new view of the discipline of management, including a different set of values as described

in Argyris and Schön's model II. Double-loop learning does lead to troublesome knowledge since sharing control and power and being transparent about beliefs, feelings, intentions, and what information one's beliefs are based on is both counter-intuitive and foreign to many managers. It is counter-intuitive insofar as management has grown out of a need for controlling that the organizational processes run according to plan. Argyris and Schön's research and years of practice also confirm that this perspective is, generally, foreign to management culture.

Jean Piaget's theory of accommodation emphasizes that double-loop learning can be difficult because it necessitates complex restructuring of the cognitive edifice. Festinger's theory of cognitive dissonance emphasizes that double-loop learning can be difficult because it creates a cognitive analogue to physical pain. The theory of troublesome knowledge and threshold concepts, however, emphasizes that the *concept of double-loop learning itself* is difficult to grasp because the knowledge this concept represents goes against the reasonable but mistaken interpretations managers make of their everyday experience of managing—much in the same way as most people will form reasonable but mistaken interpretations relating to the laws of physics from observing everyday phenomena, such as billiard balls and cars slowing down when (seemingly) no force is operating on them. Perkins, Meyer, and Land found that learners in their attempts at learning threshold concepts first go through a phase of mimicking these concepts, that is, they will learn the information about these concepts, but when asked qualitative questions their answers will be informed by their previous interpretations of everyday experience, rather than by the interpretations that would result from using the threshold concept. Such mimicking of threshold concepts is akin to holding espoused theories of action which are unlike one's actual theories-in-use.

2.5 How to Change Theories-in-Use

In this chapter, we explored Argyris and Schön's idea that an important source of manager efficiency is the ability to become aware of and evaluate those theories-in-use which govern their actions, that is, the ability for double-loop learning. Argyris and Schön claim that this is a very difficult ability to develop. Furthermore, we used selected theories

of learning to develop a deeper understanding of why double-loop learning is difficult. Behaviorist and social-cognitive theories showed us that theories-in-use develop unintentionally and automatically and that they are therefore largely unconscious. Furthermore, these theories showed us that theories-in-use can be self-reinforcing and self-fulfilling, and therefore even if managers become aware of which theories-in-use guide their actions, they can still be unaware of negative effects of using these theories. In short, theories-in-use can look like good guides for behavior even when they are not because they produce responses from the environment which in turn are taken as evidence of the validity of the theory. Finally, constructivist theories of learning showed us that even if managers manage to become aware of both which theories-in-use guide their behavior and negative consequences of using these theories, they can still be unable to change their theories-in-use, because doing so would necessitate ample reconstruction in many areas of their cognition simultaneously, because doing so involves experiencing painful cognitive dissonance, and because double-loop learning as a threshold concept represents troublesome knowledge, which can seem counter-intuitive and foreign.

Given all of this, what are the paths available for learning double-loop learning? Argyris and Schön as well as others, for example Jack Mezirow and David Perkins, propose a combination of several techniques. First, surfacing conflicting views and showing the validity of both sides can serve to diminish managers' overconfidence in their own point of view. If conflicting points of view all can have merit, one's own views cannot be the full story. Second, using inquiry and logical arguments can undermine managers' current knowledge and beliefs by showing the inconsistencies and paradoxes embedded in this knowledge and beliefs. This practice can likewise serve to diminish managers' certainty in their own perspective. Jack Mezirow has even proposed that transformational learning processes, that is, learning processes that transform one's worldview, always begin with what he illustratively calls "disorienting dilemmas" (Mezirow 1991), that is, experiences the learner cannot make sense of from their current perspective. Such dilemmas are like intellectual wedges that prevent the rationalization process from covering up the discrepancies between conflicting beliefs or between espoused beliefs and

concrete behaviors. Driving transformational learning through intellectual inquiry is well developed in the dialogues of Plato, where Socrates time and again first lets his interlocutors develop their views on various topics and then dismantles these views by showing their inconsistencies. It can be highly efficient to use such techniques to teach managers to listen to, value, and respect perspectives that are foreign to them and in conflict with their own perspective and to see them as opportunities for achieving a more whole and integrated perspective. However, as mentioned by many of the above authors, these approaches may also meet strong resistance for a variety of reasons. Argyris even wrote a book on this topic with the telling title *Overcoming Organizational Defenses* (Argyris 1990). The reason for resisting the above-mentioned approaches to inquiry could simply be that most people don't like to be embarrassed or to be put in the wrong and have their beliefs proven to be mistaken. Because of such resistance, the above approaches can sometimes be sidelined in intellectual discussions—and rationalizations can be strong opponents on this battlefield.

The aim of this book is to present an alternative approach to double-loop learning. Recent research in cognitive science shows that humans appropriate the neurons originally developed for sensory perception and motor functioning to ground abstract cognitive concepts. In other words, we understand abstract phenomena by treating them as analogous to more concrete sensorimotor experience. This view is often referred to as the embodied view of cognition. It is contrasted with the symbolic view of cognition upon which many of the learning theories in this chapter are founded. Over the next two chapters, I will argue that by focusing attention on identifying and changing the "sensory templates" managers use to represent organizational issues, it is possible to bypass many of the blockages to double-loop learning identified in this chapter—including the resistance to more intellectual approaches.

It may seem counter-intuitive that working at a deeper level than beliefs and values should cause less resistance since deeper structures should arguably be more pervasive and thus more difficult to change. However, when we direct our awareness to sensory templates we explore a level of cognition which precedes value judgments, and it is the value

judgments which create the attachment to certain ways of thinking. For example, if we did not categorize modes of operating in good and bad ones, it would be much easier to know how we actually operate, since we would not be invested in having the modes of operating we (and our peers) see as good and not having the ones we see as bad. Argyris and Schön mention that the reason managers espouse model II, while actually operating from model I, is that model II's modes of operating are generally seen as good whereas model I's modes of operating are generally seen as bad. When we move our inquiry to the level of sensory templates, managers will no longer have any concepts of which sensory templates are good and which ones are bad; therefore, it is much easier to discover the ones that are actually in use.

Before discussing what working at the level of sensory templates may look like in practice, it is necessary to get a firm grasp on the embodied and metaphorical view of cognition, which provides the scientific underpinnings for this way of working. I will describe this embodied and metaphorical turn in cognitive science in Chap. 3.

In Chap. 4, I will give examples from a research project I carried out at Cranfield School of Management from 2010 to 2014. This research shows how working directly with the sensory templates managers use to grasp a situation can lead to the solving of important managerial problems which the managers who participated in the research had been unable to solve for years—even though they were highly motivated to do so. The cases from the research show that changing sensory templates can transform the way managers think about a practical organizational problem, much in the same way that grasping a threshold concept can transform the way learners think about a discipline.

Notes

1. In this book I have chosen to alternate loosely between using "he" and "she" as generic terms for human being, since I find the use of singular pronouns more engaging than the alternatives of using either the plural "they" or passive voice.

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3
The Embodied and Metaphorical View of Cognition

The methods teachers use to create efficient learning environments in management education (and elsewhere) are based on what we know about how human cognition works. When Duolingo, an app for learning languages, gives you rewards for completing lessons and extra rewards for completing lessons seven days in a row, it is because of what we have learned from behaviorist experiments about reinforcing behavior (Watson 1913). When teachers combine auditory and visual teaching material, it is due to what we know from cognitivist experiments about attention retention and about the limits of information a human can receive through each sensory channel (ears and eyes) (Mayer 2001). When MBA programs use case-based learning or role-play, it is due to what we know from constructivist experiments about how individuals construct their knowledge from personal experience (Piaget and Inhelder 1969; Dewey 1938). Unfortunately, as we saw in Chap. 2, it remains a significant challenge for educators involved with management education to create learning environments which efficiently and reliably produce double-loop learning and through this increase managerial efficiency. However, recent discoveries in cognitive science suggest that focusing our inquiry on the sensorimotor experiences which managers use to metaphorically

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represent various organizational phenomena offers a new approach to facilitate double-loop learning, which bypasses much of the resistance often encountered when attempting to engage in double-loop learning.

One of the most exciting developments in cognitive science in recent years is the discovery that cognition is embodied (Barsalou 2008; Wilson 2002; Johnson and Rohrer 2007; Johnson 2007) and metaphorical (Lakoff and Johnson 1980; Lakoff and Johnson 1999; Lakoff 2012; Grady 1997; Grady 2005). An important consequence of this is that humans represent abstract concepts such as "power", "importance", "decision-making", "job satisfaction", and so on through analogous (metaphorical) sensorimotor experiences (embodied). The abstract concept of "importance" could, for example, be represented as analogous to the sensorimotor experience of physical weight or the sensorimotor experience of physical size or closeness to a physical center. The abstract concept of "power" could, for example, be represented as analogous to the sensorimotor experience of physically grabbing and moving objects or the sensorimotor experience of resisting being moved by external forces or simply by the experience of stillness. Because humans represent abstract concepts through sensorimotor experience, we may say that cognition is "embodied". Because humans represent abstract concepts through analogies, we may say that cognition is metaphorical. That humans thus represent abstract concepts through sensorimotor analogies makes it possible to ask whether some analogies are better than others at guiding actions related to the abstract concepts they are used to represent. For example, it is possible to ask whether managers deal better with power when they see power as analogous to the physical capacity to move objects or when they see it as analogous to the physical capacity to resist being moved or when they see it as analogous to the experience of stillness.

That cognition is embodied and metaphorical is important for management education because assuming that a particular abstract concept is analogous to a particular sensorimotor experience is already a theory-in-use, and as such it will guide managers' decision-making, planning, problem-solving, reasoning, and other actions. In short, the sets of actions a manager can imagine when interacting with an abstract phenomenon will correspond to the sets of actions embedded in the sensorimotor experience she uses to represent this phenomenon. For example, if a manager

sees motivation as analogous to pushing objects in a desired direction, then any act of motivating employees (or herself) will be an abstract form of pushing. If, on the other hand, she sees motivation as analogous to the inherent force by which a river runs, then any act of motivating employees (or herself) will be an abstract form of removing rocks that may block the flow of the river. In the following, I will refer to this class of theories-in-use as "sensory templates".

Like any theory-in-use, sensory templates form in our minds through associative and social learning. Like any theory-in-use, sensory templates shape our experience in ways that can reinforce the theory, making it seem self-evident. Like any theory-in-use, sensory templates can make managers efficient by highlighting sets of actions that efficiently address the situations the managers need to deal with, or they can make managers inefficient if they highlight courses of action that are not efficient in the situations the managers need to deal with. Thus, like any theories-in-use, it is useful for managers to become aware of and evaluate the sensory templates they use. In particular, in situations where the ways of acting that seem appropriate and obvious to the manager do not bring satisfactory results. However, unlike other theories-in-use, sensory templates are less burdened by social value judgments. Discovering that one seeks unilateral control may be more disturbing and more at odds with a manager's self-image than discovering that one sees control as analogous to pushing or to some other sensorimotor experience.

In this chapter, I describe the research in cognitive science underpinning the embodied and metaphorical view of cognition. In the following chapter, I show how this knowledge offers a novel approach to solving seemingly unsolvable managerial problems through surfacing and evaluating the class of theories-in-use I have called sensory templates.

3.1 The Development of Cognitive Science

To understand the embodied and metaphorical view of cognition, it is instructive to begin by looking at the history of cognitive science and, in particular, at the symbolic view of cognition, which developed at the

birth of this field of research and which the embodied and metaphorical view challenges.

The modern study of cognition, cognitive science, gained momentum in the 1950s through George Miller's work on short-term memory (Miller 1956), John McCarthy's work on artificial intelligence (McCarthy 1959), and Noam Chomsky's work on generative grammar and his criticism (Chomsky 1959) of Skinner's idea of language as a learned habit (Skinner 1957). Thus, from the outset, this intellectual movement was an interdisciplinary movement including experimental psychology (the kind of experiments described in the previous chapter), artificial intelligence, and linguistics. The term "cognitive science" was coined in 1973 by Christopher Longuet-Higgins. In 1976 the journal *Cognitive Science* began publishing. In 1979, the Cognitive Science Society was founded, and since that year this society has organized a yearly conference where researchers from different fields of study with a common interest in understanding how the mind works meet and exchange research findings. Today, many universities worldwide have established cognitive science departments and offer cognitive science programs.

Cognitive science is concerned with understanding the mind and how it functions. This includes understanding phenomena such as perception, memory, language, attention, reasoning, and emotions. Given the phenomena of interest to cognitive science, it brings together researchers from many areas of study, including philosophy of mind, linguistics, anthropology, neuroscience, artificial intelligence, psychology, and education. This provides cognitive science with a multitude of methods and theoretical lenses through which a given phenomenon of interest can be explored. Ideally, this can lead to a fuller understanding of this phenomenon. For example, a psychologist can test individuals' ability to memorize strings of nonsense syllables to find out what factors enhance or limit this ability. By contrast, a neuroscientist may use imaging techniques to explore which areas of the brain are active when a person is engaged in remembering strings of nonsense syllables. Comparing the results of different experiments can lead to a fuller understanding of the process of memory. In this way, Donald O. Hebb (1949) produced a highly influential theoretical contribution by comparing and linking what at the time was known about associative learning and neurophysiology. Today the discovery of mirror neurons,

that is, neurons that are active both when an individual performs an act and when the individual sees someone else performing this same act, throws new light on social learning. Scientists are still working on unpacking this link.

Cognitive science is unified by its central hypothesis, that cognition can be understood in terms of symbolic representations and processes for manipulating such symbolic representations. Whereas this hypothesis is generally agreed upon, there are debates in the field about the nature of the symbolic representations and the processes used to manipulate these.

The work of Chris Argyris and Donald Schön on theories of action and double-loop learning can be seen as a rigorous application of state-of-the-art theories in cognitive science at the time to the field of management education. Therefore, it is particularly interesting to explore the consequences for managerial education of recent developments in cognitive science about the nature of symbolic representations.

The embodied and the metaphorical view of cognition emerged independently of each other, but have in recent years merged to some extent (Lakoff 2012). In the following, I will describe these two views in turn, followed by a few comments on how they are currently merging.

3.2 The Embodied View of Cognition and How It Differs from the Symbolic View

When modern cognitive science was founded, computers were recently new, and scientists proposed that human cognition worked in much the same way as computers. Thus, it was assumed that human cognition could best be understood in terms of symbolic representations and processes for manipulating such symbolic representations—analogous to the processes used in computers. However, using the computer as guiding metaphor led to two assumptions, both of which have been challenged by the embodied view of cognition.

The first assumption is that the symbolic representations used in cognitive processes are similar to words or (more precisely) to the strings of

ones and zeros used as representational symbols in computers. In particular, they do not share physical properties with the objects they represent. The word "chair" does not share any physical properties with an actual chair. The word does not have four legs and a back, and it is not made of wood or metal and so on. Similarly, any data that comes into a computer is translated (encoded) into strings of ones and zeros. These strings *represent* data such as sounds or images even though they do not share any physical properties with the sounds and images they represent. From the strings of ones and zeros, the computer can reproduce these sounds and images through the process of decoding. The computer can also perform a number of operations on these strings of ones and zeros such as adding them or combining parts of them with each other and so on. Through such processes, the computer can create new strings of ones and zeros that, when decoded, produce altered versions of the original sounds and images. Symbolic representations, which do not share physical properties with the things they represent, are called "amodal symbols". Strictly speaking, words are not always amodal. For example, onomatopoetic words like splash, murmur, thumb, swoosh, or meow do, in fact, mimic the sounds they represent. However, language is largely a system of amodal symbolic representation and the system of symbolic representation used in cognitive processes was assumed to be entirely amodal.

The second assumption is that cognitive processes are largely independent of input and output channels. Once data coming in through various input channels, such as punched cards, keyboards, cameras, and microphones, has been translated into symbolic representations used in the computer, the computer can perform operations on this data without any further reference to the input channels through which the data was collected. Similarly, the operations performed on the data by the computer are also independent of the computer's output channels, such as screens, lights, motors, and speakers. When using the computer metaphor to understand human cognition, this translates into the assumption that cognitive processes operate independently of input channels (sensory organs and sensory centers in the brain) and output channels (muscles and brain centers dedicated to motor functions). Whereas input and output channels are important for connecting humans

with the environment, the cognitive processes can, according to the symbolic view of cognition, be studied without paying attention to sensorimotor functions—at least in principle.

These two assumptions have been challenged by the embodied view of cognition. Empirical evidence shows that cognitive, affective, and bodily processes are interlinked to the point of being inseparable (Barsalou 2008; Johnson 2007; Svensson et al. 2007; Ziemke et al. 2007). In particular, there is evidence that the symbolic representations used in cognitive processes are not separate from the neurological states related to perception and motor action. Thus, there is no clear distinction between the neurons responsible for bodily input-output mechanisms, like perception and motor control, and the neurons responsible for cognitive processes. Based on this evidence, it has been proposed that the symbolic representations used in cognitive processes are partial reactivations in the sensorimotor centers of the brain—mini-experiences of that which the symbols represent, so to speak. Such reactivations in the sensorimotor centers are often referred to as "simulations" (Barsalou 2008, 2010). Thus, the symbolic representations *do* share sensory properties with that which is represented, and the sensorimotor systems play a *central* role in cognitive processes.

Before expanding on what this means for management education, it is instructive to look at some of the research that has led to the formation of this embodied view of cognition. Since the 1990s empirical studies have provided ample evidence for the interlinked and overlapping nature of cognitive, affective, and sensorimotor functions. Furthermore, these studies tell us a lot about the way in which these functions are interlinked. Below, I present a fairly large number of research findings. I do this to give an impression of how substantial the empirical support for the embodied view of cognition is. I also do this to provide a good starting point for practitioners and scholars interested in exploring what these findings imply for management education. In particular, it has been found that emotional states are represented through somatic states, that the meaning of words is represented through activity in sensorimotor neurons, that mental tasks utilize the same neurological circuits that are used for sensorimotor functions, and that concrete and abstract concepts alike are represented through simulations in the sensorimotor centers of the brain.

3.2.1 Affective Concepts Are Represented Through Somatic States

An older strand of research providing evidence for the embodied view of cognition is concerned with the links between affective and somatic states. These experiments show that somatic and affective states are closely linked, and that manipulation of somatic states can influence affective states.

First, research has shown that different affective states generate different bodily states. That affects are visible in our bodies hardly comes as a surprise. For example, most people are able to recognize facial expressions and body postures as indications of a range of pleasant or unpleasant emotions. However, Cacioppo et al. (1986) did a study where they presented 28 individuals with pictures that would evoke either positive or negative emotions of varying strength. Electromyographic (EMG) activity of facial muscles was measured. Through these measurements, the researchers could determine both whether the affective response to the pictures was pleasant or unpleasant and the strength of the affective response—even when the activity of facial muscles was so subtle that it could not be observed visually. The study shows that different bodily states are related to different affective states. However, it does not show whether the bodily states are mere epiphenomena or more fundamental to the experience of positive and negative affects.

However, it has since been shown that just as affective states are visible in the body, bodily states can influence affective states. A famous piece of research showed that assuming power poses (e.g., standing tall with legs spread, hands on hips, and chest up and open) decreased the stress hormone cortisol and generated a sense of power and increased tolerance of risk (Carney et al. 2010). This research has since been criticized due to methodological issues and failure to replicate the results (Credé and Phillips 2017; Ranehill et al. 2015; Garrison et al. 2016). However, other pieces of research show that bodily states do in fact influence our affective states—even when these bodily states are not obviously related to particular affective states. In other words, even if the test subjects do not consciously associate a bodily pose with a particular affective state (as

would be the case with power poses), the bodily pose can still bring forth this affective state. This suggests that the connection between bodily states and affects is deeper than mere conscious association and that bodily states are not epiphenomena of affective states.

Duclos et al. (1989) showed that adopting postures or facial expressions related to sadness, anger, disgust, and fear in non-obvious ways modulated the research participants' experienced affect accordingly. This supports that facial expressions and body postures may indeed be used to represent affective states. Schubert (2004) showed that making a fist influenced how test subjects processed words related to the concept of "power" and the way they estimated possibilities of being in control and of making friendly connections to others in various situations depicted in drawings. This supports that a clenched fist represents affective states related to power in the participants' cognitive processes. Cacioppo et al. (1993) showed that non-Chinese test subjects looking at Chinese ideographs while pushing up/down on a table, and thus activating arm flexion/arm extension muscles, were more/less likely to *like* the ideographs they watched. This experiment supports the hypothesis that the affective state of aversion is represented through the somatic state of arm extension and the affective state of liking through the somatic state of arm flexion. Tom et al. (1991) asked participants to listen to music in headphones while either nodding or shaking their head. They told the participants that the purpose was to test whether the headphones would stay comfortably on the ears while moving the head. After the process, the participants who had been nodding their head were more likely to accept a pen that had been lying in front of them during the process as a gift. This supports that nodding/shaking the head influenced the research participants' affectionate attitude toward the pen. Stepper and Strack (1993) asked participants to hold a pen between their lips or teeth while watching cartoons. These two actions were a way to unobtrusively activate or hinder the smiling reflex. After the process, the participants holding the pen with the teeth (facilitating smiling) judged the cartoons as funnier than the participants holding the pen with their lips (hindering smiling). This supports that the muscles used for smiling are used to represent the affective states of humor.

Proponents of the embodied view of cognition take these research results as support for the claim that affective states and attitudes are represented through somatic states, and that when humans activate specific somatic states, this also activates the affective states and attitudes these somatic states are used to represent. Concepts of "sadness", "anger", "disgust", and "fear" can be represented through activity in the same neurons which are responsible for facial expressions. Concepts of "like" and "dislike" can be represented through activity in the motor centers responsible for arm flexion and arm extension. Concepts of "accepting" and "rejecting" can be represented through somatic states of "nodding" and "shaking the head" (this may well be culture-specific). And the concept of "funny"can be represented through the somatic state of smiling.

3.2.2 Concepts of Actions Are Represented by Neurons Responsible for Performing These Actions

Further evidence of the interlinked and overlapping nature of cognitive, affective, and sensorimotor functions comes from research on the effects of category activation on judgments and behavior. These experiments have shown that if people are exposed to words (or other representations) relating to a particular trait or stereotype in one situation, it influences the way they judge other people (cognition) and makes them more likely to behave in ways consistent with this trait or stereotype (behavior) in an unrelated situation immediately following this activation.

For example, John A. Bargh (Bargh et al. 1996) and his colleagues showed that people who were primed with a rude stereotype would, immediately after this priming, be more likely to interrupt a conversation and would do so faster than people who were primed with a polite stereotype or were not primed with any stereotype. Similarly, they showed that people who were primed with an elderly stereotype would, immediately after this priming, walk slower than people who were not primed in this way. The priming was done by letting test subjects complete a scrambled sentence test. The scrambled sentence test consisted of 30 collections of five words from which it was possible to construct four-word sentences (e.g., he, it,

hides, find, instantly). The research participants were initially told that the test was a language ability test and were asked to complete it as quickly as possible. Some participants were given tests containing 15 words relating to rude behavior (aggressively, bold, rude, bother, disturb, intrude, annoyingly, interrupt, audaciously, brazen, impolitely, infringe, obnoxious, aggravating, and bluntly), while others received tests containing 15 polite words relating to polite behavior (respect, honor, considerate, appreciate, patiently, cordially, yield, polite, cautiously, courteous, graciously, sensitively, discreetly, behaved, and unobtrusively) (Bargh et al. 1996, 234). After completing the test, the research participants were told to go to another room to be given a second test. In this room, they would find the researcher engaged in conversation with what appeared to be another research participant, who did not understand the scrambled word test. It was then measured how long the research participants would wait before they interrupted the conversation and asked to be given the second task. The ones who had completed the test with rude words were more likely to interrupt and would do so faster than the other research participants. In a second experiment, some research participants were given a scrambled word test containing words relating to old age (worried, Florida, old, lonely, gray, selfishly, careful, sentimental, wise, stubborn, courteous, bingo, withdraw, forgetful, retired, wrinkle, rigid, traditional, bitter, obedient, conservative, knits, dependent, ancient, helpless, gullible, cautious, and alone). Other participants were given tests with neutral words. After completing the test, it was measured how long it took the participants to walk the length of a hallway from the room where they had taken the test to the elevator. Participants who had taken the test with words relating to old age walked slower than those who had taken a test with neutral words. In both experiments, participants were given a fake debriefing (before the real debriefing) to test whether the participants believed the cover story that the test had been about language abilities. All participants believed this and were unaware that the tests had contained groups of words relating to particular stereotypes. Bargh and colleagues conclude that "the activation of a trait construct or a stereotype in one context resulted in behavior consistent with it in a subsequent unrelated context" (Bargh et al. 1996, 239). Similarly, Aarts and Dijksterhuis (2002) showed that using scrambled sentence tests to prime research participants with the categories of fast or slow

animals affected the way people judged the walking speed of others and the speed with which they themselves walked.

Proponents of embodied cognition interpret the result of these experiments by stating that words related to specific traits or stereotypes activate simulations in the sensorimotor systems in the brain and that the effects on judgment and behavior are due to these activations. This interpretation is supported by experiments where researchers have used various methods for monitoring neural activity in the brain to show that humans use the same neurons to perform actions themselves *and* to represent the meaning of words referring to such actions.

Friedemann Pulvermüller and his team (Pulvermüller et al. 2001) explored word processing in the brain. Research participants were presented with a sequence of words on a computer screen. Some of these were actual words, and some were nonsense words. Research participants were asked to press a button as quickly as possible whenever they saw actual words on the screen—but not when they saw nonsense words. The participants' brain activity was recorded using high-resolution EEG recordings. The real words used in the experiment fell into three categories. One-third were related to face and mouth activities, for example, moan, bite, blow, sing, suck, kiss, and chew. One-third were related to arm or hand activity, for example, seize, lift, applaud, scratch, steer, grab, and stroke. And the last third were related to leg and foot activity, for example, run away, walk, limp, kick, jump, stand, and stamp. The research showed that the motor cortices in the brain were activated during this task, even though only minimal motor action was required to push the button. What was particularly interesting was that the motor cortices were activated differently by the three categories of words. Words relating to face/mouth, arm/hand, and leg/foot activity activated parts of the motor cortices used to control these different body parts. This experiment indicates that "words are cortically represented by cell assemblies whose topographies reflect the words' lexical meanings" (Pulvermüller et al. 2001, 163). In another experiment, Tettamanti and his team (Tettamanti et al. 2005) had research participants listen passively to a number of recorded sentences while monitoring their brain activity with an fMRI scanner. Thus, in this experiment, no motor action was required from the

participants. The sentences were describing face/mouth, arm/hand, or leg/foot activity. Furthermore, a number of abstract sentences were used as control. This research showed that the sentences describing face/mouth, arm/hand, or leg/foot activity activated brain areas involved in planning and executing actions using the corresponding body parts. Like the previous experiment, this experiment also indicated that language relating to action is represented by activity in the neurons used for carrying out the particular action referred to.

These results further support the embodied view of cognition insofar as they show that humans use the same neurons to plan and execute actions and to understand words referring to such action. Finally, the claim that concepts of actions are represented through activity in the neurons responsible for carrying out action is corroborated by the discovery of mirror neurons.

In the 1990s, a group of researchers in Palma, Italy, discovered the so-called mirror neurons while studying the premotor cortex in monkeys (Rizzolatti et al. 1996). They were interested in studying the monkeys' coordination of hand to mouth movements. They were doing so by inserting highly sensitive sensors into the brain of the monkeys which were capable of detecting when a single neuron was firing. These sensors were linked to a computer—and to a speaker. This allowed the researchers to hear every time specific neurons used to coordinate hand to mouth movements were firing. One day, during a break, one of the researchers came into the lab eating an ice cream. He suddenly heard the sound that meant that the monkey's neurons were firing, but when he looked at the monkey it was watching him without moving itself. This showed that there are neurons in the monkey's brain which fire both when the monkey performs a hand to mouth coordination task *and* when it sees other monkeys, or in this case the researchers, perform such tasks. The researchers named these neurons "mirror neurons". Similar mirror neurons have since been found in humans.

The discovery of mirror neurons provides further evidence for the embodied view of cognition, in that the very definition of these neurons is that they are used both for performing actions and for representing these actions during the cognitive process of recognizing when others engage in these actions (Rizzolatti et al. 1996).

3.2.3 Mental Tasks Utilize Same Neurological Circuits That Are Used for Sensorimotor Actions

The embodied view of cognition emerged as a way of interpreting the kind of research results mentioned above. A typical procedure for testing the merit of new scientific theories is to derive predictions from these theories which differ from what older theories would predict, and to test these predictions experimentally. One prediction that can be derived from the embodied view that differs from what the symbolic view predicts relates to reaction times when humans are asked to simultaneously carry out a sensorimotor task and a cognitive task. If humans use the *same* neurological circuits for both sensorimotor tasks and cognitive tasks, as suggested by the embodied view of cognition, then asking them to simultaneously perform a sensorimotor task and a cognitive task where these circuits would have to be used in incongruent ways should result in increased processing time. If, on the other hand, humans use different neurological circuits for sensorimotor and cognitive tasks, as suggested by the symbolic view of cognition, it should not have any influence on reaction times, whether the sensorimotor task and the cognitive task relate to congruent or incongruent sensory experiences. The result of such research has, so far, confirmed the prediction made by the embodied view of cognition.

Chen and Bargh (1999) asked their research participants to classify words as either good or bad as fast as they could. The participants were divided into two groups. One group was asked to indicate their classifications by pulling a lever toward them when they thought a word was good and pushing it when they thought a word was bad. The other group was instructed to use the lever in the opposite manner (pull for bad and push for good). The second group was significantly slower in reaction time than the first. This result indicates that humans use the same neurological systems for the cognitive task of judging something as good/bad and for the motor task of pulling/pushing a lever. Thus, the two tasks can be performed faster when they use the neurological systems in congruent ways (e.g., pulling something toward oneself and judging it is good), and slower when used in incongruent ways (e.g., pulling something toward oneself and judging it as bad).

Glenberg and Kaschak (2002) gave their research participants a box with three buttons. Pressing the middle button would make a sentence appear on a screen. The participants were asked to determine as quickly as possible whether sentences made sense. The "yes" button was placed further away from the participant's body than the middle button and the "no" button closer. Halfway through the experiment, this was reversed. There were 160 sentences in total, half of which were intended to make sense and half not to make sense. The sentences that made sense either indicated a direction toward or away from the body. For example, "close the drawer" indicated a movement away from the body, whereas "open the drawer" indicated a movement toward the body. The research showed that participants reacted more slowly when the direction implied in a sentence that made sense was opposite to the direction of the "yes" button. This confirms the prediction of embodied cognition: If the cognitive task of understanding a sentence draws on the same neurological circuits involved in motor action, then understanding a sentence involving a movement should interfere with carrying out a movement incongruent with that indicated by the sentence.

The sentences used in the experiment included imperative (open the drawer), concrete transfers between people ("Courtney handed you the notebook/you handed Courtney the notebook"), and abstract forms of transfer ("Liz told you the story/you told Liz the story") (Glenberg and Kaschak 2002, 560). That the effect could be seen for the abstract sentences rules out the possibility that the observed delay in response time is due to action sentences activating the motor system *after* they are understood, rather than as part of the process of understanding the sentence.

3.2.4 Simulations Representing Concrete and Abstract Concepts

The above experiments deal mainly with more concrete phenomena, for example, graspable household objects, concrete affects, and concrete actions carried out with face, mouth, arm, hand, leg, or feet. It may not be too difficult to accept that humans use sensorimotor activations (simulations) to represent such concrete phenomena in their cognitive

processes. For example, it is easy to imagine that the concept of "chair" could be represented through mini-activations of the sensations of sitting in a chair, looking at a chair, lifting a chair, and so on. Similarly, it is easy to imagine that the concept of "running" could be represented through mini-activations of the sensations of how the muscles work in our legs or the rhythmical sensation of feet hitting the ground while running or the visual impressions related to watching others run.

However, many of the concepts that are core to managerial work are abstract. For example, "management", "equality", "power", "vision", "value", "mission", "ethics", "control", "motivation", "collaboration", "competition", "negotiation", "communication", "visibility in leadership", "innovation", and "inclusion" (we may distinguish between concrete and abstract concepts in that concrete concepts refer to phenomena that are confined to limited regions of physical space and time, whereas abstract concepts refer to phenomena that are not confined to limited regions of space and time). For abstract concepts, it is less obvious which sensorimotor activations individuals would use as means of representation. Furthermore, different people may well use different sensorimotor activations to represent the same abstract concept. To understand the implications of the embodied view of cognition for managerial education, we need practical ways of knowing and working with the sensorimotor activations managers use to represent abstract concepts.

For this purpose, we now turn to the metaphorical view of cognition as it is presented in Cognitive Metaphor Theory. In short, this theory holds that humans understand more abstract concepts in terms of more concrete concepts and that peoples' language can reveal which concrete concept they use to understand a specific abstract concept (in Chap. 5, we will see that gestures and in particular creation of various forms of art objects can also shed light on what concrete experiences individuals use to represent abstract concepts). Merging the metaphorical view with the embodied view will thus suggest that abstract concepts can be represented through sensorimotor activations similar to those used to represent the concrete concepts in which the abstract concepts are grounded. For example, the abstract concept of "understanding" can be understood in terms of the more concrete concept of "physically grasping an object". Therefore, the abstract concept of "understanding" may well be

represented through activity in the neurons responsible for executing the physical act of grasping objects. Let's look at this in more detail.

3.3 The Metaphorical View of Cognition

Cognitive Metaphor Theory got its modern expression in 1980 when George Lakoff and Mark Johnson published their book *Metaphors We Live By*. The central argument in this book is that our cognition is largely metaphorical in nature. In short, they proposed that individuals use structure from their experience in one domain to establish their understanding of another domain. Lakoff and Johnson found support for this proposition in the analysis of so-called dead metaphors found in all natural languages.

A metaphor can be defined as the use of one domain of experience, called the source domain, to describe another domain of experience, called the target domain. One can find many original and inspiring metaphors in literature, some of which have become famous, like Shakespeare's "All the world's a stage, and all the men and women merely players: They have their exits and their entrances; and one man in his time plays many parts, his acts being seven ages" (*As You Like It*, Act 2, Scene 7). Here Shakespeare describes the life and the world (the target domain) in terms of theater (the source domain).

Our everyday language contains many metaphorical expressions. However, these expressions are used so frequently that most people no longer think about them as metaphors. Whenever you speak about "love" as a "journey" or a "fire" or a "battlefield", you are using a metaphor, since you are describing the target domain "love" by using the source domains of "journey", "fire", or "battlefield". The metaphorical expressions found in everyday language are called dead metaphors. One can say that the words from the source domain in dead metaphors through repeated use acquire new literal meaning relating to the target domain. For example, when someone says they "shot down someone else's argument", we understand that they provided a very good counterargument which forced their interlocutor to give up or thoroughly revise his initial position. We understand that there was no actual "shooting" involved. The word "shot" has

simply expanded its meaning through the metaphorical use. Similarly, a manager may after a presentation exclaim that the presenter “nailed it”. Again, we understand that there were (probably) no actual hammers and nails involved in the presentation. Rather to “nail it” in this context means that the presentation was persuasive and to the point. We probably do not think of this expression as a metaphor. The word “nailed” has simply expanded its meaning through metaphorical use.

The main insight presented by Lakoff and Johnson in *Metaphors We Live By* is that it is possible to find groups of dead metaphors which all draw on the same source domain to describe the same target domain. Lakoff and Johnson take this as evidence that dead metaphors are not merely a matter of adornments or making the language we use more colorful. Rather, it is a sign that human cognition is fundamentally metaphorical in nature. It is a sign that we use our understanding and experience in one domain to *generate* a structure we can use to understand another domain. Lakoff and Johnson therefore propose the existence of what they call “cognitive metaphors”. Cognitive metaphors are the systematic use of experience from one domain to understand and engage with another domain.

One example of a cognitive metaphor is seeing argumentation as a form of warfare. When we speak about argumentation, we use many metaphorical expressions which include words from the domain of warfare. We can say things like “he *shot down* my argument”, “she *defended* her position”, “he *won/lost* the argument”, “she delivered severe *attacks* on the argument”, “the *opponents* of this argument contend that …”, and “her criticism was right on *target*”. Shooting down, defending, winning, losing, attacking, opponents, and being on target are all words borrowed from the domain of warfare (or other kinds of fighting). Lakoff and Johnson argue that the fact that we use so many expressions which include words from the domain of warfare when speaking about argumentation is evidence that we not only *speak* but also *think* about argumentation as an abstract form of warfare. Another example of a cognitive metaphor is “life is a journey”. When speaking about life, one can say that “he has no *direction* in life”, “she is at a *crossroads* in her life”, “don’t let anyone *get in the way* of how you live your life”, and “she’s *gone through* a lot in life”.

The words "direction", "crossroads", "get in the way", and "gone through" all refer to journeys (or more basically, to the act of moving from one place to another). A third example is the cognitive metaphor "theories are buildings". When speaking about theories, one may say "this theory has a *solid foundation*", "her theory was *building* on an older theory", or "he has *constructed* a theory based on the empirical evidence". Here "foundation", "building", and "constructed" are words borrowed from the domain of buildings.

Since 1980, Cognitive Metaphor Theory has been developed by a number of scholars. In the following three sections, I will first show how cognitive metaphors can be seen as a type of theories-in-use, second, show how cognitive metaphors can help solve the problem of what simulations abstract concepts are grounded in, and third, as usual, describe some of the empirical research done to test Cognitive Metaphor Theory.

3.3.1 Cognitive Metaphors and Theories-in-Use

Cognitive metaphors can be seen as a way of describing the cognitive structure underpinning theories-in-use. Thus, changing theories-in-use would be a matter of changing cognitive metaphors. That cognitive metaphors are, in fact, the cognitive structure underpinning theories-in-use is supported by two observations. First, cognitive metaphors operate in the same way as theories-in-use. Second, Argyris and Schön's descriptions of the model I and model II theories-in-use can be derived from two competing cognitive metaphors for management inquiry. Similarly, one can show that different approaches to managing organizations can be categorized according to which cognitive metaphor they build upon.

If we compare how cognitive metaphors and theories-in-use operate, we see that they function in the much same way. Like theories-in-use, cognitive metaphors offer the individual a range of possible interactions with a phenomenon and a way of looking at this phenomenon which supports these actions. Like theories-in-use, cognitive metaphors support specific ways of interacting with the environment by selecting which aspects of the environment and ourselves we pay attention to and how we interpret these aspects. In doing so, cognitive metaphors, like theories-in-use, also

hide aspects of the environment that are not important to be aware of during these interactions. Because cognitive metaphors modulate our perception of the environment, they can, like theories-in-use, be self-confirming and self-concealing.

For example, when a manager discusses organizational strategies with her colleagues she may see this as a form of warfare. This cognitive metaphor will support the manager in actions aimed at *winning* such discussions, since "winning" is a type of action afforded by this cognitive metaphor. Furthermore, the means of winning in war include deception, threats, and overt violence. Thus, the manager using this cognitive metaphor is likely to use any strategy necessary to secure victory including deception, providing false information, and various forms of violence from sarcasm, personal slander, intimidation, or lying to criminal activity. The metaphor will support the actions aimed at winning by highlighting relevant aspects of the manager's experience, like competitiveness and possibilities for immediate personal gain/loss, and by providing interpretations of various events that support the actions aimed at winning, such as seeing the event of having to change one's view due to good arguments from another as defeat. By selecting which aspects of experience the individual will pay attention to, and by offering interpretations of these events, the cognitive metaphor will also hide other aspects of experience and other possible interpretations, such as the collaborative aspects of discussing organizational strategies. If, on the other hand, a manager sees discussion of organizational strategies as a form of collaborative inquiry, rather than war, he will use a different set of actions, since the situation is no longer about winning or losing. Instead, the discussion is a matter of two (or more) people assisting each other in producing valid information. This manager will have no problem with having to change his position, since he will not perceive the event as a form of defeat, but instead as a welcomed move toward valid information. Perceiving the event of having to leave one's position as a defeat comes out of using the war metaphor—not from the situation itself. Thus, different cognitive metaphors make different courses of action seem like the right thing to do. Different cognitive metaphors highlight and hide different aspects of experience. And different cognitive metaphors provide interpretations of events which are in accordance with the metaphor itself.

The above example shows how Argyris and Schön's model I and model II can be seen as descriptions of two different cognitive metaphors through which managers can understand the target domain of discussing organizational strategies. Managers operating from model I emphasize winning and not losing, protecting self and associates, gaining unilateral control of environment and tasks, and so on. Such beliefs can be seen as emerging from the cognitive metaphor: managerial work is war. Managers operating from model II emphasize valid information, shared control, surfacing and testing different views, and so on. Such beliefs can be seen as pointing to the cognitive metaphor: managerial work is collaboration.

Thus, to change one's mode of operating from model I to model II can be seen as a matter of changing the conceptual metaphor through which one perceives managerial work.

One of the best-known explorations of cognitive metaphors underpinning approaches to management is found in the book *Images of Organizations* by Gareth Morgan (2006). In this book, Morgan explores how theories of organizations used to guide the actions of practitioners can be categorized according to which cognitive metaphor they build upon. Morgan explores eight cognitive metaphors underlying a broad range of organizational theories. In the following, I will briefly go through the first four of these. I do so to further illustrate how cognitive metaphors underpin theories of action, how they highlight and hide aspects of reality, and how there are situations in which any of these cognitive metaphors can lead managers to act in ways that are detrimental to their organization, that is, where the cognitive metaphor may appear to be good guidance for action but in fact is the opposite.

Organizations are machines: Possibly one of the most common conceptual metaphors is to think about organizations in terms of a machine. During the industrial revolution, engineers had constructed machines which impressed the world and opened new possibilities. In this context, it is not surprising that some of the first organizational theorists like Fredrick Winslow Taylor and Henri Fayol, both engineers, used their experience with engineering and constructing machines to understand how to construct efficient organizations. Engineers construct machines by defining what the machines should be able to do, breaking the overall

task into its constituent components, creating blueprints for the most efficient way of carrying out these tasks, designing good components able to carry out each separate task, and implementing monitoring systems. Thus, seeing organizations as machines highlights the task of defining goals and objectives, division of labor, planning efficient workflows, training workers to carry out each of their highly specialized tasks, and implementing systems to control performance. This approach to organizing is epitomized in the assembly line. The advantage of using this metaphor is that it allows managers to achieve speed, efficiency, regularity, precision, and predictability. Increasing production efficiency helped workers whose wages were linked to how much they produce, and it helped to lower the prices of goods, making them available to more people and raising the general standard of living.

However, seeing organizations as machines also hides aspects which in some contexts are extremely important for managers to be aware of. First, when using this metaphor, managers risk relating to humans as if they were mere components of a machine. This leads to dehumanization where employees' value is reduced to their ability to perform a highly specified task with speed and precision. It leads to unquestioning rule following, which in the worst case results in putting rules over common and/or ethical sense. It erodes the creativity of employees and can lead managers to ignore innovation arising from the lower levels in the organizational hierarchy. This makes organizations rigid and unable to adapt to change. Thus, thinking about organizations as machines can lead to dissatisfaction among employees and to losing the best employees who are able to find work elsewhere. Thinking about organizations as machines can also lead managers to ignore danger signs that are picked up by the employees "on the floor" who are often more likely to pick up changes in the environment.

Organizations are organisms: Another common conceptual metaphor is thinking about organizations in terms of living organisms. Using the organism metaphor highlights that organizations are open systems and thus that success and survival come from adapting well to the organization's external and internal environment, that is, to cultural peculiarities, customers' needs and preferences, technological

and market conditions, and employees' needs and preferences. Adapting to the organization's internal environment means fulfilling the needs of both the organization *and* the individuals working in the organization. The Hawthorne Studies conducted by Elton Mayo and Fritz Roethlisberger in the 1920s showed that monetary incentives meant less for improving productivity than did the employees' sense of belonging to a group and having the possibility to influence decision-making processes. In 1943 Abraham Maslow published his famous paper "A Theory of Human Motivation" in which he proposed a hierarchy of human needs which motivate individuals. These needs included physiological needs and the need for safety plus the needs for love/belonging, esteem, and self-actualization or personal growth. Integrating such human needs with the technical and business needs of an organization stands out as one of the core adaptation tasks of the organizational organism when managers think about organizations as organisms.

Using the organism metaphor makes it natural for managers to give employees autonomy, responsibility, recognition, and opportunities to use their creativity. It makes it natural to create more democratic organizations and to focus on finding good fits between organizational and individual needs. When the organization meets a fuller range of the employees' needs, and not only their economical need, absenteeism and turnover rates fall. This in turn supports the organization in reaching its goals. It renders the idea of "one best way of doing the job" (which makes sense from the organizations as machines perspective) nonsensical since the best way to work depends on the environment, which may change. Thus, using the organization as organism metaphor makes it natural for managers to operate in ways which are contrary to the ways of operating that appear natural when using the organizations as machines metaphor.

Using the organization as organism metaphor, like any metaphor, also blinds managers in specific ways. Focusing too much on ensuring survival through adaptation to the environment may blind managers to the way in which their efforts to adapt are shaping both their external and internal environments. For example, a manager of a dance school may choose a strategy of discouraging their students from going to social events

organized by other dance schools in an attempt at securing a vital resource (students) for themselves. The manager may be unaware of how this choice is harmful to the social dance scene in the city in a way which makes fewer people interested in social dancing, thus *creating* the very shortage of students the manager thought she was merely responding to. The organism metaphor can lead to ideology, reproduction of social conditions which are challenging to the organization, and self-fulfilling prophecies.

Organizations are brains: A third conceptual metaphor is thinking about organizations as brains with the ability to reflect and learn. Using this metaphor highlights how successful organizations are able to process information efficiently in ways that allow organizations to discover changes in the environment and to adjust their organizational strategy accordingly. It highlights organizations' ability to innovate, to be flexible, and to reinvent themselves. What we know about how the brain works offers guidelines for how to design and manage organizations.

Using this metaphor, managers are encouraged to design organizational processes which systematically encourage reflection and learning. It makes it natural to encourage employees to make mistakes since we learn as much, or even more, from finding out what doesn't work as we do from doing what works. It makes it natural to design organizations consisting of self-organizing teams since this allows new products, services, workflows, and the like to emerge. Managers can manage by setting clear overall directions and leaving it to self-organizing teams to find out how they can best move in that direction. Managers will take a facilitating role and work to enable employees to follow the path they choose. Managers could, for example, focus on using information technology to make information available to employees. Like the organizations as organisms metaphor, the organizations as brains metaphor makes it natural for managers to operate in ways which are very different from the planning and controlling encouraged by the organizations as machines metaphor.

However, the organizations as brains metaphor can give managers overconfidence in learning and blind them to the way assumptions and beliefs resist change. As we explored in Chap. 2, learning may happen while assumptions which make people act in ways that are detrimental to the organization remain untouched by reflection. Similarly, seeing organizations as brains may blind managers to the real conflicts between

self-organizing and learning on the one hand and power and control on the other. Some measure of centralized power and control seems necessary to preserve the coherence of the organization and secure its success.

Organizations are cultures: A fourth conceptual metaphor for organizations is the organization as a mini-society, complete with its own particular culture consisting of beliefs, rituals, norms, customs, dominant ideologies, subcultures with conflicting ideologies, values, and so on. Some organizational cultures may be more focused on individuality and competition (e.g., stereotypical American culture), while others may be more focused on service and collaboration (e.g., stereotypical Japanese culture). Some cultures may be more uniform and others more diverse. Some may be more focused on goal-driven rationality, while others are more focused on networks, community building, and creation of webs of inclusion. This metaphor highlights how all employees are actively participating in enacting the shared meaning and the social reality they live in through their everyday routines. Routines, rituals, workflows, architecture, artifacts, and so on are used to reify shared meaning. And this shared meaning in turn supports the naturalness of such routines, rituals, workflows, architectural arrangements, and use of particular artifacts. The organizations as cultures metaphor shows how managers' success hinges on their ability to influence the processes through which shared meaning is created.

When thinking about and acting from this metaphor, it becomes natural for managers to manage by influencing culture and shared meaning in ways which mobilize individuals to achieve the organizational objectives. Thus, managers will work with rituals, language, interior design, architecture, workflows, and so on to influence the process through which the social world is constructed. With the machine metaphor, workflows and interior designs of the organization were evaluated for their efficiency in terms of fast and reliable production of goods. With the organism metaphor this was still the case, but with the addition that to achieve fast and reliable production of goods, one had to fulfill the higher needs of employees. With the brain metaphor, workflows and organizational designs had to support reflection and learning and be open to change when change was needed. With the culture metaphor, managers may implement workflows

and interior designs which are neither the most efficient nor the best at supporting learning, if such workflows and interior designs are thought to influence the shared meaning in ways which mobilize employees to pursue the organizational objectives.

The drawback of the culture metaphor is that it can make culture appear more manageable than it really is. It is very difficult to predict how a group of individuals will make sense of managerial initiatives. The culture metaphor may also blind managers to managerial practices turning into ideological manipulation and control. Managers may attempt to manipulate and control the culture with the best intentions, but the mere fact that they think they can stand outside the culture and shape it to their liking may create a manipulating and politicizing culture which may end up undermining the coherence of the organizational culture the manager wished to achieve.

These four examples show that (1) different cognitive metaphors afford different sets of actions through which managers can manage the organization; (2) different cognitive metaphors make managers aware of different aspects of their experience and give these aspects different interpretations; (3) due to this manipulation of the manager's awareness of the organizational environment, the sets of action provided by the metaphor appear natural and reasonable; and (4) each metaphor blinds managers to important aspects of organizational reality, potentially leading them to inadvertently act in ways detrimental to the organization. This is true for the way managers think and act not just in relation to organizations in general, but also in relation to individual challenges they encounter in their work as managers. It is particularly important to note that different metaphors enable and support different sets of actions while hiding others. *Thus, when managers find themselves in situations they cannot solve, it may well be because they understand the situations through cognitive metaphors which hide the kinds of actions which would be efficient in dealing with the situation.* Just like a manager operating from model I will find it close to impossible to engage in double-loop learning, so managers may sometimes find it impossible to solve a particular problem because they are unknowingly operating from a cognitive metaphor which does not provide good guidance in the given situation. We will return to this in Chap. 4.

3.3.2 Primary Cognitive Metaphors: Merging the Embodied and Metaphorical Views of Cognition

The link between the embodied and the metaphorical view of cognition can be arrived at by considering the following: If we use our understanding of one domain of experience as a source to generate understanding of another target domain, then how did we generate understanding of the source domain in the first place? If we understand "organizations" by drawing on our understanding of "machines", "organisms", "brains", or "cultures", then how did we develop our understanding of machines, organisms, brains, or cultures in the first place? Cognitive Metaphor Theory would suggest that we generated our understanding of these four domains by seeing them in terms of yet another domain of experience. However, this leads to the question of where this chain of cognitive metaphors ends. Is there a domain of experience that is the ultimate ground which is expanded metaphorically to all other domains of experience?

In *Metaphors We Live By*, Lakoff and Johnson give some consideration to this question. They suggest that the first domain of experience is our sensorimotor experience of being a body in a three-dimensional space. Having the bodies we do, Lakoff and Johnson argue that we naturally have experiential dimensions, such as front side vs. backside, up vs. down, and center vs. periphery, and that these fundamental experiential dimensions are what we ultimately use to ground our understanding of all other domains. One could add that we have experiential dimensions of being able to grasp things or push them away; of being able to see things, hear things, or sense things; of supporting weight or having our own weight supported; of standing or falling; and so on.

The idea that our understanding of more abstract concepts is ultimately grounded in basic sensorimotor experiences inherent in human experience has since been elaborated in the work on primary metaphors—a concept introduced by Joseph Grady (1997). Primary metaphors are a kind of cognitive metaphor where the source domains are aspects of basic sensorimotor experiences that all humans have. Primary metaphors are, with a few exceptions, characterized by existing universally across cultures

and languages. For example, in English, describing one's relationship with another person as "cold" or "warm" indicates that the relationship is hostile or friendly, respectively. However, this is not unique to the English language. This very same metaphorical use of "cold" and "warm" to describe relationships between people is found across languages and cultures worldwide. This remarkable fact led Grady to suggest that primary metaphors are universal because they reflect universal correlations in human experience. For example, when a parent is friendly toward a child, they are more likely to hold them close. In this situation, the child will feel the parent's body heat. Inversely, when a parent is hostile to a child, they are more likely to keep the child at a distance. In this situation, the child will feel colder than when he is held close. Repeated experiences of the correlation between friendliness/hostility and warmth/cold are, according to Grady, the origin of the primary cognitive metaphor: Affection is warmth. The same situation can also be used to explain the primary cognitive metaphor where friendliness/hostility is represented through distance: Friendly is close, hostile is distant. Other examples of primary cognitive metaphors include:

- Affection is warmth (He gave her a cold shoulder. She gave him a warm smile)
- More is up (Prices are rising)
- Knowing is seeing (You see what I mean? I can't see your point)
- Understanding is grasping (This idea is difficult to grasp)
- Causes are physical forces (She pushed the board to approve the project. He was driven by his ambition)
- Happy is up (She's feeling down today. A party will cheer him up)
- Difficulties are burdens (My problem is weighing me down)
- Purpose is movement toward a destination (He quickly arrived at his goal. She chose a difficult path for the organization)

Ample linguistic evidence has been found supporting the claim that primary metaphors are, in fact, fundamental human cognitive structures. Whereas more complex metaphors, such as "organizations are machines" or "argumentation is war", can vary from individual to individual and

from culture to culture, primary metaphors are remarkably similar across cultures and languages.

3.3.3 Empirical Evidence for the Existence of Primary Cognitive Metaphors

Above we saw how activation of specific muscles would influence individuals' experienced affects. As mentioned, proponents of embodied cognition take this as evidence that the cognitive processes relating to affects, judgments, and social attitudes use the same neurons for symbolic representations and for executing motor activity in these muscles. For example, the neurons responsible for pushing things away by stretching the arm are used to represent the concept of "aversion", the neurons responsible for bringing things closer through arm flexion are used to represent the concept of "liking", the neurons responsible for various facial expressions are used to represent concepts of "sadness", "anger", "disgust", "fear", and "funny". We also saw that concepts of various forms of motor actions are likely to be represented by activity in the neurons responsible for executing these motor actions. For example, individuals use the neurons responsible for executing motor action to process words representing such motor actions, and mirror neurons are used both for executing motor actions and when observing someone else performing these motor actions. Finally, we saw that words representing concepts of stereotypes such as "fast", "slow", "old", "rude", and "polite" affected somatic and social behavior in subsequent situations. This suggests that these concepts of stereotypes are, at least in part, represented through somatic states.

Since all of the above concepts are, at least to some degree, directly related to somatic states, it is easy to guess which somatic states may represent these concepts and to design experiments to test this. However, the discovery of primary metaphors makes it possible to design experiments that can test whether abstract concepts with less obvious links to somatic states are also represented through somatic states as claimed by embodied cognition. Joshua M. Ackerman, Christopher C. Nocera, and John A. Bargh have carried out a series of experiments testing such predictions (Ackerman et al. 2010).

Cognitive Metaphor Theory predicts that concepts of "seriousness" and "importance" are represented through weight. This is visible in expressions such as "*heavy* thoughts", "he provided *heavy* arguments for his case", and "the book deals with *heavy* issues". In one experiment, 54 random people were asked to evaluate a job candidate by reading his resume on either a heavy or a light clipboard. Those who read the resume on a heavy clipboard judged the candidate to be overall more qualified and more seriously interested in the position than those reading the resume on a light clipboard. They also rated their own accuracy as more important than did the participants with the light clipboard. These results support the claim that humans use the sensation of heaviness to represent concepts of "seriousness" and "importance".

Cognitive Metaphor Theory predicts that the concepts of "difficulty" and "harshness" are represented through sensory experiences of rough or coarse textures. This is visible in expressions such as "speaking *coarsely*" and "going through a *rough* year". In another study, 64 random people were asked to complete a five-piece puzzle. Some were given puzzle pieces covered with sandpaper, while others were given normal smooth pieces. Afterwards, the participants were asked to read a story about an ambiguously valenced social interaction. The subjects who had assembled the sandpaper puzzle rated the situation as more rough and difficult than the others. This result supports the claim that humans use the sensation of rough or coarse textures to represent the concepts of "difficult" and "harsh" social interactions.

Lastly, Cognitive Metaphor Theory predicts that concepts of "stability", "rigidity", and "strictness" are represented through sensory experiences of physical hardness. This is visible in expressions, such as "she is the pillar of the organization", "she is hard as a rock", and "unbending will". In a third study, 86 participants were asked to sit in either a hard, wooden chair or a soft, cushioned chair. They were then asked to complete an impression formation task (rating the personality of a person in a story) and a negotiation task (putting in two bids for buying a car imagining that their first bid was rejected). In the impression formation task, people sitting in the hard chair judged the person in the story as more stable and less emotional. In the negotiation task, people sitting in the hard chair changed their bids less when their first bid

was rejected. These results support the claim that concepts of "stability", "rigidity", and "strictness" are in fact represented through sensory experiences of physical hardness.

Ackerman et al. conclude that "Basic tactile sensations are thus shown to influence higher social cognitive processing in dimension-specific and metaphor-specific ways" (Ackerman et al. 2010, 1712).

3.3.4 Sensory Templates and a New Approach to Double-Loop Learning

In this chapter, we have seen that human cognition is embodied and metaphorical. Abstract concepts are represented through somatic states to which they are metaphorically linked. We have also seen how we can get a sense of which sensorimotor experiences individuals use to represent abstract concepts by listening to how they speak about these abstract concepts. Together this provides us with a new approach to double-loop learning which bypasses many of the problems often encountered when attempting to engage in double-loop learning.

In Chap. 2, we saw four obstacles to double-loop learning. Argyris and Schön state that one of the main obstacles to double-loop learning is managers' wish to avoid threats and embarrassment. Through a discussion of various learning theories, I added that theories-in-use are formed largely through unconscious, automatic, and unintentional processing of experience, that theories-in-use are self-fulfilling and self-reinforcing, and that humans seek to create coherence between their beliefs and actions through rationalizations.

That theories-in-use are unconscious and self-reinforcing may obscure them, but it does not prevent us from detecting them. It simply necessitates that we follow Argyris and Schön's proposal and deduce these theories-in-use from analyzing managers' concrete behavior. The more severe problem arises when a manager rejects or rationalizes away what the analysis of his behavior shows about his theories-in-use because it is incongruent with his self-concept.

However, this resistance is not simply due to managers not having learned to operate from model II, as Argyris and Schön suggest. It is

also created by the approach to double-loop learning they suggest. In particular, it arises from the language they use to describe theories-in-use. When Argyris and Schön speak about theories-in-use, they use descriptors which are laden with social judgment. Such descriptors will often activate resistance, simply because nobody likes to be attributed negative qualities, such as defensive, controlling, and manipulative. If accepting such negatively laden self-concepts is a prerequisite to engage in double-loop learning, not many managers will be truly interested. And for good reasons—not merely out of vanity. The problem is not that these descriptions are altogether wrong. In many cases managers' actions can be rightly described as defensive, controlling, and manipulative. The problem is that these descriptions are both value-laden and reductionist. They are value-laden insofar as defensive, controlling, and manipulative are understood as negative personality traits. They are reductionist insofar as they hide the deeper motivations behind the managers' actions and insofar as they imply they are more real descriptions of the managers because they are descriptions of how the manager acts rather than how he believes he acts (and would like to act). For example, a manager may state that she values flexibility (her espoused theory), while her actions show that she is rigid and controlling (her theory-in-use). It is problematic to state that theories-in-use somehow show the true person and that the manager is therefore wrong when she says she values flexibility. Even though her concrete behavior shows that she acts in ways that are rigid and controlling, it may still be completely true that she values flexibility and strives to be flexible. It is therefore more appropriate to state that *both* theories-in-use and espoused theories show something true about the manager.

Cognitive Metaphor Theory offers a different way of exploring and speaking about theories-in-use which sidesteps the value-laden and reductionist discourse embedded in the concepts of model I vs. model II. From the viewpoint of Cognitive Metaphor Theory, we can explore and describe our theories-in-use in terms of which sensorimotor experiences a manager uses to represent various organizational phenomena. If we keep our exploration of theories-in-use at the fundamental level of what sensorimotor experiences managers use to represent various organizational phenomena and what sort of interactions these ways of representing

organizational phenomena support, then we engage in double-loop learning without getting entangled in and blocked by issues around social value judgments and having to see espoused theories as false. Espousing theories will simply be yet another type of action which are borne out of the specific cognitive metaphors managers use to represent the situation in which they are interviewed about their theories of action.

The main purpose of my doctoral research project, in which 60 managers participated, was to test the hypothesis that double-loop learning can be facilitated by making managers aware of which sensorimotor experiences they use to represent problematic situations and assisting them in trying out alternatives.

In the following chapter, I relate a number of stories from the research which illustrate this process.

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Part II

Cases

4

Sensory Templates: Solving Unsolvable Managerial Problems

4.1 Sensory Templates

In the previous chapter, we learned that our understanding is largely metaphorical in nature and that we understand more abstract phenomena, including social situations, by seeing them as analogous to more concrete sensorimotor experiences. In other words, we use sensorimotor experiences as templates upon which we build our understanding of abstract phenomena. In the rest of this book, I will call sensorimotor experiences used in this manner *sensory templates.*

So what does it mean for our understanding of double-loop learning that our abstract phenomena are grounded in sensory templates?

In short, it suggests that double-loop learning has to involve change in sensory templates and that the difficulties related to double-loop learning described in Chap. 2 can be seen as emerging from trying to change the theories-in-use without directly addressing the sensory templates in which these theories-in-use are grounded. As long as a manager unconsciously represents "conflict resolution" through the sensorimotor experience of "pushing aside physical obstacles", then she will comprehend

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theories about open dialogue, multiple stakeholder platforms, emancipation of suppressed voices, and shared decision-making processes as (nicely worded) means to push aside whatever she happens to see as obstacles. As long as a manager unconsciously represents "leadership" through the sensorimotor experience of "dragging objects", then he will relate to theories about servant leadership, appreciative leadership, coaching leadership, visionary leadership, and so on as (rhetorically pleasing) means of dragging his employees. It is fully possible to adopt the politically correct language without changing the sensory templates which govern one's behavior.

The split between espoused theories and theories-in-use can be seen as the result of managers adopting descriptions of theories of action without changing their sensory templates accordingly. Thus, assumptions about what sensorimotor experiences different organizational phenomena are analogous to are both some of the least explored and possibly some of the most influential assumptions managers base their thinking and decision-making on.

To illustrate how sensory templates work and the great effect our choice of sensory templates can have, I will relate a famous story from the world of physics. It is the story of how Einstein in 1905 explained the photoelectric effect by proposing that light, at least in some situations, is analogous to particles rather than to waves. Thus, in the words of this book, Einstein solved the problem of the photoelectric effect by proposing a shift in the sensory template physicists used to understand the phenomenon of light.

In 1887, Heinrich Hertz discovered the photoelectric effect. If you have two pieces of metal with a small gap between them, one of which is charged with an excess of electrons, the excess electrons will every now and then jump from the charged to the uncharged piece of metal. This is seen as a spark—or a mini-flash of lightning. When you shine light on the pieces of metal, you get more sparks, that is, more electrons make the jump—this is the photoelectric effect.

In 1887, light was understood as analogous to waves. That is, the experience of waves, like the ones we see in water, was used as the sensory template upon which physicists modeled their understanding of light. Using this sensory template, the photoelectric effect was explained as a

matter of the light waves hitting and pushing the electrons, giving them the energy needed to make the jump.

However, it was later noticed that shining very dim ultraviolet light on the metal would have a much larger effect than shining very bright red light on the metal. Using the wave analogy could not explain this. Bright red light corresponds to very tall waves (brightness) where wave tops are relatively far apart (color red). Dim ultraviolet light corresponds to very small waves (dimness) where the tops of the waves are closer together (color ultraviolet). It seems that the tall waves should be able to push more electrons than the small waves, regardless of color. Surfers let all the small waves pass by, and all of them are moved when the big wave comes. However, experiments showed the opposite.

Einstein solved this problem by assuming that light was not analogous to waves but rather to particles. He changed the sensory template used to model our understanding of light. Using the particle analogy, bright red light corresponds to many (bright) particles of light weight (red color). One can think of ping-pong balls. Similarly, dim ultraviolet light corresponds to few (dimness) particles of heavy weight (ultraviolet color). One can think of golf balls. Using the particle analogy, we can explain the photoelectric effect. You then think of the excess electrons in the charged piece of metal as tin cans. Throwing 10,000 ping-pong balls will not push over a lot of tin cans, but throwing just a few golf balls will push over at least one tin can per golf ball (if your aim is good).

Understanding light using *one* sensory template (waves) made the photoelectric effect appear as something unexplainable. Using a *different* sensory template (particles) made it possible to give a simple explanation of what was observed. Einstein's genius was that he questioned the fundamental assumption that light is analogous to waves. This shift of sensory template is what won Einstein the Nobel Prize, and it was a significant contribution to the foundation of quantum mechanics.

This story can inspire managers to ask the question: How many seemingly unsolvable organizational problems could be solved through a similar shift of the sensory templates used to understand various elements of the problematic situation?

When listening to managers speak, it is often possible to hear which sensory templates they use. A manager may speak about "negotiations" as

analogous to tug-of-war or assembling a puzzle. Managers may speak about "motivating employees" as analogous to carrying a heavy object or to removing obstacles blocking the flow of a river. Managers may speak about "decision-making" as analogous to making many objects move in the same direction or to the act of cutting through something. Managers may speak about "administrative tasks" as analogous to physical structures restricting their physical movements or to physical structures supporting their bodyweight. Managers may speak about "the team of employees" as analogous either to a united wall they need to push against or to a collection of objects with individual properties.

These ways of speaking are, as we saw in Chap. 3, not merely poetic adornments, but rather they reveal the managers' core assumptions about analogy between various organizational phenomena and sensorimotor experiences. That is, they reveal the managers' sensory templates. These sensory templates greatly influence how managers perceive various organizational phenomena and what sets of actions managers are able to imagine.

4.2 How Managers Use Sensory Templates

From 2010 to 2014, I did my doctoral work at Cranfield School of Management, UK. Sixty managers from 50 different organizations participated in this research. All participants had at least three years of experience as managers with employee responsibilities. In addition, many of the participants had held positions as project managers before they attained their first managerial position with direct employee responsibilities. There were participants from all levels of management, from line management to top management. The organizations included private sector, public sector, and hybrid sectors, such as privately owned organizations involved with public service tasks.

At the beginning of the research, all participants were asked to select a problem they were facing in their work as managers which they found to be of utmost importance and which in spite of their serious efforts to

solve it had remained unsolved. The benefit of working with problems which at the beginning of the research seemed unsolvable to the individual manager was that if managers at the end of the research had found *any* way of dealing satisfactorily with the problem, this would provide strong evidence that participating in the research intervention had resulted in a qualitatively new approach to dealing with the problem. In contrast, if the manager at the start of the research merely saw the problem as difficult, but not impossible, it would be much harder to determine whether changes in the way the manager perceived and engaged with the situation represented a qualitatively new approach or merely an improvement on an approach the manager had already used.

The managers formulated problems such as: How can I motivate employees who are always complaining? How can I make sure that managers from other departments commit to the decisions taken in the management team? How can I keep my highly skilled employees once they are good enough to start their own business? It was interesting to notice that most unsolvable problems the managers encountered were people problems—not problems about finance, marketing, product development, and so on.

Next, the managers were divided into three groups. In groups one and two, the participants used two different art-based methods to explore their problems. Group three was a control group where the participants did not explore their problem through any intervention. All managers were interviewed at the beginning of the research and again about one month after any intervention. These interviews were compared to test whether the participants had changed their perception of the problem and their approach to dealing with it. I will describe the interventions in more detail below. A full description of the research design used, a variation of Solomon Four Group design (Solomon 1949), is published in my doctoral thesis (Springborg 2015).

The data was analyzed by comparing two measures:

1. Changes in the sensory templates the managers used to represent their problem—insofar as these were visible in the managers' language and/or artistic creations.

2. Whether or not participants in the final interview reported that they had found new and successful ways of dealing with their problem and could back up this claim with concrete examples.

The main results of the research can be summarized in four points:

Changing sensory templates can solve seemingly unsolvable problems: Changing the sensory template a manager uses to understand a problematic situation can change this situation from a severe and seemingly unsolvable organizational problem to a relatively simple situation the manager can easily deal with. Merely changing the metaphor a manager uses to speak about the situation, *without* changing the underlying sensory template, does not lead to solutions.

New sensory templates can emerge from aesthetic elements outside the method: Through art-based methods, managers can find new sensory templates by engaging with photographs, drawings, and poetry. However, other aesthetic elements of the learning context, beyond those the method provides, can also be the source of new sensory templates. This can be highly unpredictable. It indicates the importance of educators paying attention to aesthetic elements of the learning context in a broad sense, such as the feel of interpersonal connections, seating arrangements, and the sensory templates from which the educator acts and speaks.

Letting go of non-essential parts of sensory templates: Changing the sensory templates managers use can be achieved by learning to perceive the individual parts of the sensory template they are currently using and changing from using the composite sensory template to just a single essential part of this template, that is, by letting go of non-essential parts of the sensory template they are using. Such changes in sensory templates seem to make managers become more courageous, patient, kind, and humble. This observation becomes important in Chap. 6 when dealing with the link between sensory templates and spiritual virtues.

The trap of "more clarity": Managers will sometimes report that a learning intervention has given them more clarity about the situation. This is generally considered a positive outcome of a learning intervention. However, if no change of sensory template has occurred, and the problem remains unsolved and (seemingly) unsolvable, such clarity can be a

negative outcome. When increased clarity does not lead to solutions, it can lead to managers being stuck in (clearly understood) perspectives which prevent them from acting efficiently. Thus, perceived increase in clarity is not necessarily good.

Below, I present a series of cases illustrating these four main findings. I will describe the cases in some detail. It is my hope that such detailed description will help the reader empathize with the manager and make palpable the process each manager experienced as their unsolvable problem transformed into a solvable one. Furthermore, I have included a fairly large number of cases. For the academic reader, some examples can be skipped as a few suffice to illustrate the ideas put forward. However, beyond their illustrative function, each case represents a general managerial problem, and it is likely that the reader who is a practicing manager will find among the cases some which they themselves have struggled with in their own organization. Reading a detailed account of a shift in perspective may enable such readers to make a similar shift for themselves and harvest similar benefits as the manager who participated in the research. Finally, detailed accounts of the learning journeys experienced by several participants in the research are also useful for scholars interested in critically evaluating and reinterpreting the research.

4.3 Changing Sensory Templates Can Solve Seemingly Unsolvable Problems

One group of managers who participated in the research was asked to create metaphors for their problematic situation. Asking managers to create new metaphors for various aspects of managerial work is a well-known way of using art creation in management education (Taylor and Ladkin 2009; Wicks and Rippin 2010). As described in Chap. 3, using different metaphors to look at an aspect of managerial work is like looking at it from different vantage points. It enables managers to see new things which may help them in their work.

For this group, there were no restrictions on the types of metaphors created. As a warm-up exercise, the managers were asked to pick a person they knew well and answer questions such as if this person were a fruit/

building/temperature/blockbuster classic, what fruit/building/temperature/blockbuster classic would he or she be. This exercise was repeated using familiar places such as a summerhouse, a lake, or the driver's seat of a car, and familiar activities, such as a child's birthday party, taking a shower, or running in the morning. The point of this exercise was to give the managers a clear understanding of what metaphors are and how different metaphors highlight different aspects of the phenomenon they are used to describe.

The managers would then create a number of metaphors for their problematic situation, pick the one they found most interesting, and develop it through a series of exercises into a poem, several photographs, and a drawing.

Developing new metaphors for their problematic situation would sometimes give the managers a new perspective from which they could easily solve the situation. However, this would only occur if the new metaphor was based on a *different sensory template* than the sensory template the managers normally used to comprehend the situation. The following cases illustrate how changing the sensory template through which a manager comprehends a situation can transform seemingly unsolvable situations into situations the manager can easily deal with.

The names of the managers in the following examples are not their real names.

4.3.1 Case: Collaboration Between Departments: Coordinated Movement vs. Connection

One manager, Anna, faced a problem many managers who work in silo-based organizations will be familiar with. For a couple of years, Anna had experienced problems in collaborating with the other department managers. At our first meeting, she formulated the problem in the following way: How can we ensure common commitment to the decisions agreed upon at our meetings, given that the different managers have very different ideas about what management is? Anna was a department manager in a public sector organization. She had six years of experience as a manager and 13 employees in her department.

Anna experienced that the managers in the other departments acted in the interest of their own departments before they acted in the interest of the organization as a whole. This attitude manifested in several ways. First, she experienced that she was not always kept informed about issues concerning her department until after the events. She felt that such withholding of information was a way the other department managers maximized their own influence in the organization and that they used this influence for the good of their own departments. Second, she experienced that some of the other department managers were not loyal to the decisions that were made during the meetings of the management team. In particular, these department managers would agree to decisions about what to communicate to the employees during a meeting, but after the meeting they would go out and communicate something else in their own departments. She believed that this difference in communication, at least in part, was due to the individual managers' different ideas about what management is. Anna herself saw management in a public sector organization as a matter of giving employees autonomy and challenging politicians' decisions about what the organization should do whenever her professional expertise told her there was reason to do so. Anna believed that some of her management colleagues saw management in a public sector organization as a matter of controlling employees and carrying out the orders of the politicians without question or error. Anna believed that one reason the actual communication to the employees in the different departments lacked coherence was that the decisions about what to communicate to the employees were filtered through these opposing ideas about management. Therefore, she lamented that at meetings the management team would speak only about the concrete problems in the organization and never about their different basic attitudes to management. All of these circumstances made it difficult for them to find common ground and Anna believed that the problem was this: How can we find common ground to work from?

To understand what Anna means when she says this, we need to know what dominant sensory templates she uses when posing this question. We can get a sense of this by listening to her language when she

spoke about the situation and by looking at the artwork (poem, photographs, and drawing) she produced to describe the situation.

When Anna spoke about "finding common ground", she used the Danish words "finde fælles fodslag", which literally translates into "finding a common beat of the feet". It refers to walking in time with each other and to the sound made when many feet hit the ground in a synchronized way. This choice of words tells us that Anna is using the sensory template of coordinated movement to understand what she feels is missing in the management team. When Anna took pictures to illustrate the problem, she took pictures of trains moving in opposite directions. Such pictures reveal the use of the sensory templates "goals are destinations in physical space" and "common action is coordinated movement".

Using these sensory templates to understand the situation, Anna asked questions like: How can I make sure that the others are loyal to the decisions we make at our meetings? How can I make the others understand the importance of giving autonomy to the employees and valuing our professional expertise and challenging political decisions when they need to be challenged? Or in the words of the sensory template: How can I make the others align with my preferred direction? Even though Anna had tried for years, she had not managed to do this. There could be many reasons for this. First, Anna was slightly uncomfortable with her own agenda, since this agenda was, in effect, one of taking control and making others conform to her point of view. And even though she believed she was right and the others were wrong, she also realized that it was problematic to ask others to relinquish control over their employees if she at the same time tried to take control of how her colleagues should act. Second, trying to impose one's own view on someone else will often generate resistance in the other. Regardless of what the reasons were, the fact remained that the problematic collaboration with the other department managers had persisted in spite of all Anna's efforts.

However, among Anna's pictures, there was one picture of a scarf on a bench. This picture was particularly interesting because it did not contain any movement—and thus, no coordinated or uncoordinated movement. This was an indication that it referred to a different sensory template than the dominant one. When Anna spoke about this picture, she was at first unsure why she had taken it. Then she said:

> It could be something about going in different directions. But it also looks a bit lonely. So, in fact, it is something about when one does not have this common commitment then everyone stands a bit lonely. And this I hadn't thought of.

Here we see a different sensory template emerging. At first, she tries to understand the picture in terms of the dominant sensory template, but then she recognizes that something else is going on. It is about separation vs. being together (Fig. 4.1).

As Anna started talking about the situation using this sensory template she saw the situation from a completely different vantage point. And just like in Gareth Morgan's *Images of Organizations*, this shift of vantage point gave Anna a number of new insights about the situation. First, she noticed that her emotion changed. Instead of an underlying atmosphere of anger (why can't they see they are wrong?), she felt an underlying atmosphere of sadness (maybe we all feel isolated, sad, and lonely in

Fig. 4.1 Anna's picture of a scarf on a bench

this). Second, Anna realized that the problem was not a problem of *lack of commitment to decisions* made in the management team, but rather a problem of *lack of relationship* between the managers in the team.

The instant she realized this, she remembered that the first thing she did as a manager when she got a new team of employees was to make sure that they formed good relations with each other, for as she said, if they don't have good relations, nothing works. This realization was a great relief to her because she also realized that the toolbox she normally used to ensure that her employees formed good relations with each other, she could simply apply to the management team.

She put this into practice, and one month after the intervention she had achieved good results in terms of better collaboration with her management colleagues.

This example shows that when Anna shifted the sensory template she used to understand the problem she faced in collaborating with her management colleagues, the problem changed from being something she could not solve to being something she already knew how to solve. When she saw the problem as analogous to "coordinating movement", she tried to impose her (correct) view on others and felt angry that they could not understand and that they were uncommitted, and she could not find any means of solving the situation. When she saw the problem as analogous to "creating physical contact", she shifted her focus to building good relationships to her colleagues and felt sad, rather than angry, about the present state of affairs, and she felt encouraged to find that she already knew how to solve the problem.

4.3.2 Case: Motivating People: Sisyphus vs. Bicycle Break

Another manager, I'll call her Becky, was the COO of an organization with 30 employees. The organization was a non-profit, private sector organization which fulfilled a very specific administrative, public service function. Every second year, they had to renew their contract with the government to remain in charge of this administrative task. Becky had more than ten years of experience in management positions in different organizations, two of these in the current organization.

Becky had problems with the culture in the customer service department with nine employees, which she did not know how to solve. At our first meeting, she asked: How can employees in customer service understand and feel that they are an important and valued part of the organization? How can I raise their self-worth?

The employees in the customer service department were very frustrated. They told Becky that they felt they were the part of the organization that was least valued and that employees in the other departments had the opinion that the customer service employees were easily replaceable. They felt that the others did not understand what they did for the organization and how difficult their tasks were and therefore did not show them any consideration. Due to this frustration, the customer service employees had a harsh tone both in their communication with other departments and internally among each other. And it influenced the way they spoke with customers.

Becky saw this culture of frustration as a severe problem for several reasons. First, the way customer service speaks to customers greatly influences the image customers have of the organization. Second, the organization's permission to administer the particular public service which was the sole base of the organization's existence depended on a satisfactory performance by the customer service department. Third, the frustration of the nine employees generated a lot of noise in the rest of the organization. It had a negative impact on the general working climate, and it took up much time in the management meetings.

Becky described employees in the customer service department as extremely competent. The work in the customer service department was repetitive and stressful. They would deal with the same issues every day. Customers would mainly call the customer service department when the customers were frustrated. And there was an intense time pressure because a part of the requirement for the organization's permission to administer their public function was that their customer service department answered 95% of all calls within 20 seconds. Many of the employees in the department had been there for eight to ten years, which is uncommonly long for a customer service department. Becky saw that this made them both extremely competent and very set in their ways.

When she spoke about the problem, she described it as a kind of Sisyphus work. Raising the employees' self-worth or sense of being appreciated was like pushing a boulder up a mountain only to watch it roll back down. This description was a direct description of the sensory template Becky used to comprehend the situation.

Using this sensory template to comprehend the situation made Becky ask questions like: How can employees in customer service understand and feel that they are an important and valued part of the organization? How can I raise their self-worth? She had tried many things to raise the employees' self-worth and sense of appreciation, including investing in new equipment, giving them communication courses, arranging events where they could tell the employees from the other departments about their work, and so on. However, it seemed impossible to keep the boulder from rolling back down the mountain.

During the workshop, Becky took pictures, wrote a poem, and made a drawing to illustrate the situation. From this work emerged an alternative sensory template. To illustrate the problem, Becky took a picture of a bicycle wheel. When she spoke about this picture, she said that the problem was also like riding your bicycle with the hand brake on: There is friction in the system.

Using this new sensory template to understand the situation, Becky began to ask: Where is the friction? Asking this question, Becky found a very interesting answer. The friction was created by the department manager, and not by the employees' lack of self-worth. She realized that the manager of the customer service department demanded that all decisions should be approved by him. Thus, the employees were not allowed to make decisions that they were fully competent to make. This gave them very little influence on their own work life and contributed to their frustration and sense of not being valued. However, they were very loyal to the manager and had not talked about this as a problem.

This made Becky realize that she could deal with the situation simply by talking to the manager about his leadership style and insisting that he would give more responsibility to the employees and in this way acknowledge their competency and value them. She was very relieved about this realization. In our last interview, she said: "It's a completely different issue, than what I thought it was… it is much more accessible and tangible".

This example shows that when Becky changed the sensory template through which she understood the problem about the frustrated customer service employees, the issue changed from being something unsolvable to being something that was easy for her to solve.

4.3.3 Case: Changing People's Mind. Water vs. Viscous, Sticky Caramel Mass

Catharine was a manager in a large multinational corporation which had business units operating in several countries. Catharine had five years of experience as a project manager and one and a half years experience with people leadership. At the time of the research, she had a team of six employees for whom she had the formal staff responsibility plus 20 employees for whom she was project leader. Catharine was part of a central unit whose function was to support the business units. The central unit developed plans, got them approved by the board, and sent them to the business unit for implementation.

Catharine described a classical problem which many managers in organizations with strongly centralized structures will recognize. In short, the people in the central unit feel that the people in the business unit, who are tasked with implementing the plans, are ignorant and unqualified. And the people in the business unit think that the people in the central unit are arrogant, don't know what is really going on at the front line, and therefore make bad plans. Thus, the people in the business unit would rather make the plans themselves. Catharine had noticed that this sort of power struggle occurred not only between the central unit and the business unit she was in charge of but between the central unit and business units everywhere. She had also noticed that the struggle was never present in the meetings between technicians, but only at the managerial level—starting at the first managerial level of team leaders. Catharine saw this as an eternal, unsolvable tension.

At the time of the research, Catharine's team had made a catalogue of the projects in the business units assigned to her, evaluated the worth of each project based on analysis of collected data, and made decisions about which projects to invest in and which to close down. According to this work, nine out of ten projects would never give any return on investment.

However, the people in the business unit thought, according to Catharine, that their projects were worth much more and that they should go ahead with practically all of them.

Catharine's problem was that the business unit had begun operating too autonomously. They had disregarded the analysis made by the central unit and had already begun, without any authorization, to make investments to develop the projects they themselves believed in—including making their own analyses, buying land, and negotiating with local authorities. Furthermore, they had hidden these activities from the central unit. Catharine didn't know how to stop the business unit from spending money on developing these projects, which according to the analysis would cost the organization more than they could eventually earn from the project. Catharine saw the problem as consisting of two parts: first, how to make Unit A listen to reason and, second, how to shut down the projects (their dreams) and still preserve a working relationship with Unit A.

Catharine felt she had been given two roles which were impossible to hold simultaneously. On the one hand, she was supposed to be the police looking with critical eyes at the business unit to ensure quality. On the other hand, she was supposed to support the business unit, and the organization had in recent years adopted "collaboration" as an explicit value, to temper an egocentric and competitive organizational culture. Catharine described it as follows: "It's just not ok to have conflicts in the organization. In the old days, it was. Then it was management by conflict. But in the new organization, it is not. In the old days, everybody was bitching. But now: No. Everybody's happy. Conflicts are an ugly thing". Having good collaborations was a key performance measure with an impact on managers' bonuses. This created a dilemma for Catharine. Alone she was unable to stop the business unit from wasting resources on projects which would ultimately lead to losses for the organization. So in order to not fail in her role as police, she would have to engage higher levels of management. However, this could be seen as telling on the business unit and thus exposing that she was unable to maintain good collaborative relationships with the business unit. Furthermore, Catharine felt that being a woman in a male-dominated organization increased her risk of being seen as someone unable to collaborate. She felt she needed to be careful about expressing negativity: "It's not good to be emotional as a woman in

a male-dominated organization. As soon as the voice becomes a bit shrill their ears close". Due to all of this, Catherine saw her two roles as impossible to unify and thus she felt the organizational structure was flawed and could never work.

During the workshop, Catharine explored which sensorimotor states she used to comprehend the situation. She discovered that as an engineer, she liked to solve problems quickly. She was used to working in a laboratory where she could set up experiments, make her measurements, and immediately see the results. There was no inertia in this movement. So because she saw the evaluation of the projects as a purely technical problem which had already been solved, she could not understand why the people in the business unit did not move without inertia.

However, talking the whole thing through, she realized that the business unit, although unrealistically optimistic about their projects, also embodied values such as entrepreneurship, being visionary, making things happen, and doing something good for the local community. Even though she believed that the business unit was acting blindly and wrongly, she admired these values and even preferred them to the values embodied in her own role, such as being conservative and controlling. She could also understand the frustration the business unit felt toward the central unit. Through these talks and through her work with capturing the sensorimotor states she used to comprehend the situation in photographs, poetry, and drawings, she came to feel the problem as a human problem, which felt like a big, viscous, sticky mass and which, unlike technical problems, could *not* be moved quickly. She described this shift in perception in the following way:

> I saw the whole problem as this big, fluent, viscous, caramel mass. And that is not something you move quickly. It is something you slowly push and work on in a calm way… I'm used to fixing things quickly. Bam, bam, bam. Problem solved. Duk, duk, duk. But now I see that this is not like a glass of water, you can pour into another glass and then it's gone. It is this big, viscous, fluent mass, which is constantly changing shape, which you just have to approach in a calm way and work with step by step… Now I don't expect that it is a mass you can just shape and move. I accept that it is eternal and big and viscous and sticky and that one just have to work with it in a calm way [laughs].

This change in sensory template brought many changes in Catharine's behavior and general feelings relating to the problem. Instead of seeing her situation as a result of a flawed organizational structure, she accepted the challenge:

> It has become an OK problem, 'cause it's part of my job. Before it was more like, fuck those fools, I'm an engineer, and I shouldn't deal with this shit. But now it's like: Yes, I'm an engineer, but I also have to deal with this, 'cause it is my job, and it is not just them who are stupid. When you think about it, it is just like this. It is complex, and it is people.

She experienced a calm and *relaxed patience* with people. She now saw it as unrealistic to think that she could go directly to the business unit and tell them what to do and expect them to simply do it. Instead, she would build up an atmosphere in many people which would then slowly reach the people in the business unit—working on them from many sides. She no longer got upset if her attempts did not work immediately. She would instead just try out different things. And she no longer felt the fear of being seen as a hysterical woman or as bad at collaborating when she pointed out the faults in the business unit's behavior to higher levels of management. She felt that she could deal with the conflict without either becoming emotional and unprofessional or staying quiet and losing herself. She described this new view on "conflict" in the following way:

> If you go after the person, it is ugly. But if you just go on in a more zen-like and calm, this-is-my-job, go-for-the-projects kind of way. Then it is not ugly. Then it is what I do. It's what I get paid for.

In short, through her work with technical problems, Catharine had come to understand problems as something with little mass and no stickiness, which could be moved quickly—like water. This made her frustrated when the people in the business unit refused to act in a reasonable way even after the technical problem had been solved and the data clearly showed what to do. When she changed this sensory template and began to understand the problem as a big, viscous, sticky mass, she realized that she had to work on the business unit from many sides and she gained the

ability to work in a relaxed, patient, and calm way without using blame. She would simply present the data for many people to build up a general attitude which would then reach the people in the business unit. This worked. At the time of the second interview, the business unit had dropped the projects she wanted them to drop and focused their resources on the one project that would be profitable.

4.3.4 Case: Generating Sales: Pulling the Cart vs. Weaving Nets

Dorothy was a self-employed consultant. She had over ten years' experience in different leadership roles. She had worked extensively with art and theater and among other things she had been the head of a large yearly festival of children's theater. For a couple of years, she had been away from the world of theater, but two weeks before the research, she had been hired as administrative leader by a children's theater to help them sell their performances. This theater used to sell 100 performances a year, but recently this had decreased to 30 performances a year. They did not know why. They had considered possible reasons, such as whether their recent plays were not as good as their previous plays or whether children's theater simply no longer had a place in today's society.

Dorothy's problem is the common managerial problem of being handed a business with failing sales and no clearly identified reason for the decline. It is the problem of being a new leader hired to turn an organization around. To some managers such a task is exciting, and they may even specialize in this kind of work. To others, it is one of the scariest scenarios, and they would never take such a position. Dorothy's story also touches on the classical manager trap of doing things themselves when tasks seem too big and complicated to delegate.

Dorothy believed the reason for the decline in sales was related to a recent municipal reform. In Denmark there are around 140 children's theaters. These theaters deliver many of their performances at schools and similar institutions, and they are usually hired by coordinating employees in the municipalities. Many of these coordinating employees are individuals working in the municipality who happen to have a passion for

children's theater. They are people who believe in the importance of children being exposed to theater as part of their development. They are the champions of children's theater. During a municipal reform in 2007, many municipalities were joined, and many of the employees who had previously hired the children's theaters were either moved to new functions or were let go. Thus, the theater lost many of their most important connections who had generated sales for them. Dorothy did not believe that the time for children's theater was over. Before participating in the research, she had visited a festival for children's theater after having been away from the scene for five years. Out of the 100 theater groups represented at the festival, there were 20 she didn't know, which had emerged within those five years. One of these groups delivered a performance which Dorothy considered among the ten best performances she had ever seen. Thus, even though Dorothy in the initial interview saw the situation as very bleak, she did not believe that the product itself was the problem.

At the start of the research, Dorothy said she felt the problem was "an impossible wall" in front of her and that she felt she was hired to "pull the cart on her own". These two statements revealed the sensory templates she used to comprehend the situation. First, she saw the problem as *one thing*, a wall. Second, she saw herself as the sole agent who needed to somehow solve the issue.

Dorothy experienced an important shift when she became conscious of these sensory templates. She realized that the owners of the children's theater who had hired her expected her to generate the sales on her own. Knowing very little about sales, they imagined that she, being the expert, could come up with a magical formula that would solve their problems. And she realized that she had bought into this view. This was a big eye-opener for her. Immediately upon this realization, another set of sensory templates came into play. She began speaking about herself as someone who was not going to pull anything, but as someone who was going to activate a whole network of people. Thus, the problem was no longer one thing, but many, namely how to activate individuals one by one in a collective effort. Similarly, her task was no longer moving something but rather creating connections or weaving a web between individuals who had both resources and an interest in doing something about the declining sales of children's theaters.

Thus, after the workshop, Dorothy began activating all the people she could imagine would be interested in solving this problem. First, she created a workshop for all employees in the theater group about sales. In the workshop, she presented very basic and simple ideas about dividing customers into different segments and clarifying what to say to customers within each segment and so on. The theater people became excited about Dorothy's systematic approach to sales. One employee changed from viewing sales as something she'd never do to actively asking Dorothy for more leads to follow up on. This already brought results. By the time of the last interview, the performances they had worked with were almost sold out. Due to the positive results, they had been talking about involving a few more theaters in a combined effort. Second, she realized that she herself could not produce a grand analysis of the effects of the municipal reform. Therefore, she contacted students and teachers on the faculty of theater science and sparked their curiosity in investigating the problem as part of their university assignments. Third, she contacted a department in the ministry of culture that offers mini-educations to students in schools so they know how to receive performances at their school, that is, telling them what information the janitor at the school needs, which facilities are important for performers, and so on. Fourth, she connected with a governing body which gives money to cultural programs and made them interested in investigating reasons for the declining sales. Given Dorothy's extensive experience with the theater world, she, more than anyone, had the overview of who had resources and were interested in joining in a collective effort to raise the declining sales for children's theaters.

In short, Dorothy changed the sensory template she used to understand the problem. Before the workshop, she saw the problem as one thing (an impossible wall), and she saw her task as pulling the cart alone. After the workshop, she saw the problem as consisting of many small tasks of one by one finding, activating, and connecting all the individuals who had both resources and an interest in doing something about the declining sales of children's theaters. Dorothy's shift in sensory template is similar to Anna's shift. Like Anna, Dorothy changed from a sensory template of moving things in a certain direction to a sensory template of creating physical connections. Where Anna spoke about creating one-to-one connections, Dorothy spoke about weaving a web of connections. Dorothy's

shift in sensory template was also similar to Catharine's shift. Both were faced with something which seemed immovable—an impossible wall and an obstinate business unit. Both changed from thinking that their problem was finding ways in which they personally could move the immovable thing, to thinking that their problem was how to engage many individuals with resources and a common interest in dealing with the problem.

In the last interview, Dorothy said that the workshop had been a profound personal development for her. She recognized that throughout her professional career she had tended to do things herself instead of delegating—often realizing the need to delegate too late. She described the change in the following way:

> Your methods have helped me to catch a management mistake I've suffered from many years, which is 'now, I'll deal with everything myself.' I've been a leader several times, where I really have to be able to delegate. And I do it, but often too late. I try to solve everything myself. And I became keenly aware of this. It was the image of myself as a magician… tall hat and magic staff and a hand with a white glove: 'Wiiing' and then there had to be a solution. And that image became key for me. I can feel I'm about to jump into that trap when I can detect a certain internal panic: Gosh, this is a big problem. Now it's getting immense and difficult. But then I think: You are not a magician…. And then I see this open field with scattered rocks here, and there and I go and choose one at a time. Who am I with now and what can they do in relation to this rock if we turn it over? … And it may sound like this is just leadership, but for me, it is a personal process of catching that panic when it arises. And then be analytical instead of panic stricken: It is not a big wall, it is a field, and there are some rocks that need to be turned. Look out over the field!

This quote also shows that when Dorothy saw the sensory template she used, *she could let go of it and let another sensory template emerge.* In Chaps. 6 and 7, I will return to the importance of learning to become conscious of sensory templates as a way to let go of using them.

At the end of the research process, Dorothy told me that when she came, she had thought that it would be nice to talk through the problem, but that she was certain it would not solve anything. However, she now

estimated that the activities she had initiated after the workshop might not get the sales back from 30 to 100 performances a year, but that they would increase the sales to 60–70 performances a year. She was very surprised at this outcome. Such surprise was very common among the participants who experienced that their problem transformed from unsolvable to accessible.

4.3.5 Case: Managing Complaints. Employees as One Group vs. Many Individuals

Einar was a manager in a government administration. He had been in this position for three years, and it was his first job as a manager with employee responsibilities. Einar had worked ten years as a project manager. He led two teams. One team consisted of five employees with shorter educations who took care of operations. The other team consisted of eight employees with longer educations who took care of development tasks.

Einar's problem was yet another problem that many managers will recognize. The employees in the operations team expressed dissatisfaction with a variety of things. Einar listened to them and felt he did everything in his power to make changes so these employees could be satisfied with their work life. However, instead of appreciating his efforts, the employees simply found new things to complain about or found flaws in the solutions he came up with. Many managers will at some point in their career have encountered groups of employees who seem more interested in complaining than in solving the things they claim to be unhappy about and moving on. This culture of complaining generated an atmosphere which affected employees in both teams negatively. Einar had even had one employee who felt so distressed about the situation that she didn't want to come to the workplace. Einar felt lonely and resentful in this situation.

Einar had observed that the employees in the development team were motivated by their vocational challenges and successes. They appreciated being given autonomy in their work, and they handled this autonomy well. Thus, it was easy for Einar to understand what these employees needed in order to thrive and be productive. The employees in the operations team,

on the other hand, seemed to have a greater need for Einar's active involvement, but Einar found it difficult to understand exactly what these employees needed in order to thrive and to be productive. He would listen to their complaints for clues, but it seemed to him that they did not tell him clearly what they really wanted and needed in order to be satisfied.

Much of the dissatisfaction the employees in the production team expressed was aimed at things which Einar could not do anything about. For example, some of the employees in the production team were dissatisfied with doing the work they were doing and would instead like to do the same kind of work their colleagues in the development team were doing. However, these employees lacked the qualifications, both in terms of education and experience, needed to do the work of the development team. Furthermore, Einar needed them to do the work he had hired them to do. Another type of complaint which Einar saw as something he could not do anything about was lamentations about how much better things had been in the old days. Adding to this, Einar observed that the employees in the operations team would often read events in a negative way. If, for example, he brought ice cream for everyone one day, instead of seeing this as a positive thing, they might see it as an underhanded management intervention aimed at manipulating them. Similarly, if he held a meeting to inform his teams about developments in the organization, the employees in the operations team would often complain that they had not been informed earlier—regardless of how quickly he informed them about matters. Thus, the complaints of the employees in the production team did not give Einar a clear idea about what they needed in order to thrive and to be productive.

Einar had a genuine wish to bring out the best in his employees. He wanted this not merely for the sake of scoring high on the job satisfaction surveys and having productive employees, but also out of care for his employees and a desire to see people thrive. However, he felt the employees in the production team made it difficult for him to help them thrive. Einar resented the above-mentioned complaints as he found them unfair "cheap shots". He felt such complaints were doing nothing good and that they were needlessly poisoning the workplace climate. On the one hand, he wanted people to tell him if something really bothered them so he could do something about it. On the other hand, he didn't want to spend

time on the kind of complaints he felt were complaints for the sake of complaining. At the start of the research, Einar stated that his problem was how to raise the morale of employees in the operations team by setting aside their negative attitude and *complaining less* about things they could not do anything about and instead adopting a positive attitude and focusing on improving the things they could improve.

During the workshop, Einar captured the sensorimotor states he felt in the situation by taking pictures of glass walls, a sign with the word "reserved", and a vending machine with candy behind a glass. Einar said:

> First I took a series [of pictures] which all have the same theme. Loneliness and prohibition and not being able to penetrate. Not being able to get in touch with the core of the problem, but more touching symbols and artifacts around it… What I'm dealing with is a bit of a closed party, where it is difficult to penetrate to the core.

Einar further explained that he felt there was something attractive and promising and even loving that he was trying to bring out in the open, but that the production team was like an impenetrable wall blocking all his attempts. This made him feel lonely and resentful. He felt the employees "cheated him out of realizing his positive intentions". He felt the whole thing was like an obstacle race or like a drawn out game of hide and seek.

While speaking about his art creations, Einar said:

> My drive—the wish I have—is that I believe in the good in all people, believe that people have meaningful motives for doing what they do. Therefore it's about *reaching* this. What drives them? *Find it and cast light on it and make it object for awareness*. But… I'm no oracle—so it is necessary that people (…) somehow show: this is where we are. If it is hundred meters *steeplechase* in *hiding,* then it is impossible to find what drives people. And then I get cheated out of my good intentions, and the other part plays with *covert cards*.

When we look for sensory templates in the above quote, we see three in play (and that Einar was a master of mixed metaphors). First Einar uses the sensorimotor experience of wanting to reach something attractive

that is kept from his reach by a barrier—like chocolate behind the glass wall of a vending machine. The use of this sensory template is visible in Einar's use of words like "penetrate" or "wall" (in the previous quote) and in the picture of the vending machine. But Einar also uses another sensory template. This is visible in his use of words like "finding", "hiding", "cast light on", and "make it object for awareness". These words seem to refer to the sensorimotor experience of things coming in and out of one's vision. If the light is switched off, he cannot reach what he wants, not because of a barrier, but because he cannot see it. When he says "find it" rather than "reaching it", he introduces the notion that, unlike the chocolate behind the vending machine's glass wall, the thing he is reaching for is invisible to him. When Einar talks about playing with "covert cards" he adds a further layer to the sensory template, namely an *agent* that deliberately keeps the thing he is reaching for hidden. Einar speaks about this agent as being "the production team". That he speaks about *one team* shows that he uses the sensory template of "one entity", to understand this agent.

These three sensory templates structure Einar's perception of the problem and determine the set of actions he can imagine. This first layer of the sensory template is "wanting to reach something attractive that is kept from his reach by a barrier". Einar imagines a scenario where the employees are thriving, and there is a good (and even loving) work climate. This scenario/climate is what Einar is reaching for. The complaints of the production team are the barrier Einar needs to penetrate to get to the attractive scenario/climate. Therefore, Einar tries to get rid of the complaints—by resolving the ones within his power to solve and encouraging the employees to stop complaining about things that are impossible to change. Given the sensory template of wanting to reach something attractive that is kept from his reach by a barrier, these actions make perfect sense. The second layer of the sensory template is "reaching something that is not visible to him". Einar assumes that what he is reaching for is whatever would make the employees in the production team happy. Assuming that it is visible to *them,* he asks them to show it. This is what causes the resentment in him. Using the sensory template of reaching for something he cannot see, he resents that the people he supposes can see what he is reaching for will not tell him where it is—even though he is trying to do something in

their own best interest. The third layer of the sensory template is that the production team is one entity. This sensory template makes it appear to Einar that the production team is acting with one will and that the team is one entity hiding the thing he is reaching for. This makes him address the production team as one entity, for example by asking the entire team to complain less.

Even though no change in sensory template occurred during the workshop, in the last interview an important change had occurred in relation to the third layer of the sensory template. In the month between the workshop and the final interview, Einar had conducted the annual performance and development reviews. Thus, he had spoken individually with all his employees. Doing this, he realized that the production team was *not* one entity, but rather five individuals, who did *not* act with one will but (on the contrary) differed quite significantly in their views. He realized that only one employee was complaining and that the rest simply kept quiet and that he had, falsely, assumed that this meant they agreed. However, they did not. On the contrary, they were as tired of the complaining as he was. Changing from seeing the team as one entity to seeing them as five individuals with different opinions brought Einar a new way of engaging with the problem. Instead of encouraging the whole team to complain less, he began to encourage the quiet team members to voice their complaints. When the quiet team members began to speak, it was made clear that the general attitude in the team was not one of dissatisfaction with the organization, but dissatisfaction with the one person who was prone to complaining.

In short, when Einar changed from viewing the production team as one unit to viewing them as five individuals, he realized that the wall of complaints had been an illusion. He also realized that instead of trying to make the entire team complain less, a far more efficient approach was to encourage the ones who were normally silent to speak their minds about what bothered them. This changed the general atmosphere in the group.

Whereas this did not completely solve the situation, it did make it far more accessible to Einar as the production team no longer appeared as an impenetrable wall, but rather as five individuals—most of whom were quite content. Einar's case is interesting because he used three interwoven sensory templates and only changed one of these, which did not seem to

be central to his understanding. It is possible that Einar would have accessed even more efficient ways of addressing the problem if he had changed the central sensory template of wanting to reach something attractive that is kept from his reach by a barrier.

The five cases above are summed up in Table 4.1.

Table 4.1 Changes in sensory templates and their implied actions

Manager	Old ST	Old action	New ST	New action
Anna	Collaboration is coordinated movement	Force department managers to commit to decisions	Collaboration is physical connection	Buid relationships between department managers
Becky	The problem is like pushing a rock up a hill and preventing it from rolling back down	Tell employees how much they are appreciated and make employees in other departments understand the challenges of customer service to enhance their appreciation	The problem is friction—like riding a bike with the breaks on	Identify and remove the friction. In this case, the department manager's overly controlling management style
Catharine	People in the business unit are like water	Present the people in the business unit with the data to move them, and blame them if they don't move	People in the business unit are like a viscous and sticky mass	Calmly present the data for many people who can work on the business unit from many sides
Dorothy	The problem is an obstacle to be moved The problem is one entity	Solve the problem alone	The problem is to weave a web. The problem is many small rocks to be turned one at a time	Find, activate, and connect people with resources and interest in solving the problem
Einar	The team is one entity	Ask the team to complain less	The team is five individuals	Ask the silent members to "complain" more

4.3.6 Different Metaphor Based on Same Sensory Template Does Not Bring Change

In some cases, managers would change the metaphors they used when talking about their problematic situations, without changing the underlying sensory template they used to comprehend the situations. This did not lead to solutions for the problems like in the cases above. We can, for example, think of the task of motivating an employee as analogous to the sensorimotor experience of pushing something that resists movement. This is one possible sensory template. The sensorimotor experience of pushing something resisting movement can be part of many concrete situations, such as pushing a car that won't start, pushing a mule that won't walk, or pushing a big round rock up a hill. Therefore, we can speak about the problematic situation using words from many different source domains, that is, we can use many different metaphors without changing the sensory template we use to comprehend the situation. For example, talking about the act of motivating an employee by saying that it is like "trying to push start a car", or that the employee is like "a stubborn mule that won't walk", or that motivating the employee is like a "Sisyphus work" are three different metaphors, but they are all grounded in the same sensory template of pushing something that is resisting the movement. Changing metaphors without changing the sensory template has little or no effect on transforming the managers' perspective in ways that dissolve the problem.

One manager, Xenia, faced the problem of being the newly appointed head of a department with only 20–25 employees and two managers under her. This situation had arisen when two departments were merged and both managers kept in management positions. The employees were confused about whom to report to, and they resented that two positions in the department had been cut away, while the three management positions remained. Furthermore, the two managers had very different personalities and had basically divided the department between them—so it wasn't really merged. Xenia initially understood the situation as analogous to physical splits and forces pulling in opposite directions. She spoke about a split department, a split between rationality and personal agendas, a split between her desire to create an efficient department by letting one manager go and her empathy for both managers, and her split

between which manager to keep. In her artwork, she created many different metaphors, but all of them embodied this sensory template of split and forces pulling in opposite directions. She took a picture of a sculpture which was a cube cut from top to bottom; a unisex sign on a toilet door, with a pictogram of a man and a woman with a line between them; two dishes next to each other at the canteen counter, one traditional and one more experimental; and her drawing and poem both built on the metaphor of too many chefs in the kitchen and forces pulling in different directions. Even though Xenia produced many different metaphors, she did not change the sensory template, and, consequently, she did not find any solutions beyond what she had imagined before the workshop.

Another manager, Xavier, was head of the secretary at a university. His problem was how to work efficiently between a dean with many ideas and visions for the university but little understanding of the practical challenges on the one hand and a group of researchers with their own ideas and visions, and contractually secured rights to freedom of research, on the other. Xavier initially described this situation as a case of "herding cats". The sensory template embedded in this image is one of trying to bring together a large number of independently moving objects, in this case cats. Xavier was adept at speaking in metaphors and created many colorful and wonderful images. During the workshop, he drew an image of the situation as trying to build a bridge. He drew the administrative staff as sweeping the part of the bridge that was already constructed, the dean as walking far ahead on the water, oblivious that he was off the bridge, and the researchers as engaged in their own projects elsewhere. This image is different from the image of hearding cats, but it embodies the same sensory template of trying to bring together a large number of uncoordinated and independently moving objects. Xavier felt that the pictures brought clarity, but he did not find new ways of handling the situation.

Xenos, a manager with 30 years of experience, had been head of an IT department with 11 employees for four and a half years. Xenos' problem was that he could not convince his boss that investing in new IT equipment would save the company a considerable amount of money in the long run—and secure them against impending severe breakdowns from pushing the current system beyond its capacity. Xenos saw the situation

as analogous to pushing an object that resisted being moved, and he did not change this sensory template and did not find any solutions. What is particularly interesting about Xenos' case is that during the research he got a new boss. However, in the final interview, Xenos began by saying: "Not much has changed. I'm now reporting to a new CEO. He is American. The other was from Singapore. It's the same, just in a different way". This case hints at the power sensory templates have to shape our experience. It is possible that they shape our perception of the situation even to the extent that we can replace the people without changing the fundamental way in which we feel the situation—in this case, the situation of pitching an IT investment proposal.

These three brief examples show that solutions are not produced when managers change the metaphor they use to speak about a problematic situation *without* changing the underlying sensory template they use to comprehend the situation.

4.4 New Sensory Templates Can Emerge from Aesthetic Elements Outside the Method

So far we have seen how changes in sensory templates can transform seemingly unsolvable situations into situations the manager has no problem dealing with. In the examples above, the managers found the new sensory templates by looking at their artistic production (photographs, drawings, and poems) and noticing what stood out as something interesting and novel to them. In short, they found new sensory templates through activities intended to bring about new sensory templates. However, in some cases, new sensory templates emerged from other aesthetic elements of the learning intervention not directly intended to have this effect. These cases show that managers can use elements of how they felt during any part of the learning intervention to later structure and comprehend their problematic situations.

This is important for managerial educators because it invites them to consider a broader range of the sensorimotor experiences the managers will

be exposed to during their learning intervention design: How participants are welcomed upon arrival, the interactions with the facilitator, interactions between participants, seating arrangements (auditory, circle of chairs, tables or no tables), the number and length of breaks in the program, whether or not to allow participants to leave early or arrive late, and so on are all possible sources of new sensory templates which can be used or missed by the managerial educator. In Chap. 2, we discussed how theories-in-use emerge automatically and unintentionally from experience through processes such as associative and social learning. Through associative learning, individuals will (automatically and unintentionally) come to associate whatever consistently occurs simultaneously in their experience. If, for example, every time a manager admits to something they believe to be embarrassing about their own behavior or their lack of ability to handle a situation they are met not with judgment (as they may expect) but with keen interest and a wish to understand the motivations and mechanisms involved in the manifestation of this behavior, over time the manager may come to associate his own (embarrassing) behavior with curiosity rather than judgment and he may adopt this attitude toward both himself and others. Through social learning, individuals (automatically and unintentionally) pick up various role models' attitudes and mannerisms. When a facilitator operates from a particular sensory template, his interactions with others will embody this sensory template—allowing others to pick it up from the interaction. Thus, paying sustained attention to sensorimotor experience, the playful exploration of juxtaposing the problematic situation and various sensorimotor experiences, engaging in safe, open, and undefended dialogue, or simply being with others in a relaxed state may all be (unusual) kinds of activities which embody sensory templates the participating managers can adopt. In short, managers can sometimes learn more from partaking in the general "vibe" of the learning intervention than from the concrete methods used. And educators need to be aware of and use this as a means of teaching.

The following cases show how aesthetic elements of the learning context beyond those provided by the concrete method can become the source of new sensory templates which transform seemingly unsolvable situations into manageable situations.

4.4.1 Case: I'm a Drawing, My Colleague Is a Poem

Frank's story illustrates yet another example of a common problem known to many managers working in a silo-based organization. It is the dilemma between being hard or even manipulative when working to secure one's own project goals, and being flexible, taking care of coordination, collaboration, and the larger organizational goals—and risking being taken advantage of.

Frank was a team leader in a large multinational organization. Frank was leading projects with between two and fifteen employees. He had a background as a geophysicist and had always been working in technical roles up until four years ago, where he got his current formal management position. Even though he had more than 20 years of experience as a project leader, he felt he needed more formal management education, tools, and experience in dealing adequately with the staff responsibility of his current management position.

Frank worked in a silo-based organization. He tried to coordinate well with managers who were in charge of projects which were related to his own projects. Frank felt that the project managers in the organization, including himself, were constantly in situations where they had to choose between reaching their own project goals and sticking to the agreements they had made with other departments to secure the larger organizational goals. When pressured in this way, his colleagues usually prioritized their own projects. Thus, Frank often found himself in situations where the agreements he had made with another project manager were broken—causing problems for his project. For example, for each project, Frank would make agreements about borrowing employees from other departments a certain number of hours a week. But whenever one of these departments got an important project themselves, someone higher in the hierarchy would cancel such agreements, leaving Frank with fewer resources, in terms of staff hours, for his projects. Similarly, several project teams would often have shared access to a team of analysts. This would often lead to power struggles where the different teams tried to gain control over budgets and decisions about how to analyze the data and who to hire to do the analysis. When the teams were under time pressure, project managers could, for example, ask the analysts to prioritize

producing the data they needed for their own projects without coordinating with Frank's team. As a result, Frank's team had to wait longer to get the data *they* needed—delaying their work.

In such situations, Frank would, on the one hand, try to be flexible and find alternative solutions to reach his project goals with fewer resources. However, he often felt taken advantage of. On the one hand, he thought he might need to be more confrontational and insist on sticking to the agreements. On the other hand, he did not like this way of treating others and was not convinced that being firm and rigid was the best solution to these situations.

Frank's language showed that a central sensory template he used to understand the situation was that of seeing himself and others as having to choose between being flexible and being hard and rigid. This sensory template did not offer him a satisfactory solution to the situation, since being flexible led to being taken advantage of and being hard and rigid led to lack of coordination and poorer overall organizational performance.

No new sensory templates emerged in the specific art objects Frank created during the workshop. Yet, when he came back after a month, he told a remarkable story of personal change. He had begun to speak much more openly with his colleagues, instead of trying to deduce their motives. In particular, he would voice his perceptions and ideas more directly and had found that if what he said was reasonably well reflected, others would, to his surprise, be very ready to give him space and follow his suggestions.

During the last interview, Frank told a story about a recent situation where an agreement had been broken, causing problems for his project. Frank had not acted in any of the ways he was used to acting. He had neither chosen to be flexible and try to find a way to work with fewer resources, nor tried to achieve his own ends by becoming hard, rigid, and manipulating. Instead, he had walked down to the other project manager's office and told him what consequences breaking of the agreement had for Frank's team. He then said that personally he did not find it fair that the other manager had broken the agreement, but that he was interested in hearing what the situation looked like from the point of view of the other manager. He had been *sincerely interested* in hearing the

other manager's view. Much to Frank's surprise, the other manager simply said that Frank was right and changed things back to the original agreement. Frank had been delighted and astonished at how simple this had been.

Frank described the impact of the workshop on his personality and way of working in the following way:

> I feel that it has an effect on me personally, because it has opened me up both for something functional, about how one can work with difficult things and for the insight that it is important to put oneself in the other person's place, and it's important not just to stop there, but to take the extra step and instead of thinking that they do like this because this or that, then one can just go directly to the source and ask! And then let people tell things from their reality and understanding. And that may be a kind of coaching, where one says that I experience that we have a problem with this… And I have actually done this previously, but maybe in a very square way, like: 'we have a problem, and it looks like this, and we should do this and this and this.' But one can take the extra step and say: 'I experience that we have a problem. What do you think? How do you see it?' Then it becomes more a dialogue… so one does not make conclusions too early.

When I asked how he had gotten the idea to begin experimenting with engaging his colleagues in open dialogue, Frank said:

> I think that for me it was that we did *so* many different things [poetry, photography, and drawing]. It was an epiphany: that one can do this, one can do this, but one can also do this and this. And for me, it is a kind of innovative process. One removes oneself completely from the daily work and journey to a new place to people one does not know, and then one looks at one thing from many different angles. It is very interesting.

Frank had come to see different people as analogous to different art-based media. During the workshop, he had experienced Susanne Langer's point that different art-based media can capture different aspects of reality. And he had begun using this experience as sensory template—seeing that different people can capture different aspects of reality. He would see himself like a drawing and his colleague like a poem, and since both media showed

something valuable about the situation, becoming informed through both media would give him a fuller understanding of the situation. Using this sensory template enabled Frank to be sincerely interested in hearing what the situation looked like from his colleague's point of view. Thus, he had found a third option beyond being either flexible or hard and manipulative. He could seek a fuller understanding through open dialogue with his colleagues—without giving up what he could see and without trying to influence or manipulate what they could see.

Although Frank did not explicitly confirm this, as a facilitator I had the impression that there was yet another cause of the change Frank experienced after the workshop. During the conversations I had with Frank at the workshop, it became clear to him that everybody in the organization, including himself, was terrified of losing the blame game (in Argyris and Schön's terms, they operated from model I). The expression Frank used literally translates as: Not being left sitting with the monkey. This expression is similar to the English phrase not being left holding the baby, but being left sitting with the monkey implies being put in a shameful position—in addition to being made responsible for something in an unfair way. During the workshop, Frank spoke openly about this taboo topic. I believe that both seeing this fear clearly and seeing how it is an unconscious motivation for much of the behavior in the organization and talking about it in a relaxed matter of fact way, without any sense of taboo around it, freed Frank from being under its control. I believe that changing from seeing the fear of being left sitting with the monkey as a taboo to seeing it as a natural and shared human fear made it possible for Frank to engage in open dialogue. As long as he felt he had to tip-toe around the topic of the monkey, open dialogue would be very hard and scary, since this topic could come up at any moment during such dialogue. Being relaxed about this topic, Frank no longer had to be careful in his conversations. If the topic should come up it would be no big deal—it would just be stating the obvious. In short, he changed from seeing the topic as something to avoid to seeing it as something he could be relaxed about.

Interestingly enough, in the final interview, Frank said that he had become more interested in verbal communication, whereas earlier he had preferred e-mail communication. He had also begun to communicate with a larger group of people, including technical employees and

management on his own level and two levels up. And these people had told him that he came across as more competent and self-assured. He also experienced that people were more interested in hearing his opinion. This increase in confidence and interest in verbal communication might well be a consequence of having the taboo around the proverbial monkey removed.

What's interesting about this case is that the new sensory template of using multiple media/senses in understanding a problem, and of seeing the fear of being left sitting with the monkey as something he could be relaxed about, came from the experience of the broader learning context—not from any single art object Frank produced. This illustrates that aesthetic elements of the learning context beyond those the method provides can be the source of new sensory templates.

4.4.2 Case: Communication as Conduit for Information and Appreciation

Gary's story represents another classical managerial problem: having an employee who does not meet deadlines, but who possesses skills or knowledge which makes it difficult to replace him. In Gary's case, the employee in question was a unique programming genius who could solve coding problems nobody else could solve, but who partly due to a mental illness was unreliable. Replacing him would be expensive, because very few would have his skill level and because it would take a long time for someone new to pick up on concepts the organization worked with.

Gary was one of the participants in the control group where no art-based method was used. Gary was only interviewed about his situation. The interview included a systematic comparison of the interests of the various stakeholders. Gary was one of the very few people in this group who experienced a shift in the sensory templates through which he comprehended his problem. This shift led to a significant personal development and a solution to Gary's problematic situation. Like in Frank's case, this shift arose from experiencing the particular quality of the conversation he had with the facilitator and the other participants.

Gary was manager and one of three owners of a software development company. He was leading the department which developed new software and had some responsibilities relating to operations. The organization had 25 employees and a fairly flat structure. Gary had worked 27 years with project management, and for the last ten years since he was promoted to partner in the organization he had also had employee responsibility. Gary had never received any formal leadership education. He showed a high level of self-awareness around his reluctance to deal with the part of his leadership role involving employee responsibility.

> I am reluctant to deal with this leadership thing. I come up with all sorts of excuses not to take this role of responsibility. One of them is that the employees are intelligent people and I don't want to work with people who cannot lead themselves. And I know that is rubbish. But I *am* reluctant to deal with the responsibility, which actually is mine. And this I would, of course, like to work with.

This general problem was particularly visible in relation to one of Gary's employees. This employee was a unique asset for the organization because he could make code no one else could make. He was a programming genius. However, he also had some severe personal problems. According to Gary, programmers generally have personalities which make them challenging to manage. They are generally not particularly good at communicating with their surroundings and are very personally invested in their work. They never really stop working on the problems and they often take critique of their work personally. Gary understood these character traits well, and he had a knack for working with programmers on their own terms. But for this particular employee, these traits were on the verge of mental illness, and Gary did not know how to manage him and make him do what he needed to do to finish his projects.

When other programmers got behind on their work, Gary could tell them: "Get this done or else…". But because nobody could replace the problematic employee, Gary could not use an "or else!" with him. He simply had to wait until this employee got the job done on his own. For one project this had, so far, meant 1.5 years delay.

One of the reasons the employee would not deliver the code he needed to deliver was that he easily got sidetracked and did not know how to prioritize his tasks. He would find some particular challenge which caught his interest and spend all his time on this, without any concern for whether or not this was necessary in order to deliver what had been promised to the customer on time. Sometimes he would hear other programmers in the organization speak about a problem they were working on and if he found that more interesting than his own assignment, he would start working on this problem instead. Because he was not socially adept, he often worked from home. Sometimes Gary would not see him for a week, and he would not know whether he was deep in his work or deep in trouble regarding his mental health. The organization had hired a relaxation therapist who was having conversations with the employee of a more therapeutic nature. Gary was reluctant to address the illness with the employee himself for two reasons. First, Gary had no competency to work with mental illness. Therefore, he would let the therapist deal with the illness side and stick to the professional side himself. So whenever the employee did not show up for work, Gary would only call him if he had something work related to ask him. Second, Gary was afraid that if he called the employee too often, the employee would get tired of him and perceive him as a micromanaging boss—just like the other programmers would.

The situation was very frustrating for Gary and had led him to consider whether he was really cut out to be a manager with employee responsibilities. He felt he was not a good leader for two reasons. First, whereas Gary was comfortable about leading in terms of setting a course professionally as he had done working as a project manager, he did not like the leader role when more personal aspects were added. Second, he saw leaders as people with big personalities who take up a lot of space, and he didn't want to be like that. He didn't find his own person that important.

During the workshop, two things happened which retrospectively seemed to have had a big impact on Gary. First, one of the other participants, who had had experience with employees with tendencies toward depression and drinking problems, shared that such employees, to her initial surprise, were often grateful to her for calling them when they

were sick to check up on them. The employees themselves had told her to do so because this would help them to get out of their low mood. Often when they did not show up for work and she called to check on them, they would thank her and come to work. Second, several of the other participants challenged Gary's belief about being a bad leader. They found that he had a tremendous capacity to understand and care for his employees, and as such had some very important leadership qualities. They saw his style as "leading from behind" or "service leadership", rather than leading through a charismatic personality. Thus, during the workshop, Gary experienced firsthand how a conversation could be a means for acknowledgment and appreciation. In a later part of the interview, Gary was talking about what motivated different stakeholders. Gary remembered that whenever the employee in question had solved a particularly difficult problem, he would show it to everyone in the organization. This made him realize that what motivated this employee was acknowledgment and appreciation. These experiences changed how Gary comprehended "communication", and this helped bring about a solution to his problem.

When Gary returned one month after the first interview, he had sat up a group with just himself and the employee, with regular meetings every second week where the employee could tell Gary what he was working on and Gary could tell the employee a bit about what his world of relating to customers looked like. He had also told the employee that he would like him to be at the workplace two days a week and that even though he felt he got more done when working at home, it was important for Gary to have the employee at the workplace so they had the possibility of working together on the projects. He had said this without any "or else!" but just simply speaking human to human and being open about what he would like from the employee. He had also talked more openly with the employee about his illness instead of shying away from it. This worked. The employee was now working on what he needed to work on. The day before I met Gary for the last interview, the employee had delivered something that Gary had not expected to be finished for at least another month. Once during the meetings, the employee had told Gary about a problem he could not

solve and Gary had told him that actually he didn't really need to solve this problem now because this functionality was not important in relation to the upcoming test of the program with the customer. The employee had been relieved and had begun working on the things Gary wanted him to prioritize.

These changes may seem very simple. Gary said that what had inspired him to make these changes was the realization that the employee was primarily motivated by acknowledgment and appreciation and the realization that communication could be used not only to pass on information about what needed to be done but also to create a sense of connectedness and to show appreciation. This last realization came from experiencing the effect the conversation with the other research participants had had on himself. Gary said:

> It is not because you [the facilitator] have been teaching really. You have just used some simple things, and I think that is extremely interesting. I have become aware that it is important to talk things through, not just let them be. *I feel privileged to be allowed to be part of this*.

In this case, it is difficult to describe the change in terms of a change in sensory templates because these were not made explicit in the process of the interview. However, it is clear that Gary changed the way he felt "communication" and "motivation". In the first interview, he saw "communication" as a means of passing on information and as something that could potentially be invasive, and he saw "motivation" as something springing from the employees' professional interest in their work and from getting paid for doing the work. In the second interview, he saw "communication" as a means of generating a sense of connection and showing appreciation and "motivation" as something that can come from feeling appreciated and from simply meeting. In particular, the feel of the two ways of perceiving motivation is very different, and thus it seems likely that if the sensory templates were made explicit, they would be quite different.

The changes in Gary's way of comprehending "communication" and "motivation" came from personally experiencing the quality of communication

during the interviews and not from the creation of any art objects—since Gary was part of the control group, where no art objects were created. This case illustrates how aesthetic elements of the learning context can become the source of new sensory templates.

4.4.3 The Role of the Learning Context

The two cases of Frank and Gary illustrate that new sensory templates can emerge from aesthetic elements of the broader learning context and not only from the poetry, drawings, and photographs which were intended to bring about such new sensory templates.

Frank presented a situation he felt was a dilemma between being hard and somewhat manipulative and being flexible and focused on coordination, collaboration, and the overall organizational goals while risking being taken advantage of. This view seemed to be based on a sensory template where Frank saw his relationship with his colleagues as analogous to physically pushing or being pushed. During the learning intervention, Frank experienced how his poem, drawings, and photographs captured different aspects of his situation, just like different senses capture different aspects of an experienced phenomenon. They would be like pieces of a puzzle which are all needed to give the full picture. He later used this aspect of the learning experience as sensory template through which he could understand his relationship with his colleagues. Using this new sensory template, he came to view a meeting with a colleague as a matter of openly sharing points of view, with the aim of mutually enriching each other's understanding, rather than a matter of imposing one's view on the other. To Frank's surprise, this proved to be a more efficient way of changing the kind of behavior in his colleagues which made it difficult for him to reach his own project goals than his previous strategy of becoming hard and manipulative.

Gary presented a situation where a highly skilled employee was both irreplaceable and unreliable. Sometimes this employee would solve problems with amazing speed, and sometimes he would spend all his time working on problems which were not important for the organization's project goals. When Gary came he lamented that since he could not

replace the employee, he could not use threats to push him to do what was needed—he had no "…or else!" Gary was used to working with highly skilled and self-motivated employees who preferred to be left alone, and therefore he perceived "conversations with the boss" purely as a means of passing on information about job tasks and as something that was potentially imposing and invasive. Thus, he kept such communication to a minimum. However, during the interviews Gary realized that his employee was motivated primarily by feeling appreciated, and at the same time he experienced firsthand how "conversation" could create a sense of connection and appreciation. Thus, Gary changed his view of "conversation" from seeing it as imposing and invasive to seeing it as nourishing (i.e., providing connection and appreciation). This gave Gary the idea of setting up regular meetings with the employee where he could simultaneously focus the employee on the tasks most important for the organization and motivate him by offering him a space of connection and appreciation.

In Chap. 2, we discussed how theories-in-use emerge automatically and unintentionally from experience through processes such as associative and socio-cognitive learning. The above cases illustrate what this may look like in practice and how this can make aspects of the learning environment peripheral to the learning intervention the most important elements in the process of constructing new understanding and skills related to dealing with problematic situations.

4.5 Letting Go of Non-essential Aspects of Sensory Templates

As mentioned, the participants in the research were divided into three groups. One group worked with metaphors as described above. A second group of managers in the research was asked to leave aside any considerations of how to solve their problem and instead focus on creating photos, drawings, and poems which evoked in them the same sensorimotor experience as thinking and speaking about the problematic situation. In effect, this process revealed the sensory templates the managers used to

represent the situation. This process was more efficient in bringing about shifts in sensory templates as described in the above cases and it was able to create a different kind of shift from using a particular sensory template to using only the essential aspect of this sensory template—decoupled from non-essential aspects.

As a warm-up exercise, the participating managers in this second group were asked to describe the sensorimotor experiences triggered in them by different pieces of music, paintings, and words in both a language they did not understand (Russian was used) and a language they did understand (English and Danish were used). The participants were encouraged to use the faculty of inner sensing to notice the felt sense of their inner atmosphere. The managers would thus describe the opening of Felix Mendelssohn's *Violin Concerto in E Minor* (OP. 64) by using sensorimotor words such as floating, soaring, viscous, swaying, and dense. Similarly, they would describe the first track on R. Carlos Nakai's *Canyon Trilogy* as still, open, spacious, and very stable or grounded. They'd describe Pierre-Auguste Renoir's painting *La Yole* as evoking a sense of lightness, light warmth, and a gentle upward stream of energy. They would describe the word "bubblegum" as moving like a babbling brook, dark blue in color, somewhat weighty, and slow, whereas the word "trick" would be described as sharp, fast, and moving with sharp changes of direction. If they used abstract words, such as "sad", "interesting", "peculiar", or "unpleasant", to describe the state evoked in them by the music, painting, and words, I would ask them to notice what internal sensorimotor experience these abstract words referred to. For example, if they described a piece of music as "sad", I would ask them to describe what it was they sensed that led them to use the word "sad". They could for example answer: It feels like a gray substance slowly moving downwards through my chest, or it feels as if my upper back and arms were frozen and are now melting. Similarly, if they described the sense evoked by a picture as "unpleasant", I would ask them what "unpleasant" felt like in their body. They might answer that it felt like nausea or like needles or something other. I would keep encouraging them to explore the inner felt sense until they could describe it through neutral and concrete sensorimotor words. After a while, the managers got the hang of this and could do it on their own. Once the managers had some skill in describing their experience

in terms of neutral and concrete sensorimotor words, they were asked to describe the problematic situation in this particular way. Once they had described the inner atmosphere that the problematic situation triggered in them using sensorimotor vocabulary, they went on to describe this inner atmosphere further by using the media of poetry, photography, and drawings. Using such media often helped the managers capture more aspects of the sensorimotor experience triggered in them by thinking and speaking about the problematic situation. This process captured in verbal and non-verbal descriptions the sensory templates the managers used to represent the problematic situation and showed how these would often be composed of many distinct sensorimotor aspects.

This second intervention was more efficient in facilitating the shift of sensory templates described in the cases above. Changes in sensory templates simply occurred more often among managers in this second group than among managers in the first group. This can be understood by contemplating the difference between the process of describing the situation through a new metaphor and describing the situation through sensorimotor words. In both cases, the managers are describing the problematic situation through metaphors, but whereas in the first group the source domain could be anything, in the second group the source domain was restricted to sensorimotor experiences. As discussed above, participants in the first group could change their metaphor without changing the sensory template, since it is possible to create many metaphors containing the same basic sensorimotor experience. For example, the experiences of push starting a car, pushing a donkey, and pushing a boulder up a hill all contain the same basic sensorimotor experience of pushing. However, when restricting the source domain to sensorimotor experiences, a shift of metaphor will inevitably also be a shift of the sensory template. Moreover, when managers explored the sensorimotor experiences triggered by thinking about the situation, they often found that they had more than one sensory template available which they could use to comprehend the situation. However, they would generally rely more heavily on one dominant sensory template. So changing from using one sensory template does not have to be a matter of finding a completely new sensory template. Instead, it can be a matter of shifting which sensory template is dominant. Given these considerations, it is not surprising that restricting managers to

working directly with sensorimotor descriptions increased the likelihood that the managers would find alternatives to the sensorimotor states they usually used to comprehend the situation—thus increasing the efficiency of the intervention.

Moreover, the second intervention could also facilitate a different kind of shift in sensory template. This kind of shift can best be described as letting go of non-essential aspects of the sensory template used. When describing the inner sensorimotor states triggered in them when thinking of the problematic situation, the managers often discovered how the sensory template they currently used to comprehend the situation was composed of several sensorimotor parts. Even though these parts were tightly associated, it was possible to clearly distinguish them from each other. This created the possibility of shifting from using the composite sensory template as a basis for comprehending the situation to using one single core component of the sensory template to comprehend the situation. In other words, instead of shifting from one sensory template to another as in the previous cases, in these cases the managers shifted from using one sensory template to using only a specific part of that sensory template. For example, when managers describe the inner state they feel when thinking and speaking about an unsolvable problem they may state that they feel frustrated and angry. When asked to describe this state of frustration and anger using sensorimotor words, managers would generally describe their inner state as explosive, like hot liquid in a pressure cooker. This description matches Joseph Grady's work on primary metaphors (Grady 1997). However, this description consists of two clearly distinguishable sensorimotor states: the hot, expansive liquid and the container which restricts the expansion and flow of this liquid. When managers changed from using the combined sensation of heat and restriction to using just the sensation of heat on its own as sensory template for understanding the situation, it transformed their experience and enabled them to imagine new ways of engaging with the situation. When they removed the restriction aspect of the sensory template, what they previously experienced as negative frustration and anger began to appear as positive and relaxed assertiveness, directness, a sense of taking leadership, clarity, and even an adventurous excitement. Similarly, they changed from perceiving the situation as something causing frustration and anger to an

enjoyable challenge they could imagine many ways of engaging with. Similar processes could be observed in relation to composite sensory templates where the core sensorimotor state could be described as solidity or lightness instead of heat. When these sensations were used on their own instead of in combination with other sensations as sensory templates, the problematic situation changed from being perceived as unsolvable to being perceived as simple. That such transformations are possible indicates that there is something problematic about assuming a simple *causal* relationship between a situation and the anger (or any other emotion or feeling) felt by a manager in this situation. I will deal more in depth with this in Chap. 7.

The following examples illustrate how managers could find efficient ways of dealing with their problematic situations, not by changing the sensory template they used to understand the situation altogether, but rather by learning to perceive the individual aspects of the sensory templates they were already using and changing from using the composite sensory template to just a single part of this template.

4.5.1 Case: Being an Appropriate, Conflict Seeking, Disloyal, Weak, and Uncontrolled Leader

Helena was a head nurse at a hospital with 35 employees reporting to her. She had been four years in the position, and it was her first position as manager with employee responsibility. Helena's problem was that the nurses exclusively used their professional *medical* knowledge to evaluate their own work. But due to limited resources, what is *technically* possible to do for patients is not always *practically* possible to do. Whenever the limited resources forced the nurses to choose suboptimal treatments, they felt they were doing a poor job. Furthermore, the nurses were also charged with tasks not directly related to nursing, and while dealing with such tasks they felt time was taken away from doing what really matters to them: taking care of patients. Helena found it very difficult to explain to the nurses that they were in fact doing a great job, even if they could do more had they had the resources. The situation was frustrating not only for the nurses but also for Helena. However, Helena felt that expressing her own frustration or anger was inappropriate for a leader who was supposed to keep up morale—and she therefore repressed it.

During the workshop, she described how this situation felt to her through pictures, a drawing, and a poem. She took a picture of a glass window with the word "escape route" (Fig. 4.2). She took the picture because of the word and because the scene spoke to her. Looking at it afterward, she noticed why she liked the picture. On the other side of the glass, there were a parking lot and gray concrete buildings. Commenting humorously on the picture, she said:

> When one needs an escape route, it is because one is running from something bad. But I don't think it looks much better on the other side of the screen.

In her drawing, she tried to make something with no softness, which could not stay within a frame. In this drawing we see the classical description of anger as something expansive plus something trying to hold this expansion in (Fig. 4.3).

Helena's poem was called "Frustration".

> The situation creates exasperation. The result is disinclination.
> Everyone expresses fury. The top keeps us in a hurry. We end up sorry.
> The employees are anxious. The conditions are tough. The tasks are too many and too much.

Fig. 4.2 Helena's picture of "escape route"

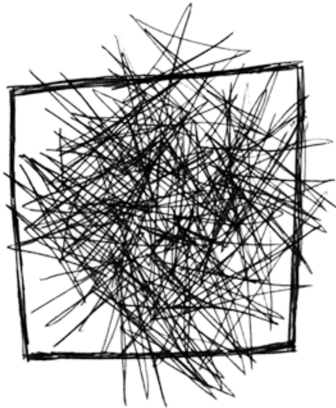

Fig. 4.3 Helena's drawing

> It is really uphill. It's all shit to put it in brief.
> The conflict mortifies. The demands come like cries. The patients are seen as wry
> (Situationen skaber utilfredshed. Resultatet bliver utilpashed.
> Alle udtrykker vrede. Oppefra bliver de ved at træde. Vi ender med at græde.
> Personalet de er bange. Vilkårene er trange. Opgaverne er for lange og mange.
> Det er rigtig hårdt. Det hele er noget lort hvis det skal siges kort.
> Konflikten den er svær. Kravene kommer som bræer. Patienten opleves som tvær)

Immediately after writing this poem, Helena began laughing and expressed that she felt both great relief and greatly energized. Creating these works of art, in particular the poem, allowed Helena to experience the energy in her frustration decoupled from the restriction. This sensorimotor experience of freely flowing energy became her new sensory template she used to understand and engage with the situation.

When she returned after one month for her final interview, she described how after having allowed herself to express her frustration and anger freely and without any restricting "political correctness", she had begun to feel herself more clearly, instead of using all her attention on trying to figure

out what others were feeling and what they expected of her. This increased awareness of herself was visible in her language. When Helena, before the workshop, was asked to describe the problematic situation in brief, she used nine sentences and did not use the word "I" in any of them. When she was asked to do the same one month after the workshop, she used ten sentences and used the word "I" in five of them. The increased awareness of herself relaxed the pressure she put on herself to perform in the way others expected her to. In the final interview, she related how she had been to a dinner with her boss and management colleagues and when they asked her what she had done in the workshop, she had pulled out the poem and read it—which is something she would never have done before the workshop. Everyone had laughed and thought the poem was a spot on description of the situation. She felt the reading produced relief in the whole group.

In relation to her work, she no longer felt she had an unsolvable problem. She was now working on highlighting the patients' expectations and showing her nurses how they often met those expectations, and she felt confident that this was the right way to proceed. The conflict between resources and the possibilities of modern medicine was still the same. The nurses still found this frustrating. But Helena no longer had any problem dealing with this situation. Before the workshop she had felt paralyzed. This paralysis had now vanished. This suggests that the paralysis Helena had felt was not caused by the situation, but was a sensorimotor state she activated as part of her act of comprehending the situation—namely the restrictive part of the sensory template she used to understand her role as leader.

This case illustrates how changing from using a composite sensory template consisting of energy and restriction to using only one part of the sensory template, namely the energy, changed the situation from seeming unsolvable to being a manageable situation.

4.5.2 Case: Being a Likable Leader

Ira was the owner and daily leader of a dance school. Ira's problem was that some of her employees had personal agendas which impaired their ability to collaborate on the tasks she gave them. She had for many years tried to change the attitude of these employees, without any luck. During

the initial interview, she said that she knew other leaders, personally, who would be able to deal with this kind of employee, but she just couldn't do it, and she was unsure why. Ira had six years of experience as a leader, and she was currently responsible for 18 employees. Most of the employees were teachers; the rest were admin and cleaning staff. The problematic employees were found among the teachers.

Ira described two types of problematic employees, which will be familiar to most managers. The first type of employees Ira called "the divas". The divas were primarily concerned with being the stars of the organization. They wanted to be the top name on the posters and the main acts at shows and festivals. The other type of employees Ira called "the wage slaves". The wage slaves were primarily concerned with their contractual rights and with counting minutes and discussing exactly how much they would be paid for each single task they performed. As such, Ira didn't find there was anything wrong with either the wish to be the star and perform or with wanting to get a fair wage. The reason she saw both of these types of employees as problematic was that they were so occupied with these agendas that it impaired their ability to collaborate on doing what was needed for the organization to thrive.

The disruptive effect of employees' excessive focus on their personal agendas was particularly visible during staff meetings. Ira would often experience that the discussion was derailed during these meetings and that important points on the meeting agenda were left unaddressed. She felt unable to secure the necessary level of productive dialogue during these meetings. When this happened Ira got angry. However, she saw this anger as problematic and would hide it. She saw it as the opposite of being open, inclusive, listening, rational, reasonable, and in particular being likable.

During the workshop, she explored the sensorimotor experiences she felt when thinking and speaking about this situation. Through this work she discovered three distinct components, each one being a reaction to the previous:

1. Something explosive, sharp, and clear. She called this aggression.
2. Something flickering, diffuse, and unclear. She called this confusion.
3. A screen in front of her/a stiff expressionless face. She called this disconnection.

The flickering and unclear sensation was expressed in pictures of transparent metal stairs and reflections of windows in other windows. It was also expressed in her drawing as a cloud of curved and tangled lines. The explosive sensation was expressed in the drawing as sharp, jagged lines giving the impression of sharp teeth. These were placed under the cloud of curved and tangled lines. The screen and the stiff expressionless face are shown in the drawing as a small square and behind it a small ladybird. As Ira humorously explained: Ladybirds are not known for vivid facial expressions (Figs. 4.4, 4.5, 4.6, and 4.7).

The three components of the sensorimotor experience were also expressed in the poem: the flickering and unclear in the two first lines, the explosive in the two following lines, and the screen and the expressionless face in the two last.

> *"Thoughts like confetti, arms like soft spaghetti*
> *Complaint-arguments flickers, unmanageable dangers, indisputable.*
> *Strife that makes me explosive. The jaw is tight and aggressive.*
> *Should I let them make noise? Ego up pillars, down frames*.*
> *Shoots the screen in between them and me. The face turns to stone.*
> *The mass stiffens. Unimpressionable. The world woolly, unreal".*

Fig. 4.4 Ira's picture of reflections in windows. *"Some windows reflecting something. Are you looking in or at the reflections or the window itself?"*

Fig. 4.5 Ira's picture of hallway. *"Thing overlap. There are many ways to go and many decisions… but I cannot see where I get to if I choose one or the other way"*

Fig. 4.6 Ira's picture of metal staircase. *"It's a staircase that is both transparent and a bit flickering, 'cause one can see other steps through the steps. And one has to look for a while to see if the steps go up or down. So it's a bit confusing and unmanageable"*

Fig. 4.7 Ira's drawing. *"There is some aggression in the middle and some confusion over here and my usual solution over here.... To put up a screen... and stay expressionless on the other side of the screen"*

*This is a variation of a Danish idiom, which literally translates as "talking up pillars and down walls". It refers to talking a lot and uninterrupted without it leading to anything.

Seeing that the situation consisted of these three separate sensorimotor aspects changed Ira's way of perceiving the problematic meetings and consequently how she could imagine leading these meetings.

When Ira looked at her pictures, poem, and drawing, she immediately became curious about how much she used flickering and confusion to cover over and hide aggression. Seeing this was new to her.

> I have not thought about it in this way before. I have more thought that I should be rational, thoughtful, understanding, tolerant, flexible, and mmm [sarcastic sound]. So, therefore, I have not expressed the aggressive side. And I don't think I have been aware of how much I use the other thing to simply distract myself from it.

Ira noticed that labeling the inner state of sharpness as "aggression" associated it with being not nice or not likable and thus made it appear as something she should avoid or control. Her way of avoiding it was first by creating confusion and second by becoming rigid and disconnected. Instead of clearly saying what she meant, she would withdraw and reflect and later present her reflections in an abstract way. This was, as she put it, a way of "…hiding myself behind a little piece of theory". By representing the inner state of sharpness through the visual shapes, instead of through the negatively laden word "aggression", she was able to feel it decoupled from the other sensorimotor states it was usually connected to. When she felt the state on its own in this way, she realized that this inner state was also what she at other times would call "clarity" or "strength". She realized that nobody was benefitting from her attempts at being nice by hiding that she knew exactly how she wanted things to be.

Already the day after the intervention she had another staff meeting. She decided to lead this meeting in a very different manner from what she was used to. She gave each point on the agenda a color code. At the start of the meeting, she explained to the participants that she expected them to get through all points on the agenda within one hour. Then she explained the color codes. Green meant that a point would be discussed in the group for a fixed length of time. Yellow meant that she wanted their opinion on the matter but that there would be no discussion. Red meant that they did not need to have an opinion because the point was simply a matter of passing on information to them. The meeting finished on time. All points were covered. Furthermore, Ira felt that the employees had been really happy with the meeting. In the final interview, Ira was very happy about her new style of leading meetings. She found that allowing herself not to be open to discussion on certain points did not make the employees regard her as less likable, but rather made them feel safe in knowing what they had to deal with.

This case illustrates how the sensorimotor state Ira used to represent the situation could be broken into several individual components: the sharpness and energy, the flickering confusion, the rigid screening off, and the overall tension related to judging the state as something negative (i.e., calling it aggression). Clearly seeing the individual components

allowed Ira to feel the sharp energy decoupled from the other sensorimotor states. This enabled her to shift from using the composite sensory template to using this particular aspect of the composite sensory template as means of understanding and engaging with the situation. The result was that the meetings transformed from an unsolvable problem to something Ira could easily manage.

Several of the managers in the research went through processes similar to those of Helena and Ira. Many managers labeled inner states of heat and energy as "aggression" and rejected it for various reasons. One manager associated aggression with something that creates rather than solves conflicts. Another saw aggression as a form of disloyalty toward her employees. Yet another saw aggression as a sign of weakness and of having lost control or being unable to handle things. Thus, for these managers "aggression" was a highly composite sensory template created around the core sensorimotor state of heat and energy. For all of these managers, learning to sense the core sensorimotor state of heat and energy without judging it as something bad enabled them to feel it in a relaxed way, rather than automatically tensing up in an effort to control it. Experiencing the heat and energy as something that could flow freely in them, rather than something that threatened to explode out of its confinement, transformed their experience of this state from something negative to a range of phenomena of immense value in their work as managers, such as clarity, strength, and courage. Other managers experienced similar processes where the core sensorimotor state could be described, not as heat or energy, but as lightness or solidity. I will explore these processes and how to facilitate them in more depth in Chap. 7.

4.6 The Trap of "More Clarity"

So far we have looked at the managers who worked with their problems using two different art-based methods. A third group of managers in the research did not use any art-based interventions. The managers in this group were merely interviewed about their problematic situation. The interviews included a stakeholder analysis. Looking at the managers in this group showed that managers can perceive an intervention (here the interviewing) as useful even if it is not.

Several managers in this group found the interview process very useful and reported at the end of the research that they had found “more clarity” around their problem. However, most of them (17 out of 20) did not find any solution to their problem. In these cases, *seeing the problem clearer* simply meant seeing the problem clearer from their current vantage point, that is, becoming more convinced about their particular way of seeing the situation and getting better at arguing why the situation was as they already perceived it to be. However, part of their view of the situation was that it was unsolvable. Thus, increased clarity in these cases only made the managers more convinced that the problem really was unsolvable and made them better at arguing why this was so.

When the managers thus felt they saw the situation with increased clarity, some of them reacted by simply giving up hope. As long as the problematic situation had not been entirely clear to them, they could sustain the hope that more clarity would reveal something that would show them how to solve the riddle. However, when the mist of uncertainty had dispersed, and they saw the unsolvable nature of the problem with clarity, it seemed that they would just have to accept the problem as an unavoidable fact of life.

Other managers reacted by concluding that the way they had tried to solve the problem so far was in fact right, and that they would just have to increase their current efforts. However, such conclusions do not seem to hold much merit, since at the beginning of the research the managers themselves had stated that the strategies they had used so far didn’t bring them the results they wanted. Presumably, continuing doing something that had not worked thus far seemed a better option to these managers than having to conclude that the problem could never be solved. This reaction can be seen as an example of using rationalization to diminish cognitive dissonance (as discussed in Chap. 2).

In all of these cases, neither of the two processes described in previous sections occurred. There was no change in the sensory templates the manager used to understand the problematic situation. Thus, they kept looking at the problem from a vantage point from where no solutions were visible.

It is very important that even when managers did not find any solutions or any new ways of approaching their problem, they could still at the end of the intervention report that they felt the process had been valuable

to them and that they had gained increased clarity about their problem. This fact should make managerial educators skeptical about such reports. Of course, it is nice if a student or a client is pleased with their learning experience, but as educators we need to distinguish between different kinds of value our students or clients can perceive in their learning.

In the above examples, the value did not relate to learning something which made them better at *solving* an organizational issue. No solution was found. No new ideas for possible solutions were formulated either. The value the managers in these cases spoke about was the value of being confirmed in the correctness of their current view of the situation. And whereas the managers themselves may find value in being confirmed in their points of view, as educators we should not accept this as valuable when a manager's current view does not enable him to deal efficiently with situations which impede organizational performance.

4.7 Images of Problem-Solving

One interesting trend that can be seen in the cases from the research is that when managers encounter unsolvable problems, the real problem is not necessarily in the external circumstances. The real problem can be that the managers comprehend the situation as analogous to either moving or balancing physical objects and that these sensory templates do not support the managers in dealing efficiently with the given situation.

If managers understand organizational problems and problem-solving as analogous to the sensorimotor experience of moving something, they will organize their experience of the problematic situation into categories, such as the object that needs to be moved, the desired destination, means of moving the object, obstacles to moving the object, and means of removing these obstacles. This may sound very familiar and like a good rational approach to problem-solving, but it can in fact at times be very inefficient. When managers use this sensory template to structure their understanding of problems and problem-solving, it can easily lead to seeing other people, their attitudes and opinions, and even their values as analogous to objects that need to be moved or obstacles that need to be removed. This can lead to rationalizing various forms of violence as simply doing what needs to be done for the benefit of all stakeholders (or at

least all *important* stakeholders). When managers treat other people as objects to be moved or obstacles to be removed, they are likely to start dismissing legitimate objections by interpreting them as resistance based in these people's incompetence, laziness, egotism, or lack of understanding and organizational overview, and they will be less likely to see the shortcomings of their own understanding and to see their own part in the creation of the problem.

Above, we have seen a number of examples of this sensory template failing to bring solutions to problems. Anna initially saw her colleagues' attitude to management as an obstacle to be overcome. Yet, she could not do this. Becky initially saw the customer service employees' feeling of being underappreciated as an obstacle to be overcome. Yet, she could not do this. Catharine saw the rebelliousness of the managers in the business unit as an obstacle to be overcome. Yet, she could not do this. Dorothy started out believing that she had to overcome the obstacles to generating sales. But she was exhausted by the very thought of this work—and she even had difficulties in identifying what the obstacles were. Einar tried to identify the obstacles to his employees' contentment and failed—which led him to feel that the employees were hiding the truth about the obstacles from him. In all of these cases, the real problem was that the managers structured their understanding of the problem in terms of moving objects and removing obstacles to this movement and that this way of structuring their understanding did not help them act efficiently.

Similarly, if managers understand organizational problems and problem-solving as analogous to the sensorimotor experience of finding a balance point, they will organize their experience of the problematic situation into categories, such as two or more mutually exclusive elements, the pros and cons of each element, and the search for the optimal balance between these elements, that is, how much "pros" is necessary and how much "cons" is tolerable. This too may sound like a rational and reasonable approach but this can also be highly inefficient. It can be particularly inefficient when the disadvantages of one or both of the elements are unacceptable or when the advantages of one or both of the elements are indispensable. Sometimes, finding a balance point is like choosing between pest and cholera. Sometimes, trying to find a balance point leads to paralysis, lack of integrity, lack of coherence, and efficiency.

Above, we have seen a number of examples of this sensory template failing to bring solutions to problematic situations. Frank was initially trying to find a balance between being hard and being flexible. If he was too flexible, the others would take advantage of him, and if he was too hard, he didn't like himself, and the overall organizational performance could suffer. It was impossible for Frank to find a satisfactory balance. Gary struggled with finding a balance between being controlling and giving freedom to a certain employee. If he gave too much freedom, the employee might not work on the projects he needed to work on in order for the company to deliver what they had promised to the customers. If he was too controlling, he was afraid to come across as invasive and that the employee would react negatively to this. Searching for a balance between control and freedom did not help Frank deal with the problem. Ira was looking for a balance between being in control of her employees and being liked by her employees. If she made decisions herself, she was afraid the employees would not like her, but if she invited the employees to discuss too many things, the employees would engage in endless quibbling and no useful decisions would come of it. Again, thinking about the situation in terms of a balance between being liked and being controlling did not help Ira deal with the situation. In these cases, the real problem was that the managers structured their understanding of the problem in terms of balancing objects and that this way of structuring their understanding did not help them act efficiently.

It is important for managers to know that whenever they find themselves in a situation where they feel they have to move something forward or find a good balance between mutually exclusive elements, the reason they feel they have to move something or find a balance is that they themselves structure the situation in those terms. The feeling is not *caused* by the situation but comes from their own acts of comprehending the situation. The feeling of having to either move or balance something *is* the sensory template they use to understand the situation and to engage with the situation. These are sensorimotor states the managers themselves add to the situation in their effort to comprehend it. Therefore, if managers consistently fail in dealing with such situations, it is likely that the sensory templates of moving something or balancing something are simply poor tools for engaging with that particular situation and must be dropped—allowing alternative sensory templates to emerge.

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Part III

Methods

5

Using Art-Based Methods to Identify Sensory Templates

In the previous chapter, I gave several examples of how the sensory templates managers use when engaging with a situation can make this situation appear either as an unsolvable problem or as a simple matter. The three remaining chapters of the book are dedicated to looking at what concrete methods management educators can use to work with managers' sensory templates.

In this first of the remaining chapters, I argue that art-based methods provide an excellent tool for working with managers' sensory templates. Asking managers to represent various aspects of their work experience in art-based media can make them aware of the sensory templates they already use. Engaging with famous works of art and participating in art creation processes can help managers find alternative sensory templates. This chapter is structured around Steven Taylor and Donna Ladkin's typology of art-based methods. It includes a criticism of current literature on art-based methods for uncritically drawing on an outdated view of cognition and consequently viewing sensorimotor experience primarily as something to reflect *on*, rather than as potential sensory templates to reflect *with*.

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In the following chapter, I turn to the use of religious and spiritual doctrines and practices in management education. I propose that we can use spiritual doctrines and practices more efficiently in management education by understanding such doctrines and practices as means to effectuate particular changes in sensory templates. By knowing which sensory templates we aim at changing we can better direct our efforts and evaluate the results. To illustrate this, I look specifically at how doctrines of virtue and vice from the philosophy of Socrates, Aristotle, Christianity, and Tibetan Buddhism can be used in management education. Cultivation of virtue is important for managers as a means of preventing human vices from leading managers to make flawed strategic decisions detrimental to the organization, its environment, and the manager's own career. I argue that cultivation of virtue can be understood as a matter not of adhering to a morally good code of conduct but of adopting sensory templates from which such conduct follows spontaneously and effortlessly. Drawing on Buddhism, I further propose that virtue (and consequently better decision-making) follows from adopting the sensory template of seeing phenomena as empty of inherent existence.

In the last chapter, I describe a selection of concrete practices for working with sensory templates. I call these Somatic-Linguistic Practices, as they are based on developing somatic awareness and on attention to language. They can be used in conjunction with art-based methods and spiritual doctrines and practices—or on their own. The practices are divided into three groups. The first group of practices aims at making managers aware of the sensorimotor experiences that are not caused by the situations they are in but are instead the tools they use to comprehend the situation and their own possibilities for acting in this situation, that is, making managers aware of their sensory templates. The second group of practices aims at making managers aware that all their desires and difficult emotions are ultimately ways of trying to feel happiness and make them aware that this happiness is always available to them. They do not have to *create* happiness; they have to *notice* it. The third group of practices aims at learning to move into action without losing awareness of the happiness that is always already present.

5.1 What Are Art-Based Methods?

To give an impression of the variety of art-based methods in management education, it is instructive to begin by briefly mentioning a few examples. The Boston Consulting Group has worked with The Actors Institute, a theater-based training center, to improve the performance of their consultants (Buswick 2005). At IEDC-Bled School of Management, two full days at the end of an executive MBA program were reserved for master classes in choral conduction and dance classes as a way of learning about leading and following (Springborg and Sutherland 2014). At the University of Bristol, students on an MSc program in management learning and change created dolls as a way to learn about themselves as leaders (Wicks and Rippin 2010). In the years 2002 to 2005, Volvo increased their sales in Greece from 600 to 5000 units a year—the largest increase in sales in the history of the organization. Vice President Peter Rask stated that key to this success was what he learned through his collaboration with Michael Brammer, an artist who works with provocation. During his collaboration with Volvo, he stretched the concept of marketing, for example, by suggesting that Volvo could catapult a brand new Volvo into a red heart as a marketing event at the 2003 Detroit world exhibition for cars (Darsø 2004). DaCapo Theatre in Denmark is a corporate theater group which, inspired by Augusto Boal's forum theater, plays and replays scenes based on difficult situations in the organization as a way to facilitate discussion between employees. In this way, employees can, among other things, safely test new courses of action on stage which they might hesitate to test in real life (Darsø 2004). The Praxis Centre for Leadership Development at Cranfield School of Management in collaboration with the Shakespeare Globe Theatre in London had managers analyze *Henry V* as a way to learn about inspirational leadership (Lander 2001). Shibboleth is a year-long leadership development program at Karolinska Institutet's Department of Neuroscience in Stockholm which consists primarily of exposure to challenging art followed by writing sessions and group reflection. Shibboleth has been shown to consistently produce positive psychological, behavioral, and biological changes in both the

leaders who participated in the program and their employees, even though these employees did not participate in the program (Romanowska et al. 2013).

As can be seen from the above, art-based methods in management education are many and varied. In general, art-based methods are a form of constructivist learning interventions characterized by the use of different elements linked to art, such as art-based media, processes inspired by art creation, and existing works of art. For example, managers may be asked to represent abstract concepts, such as their self-image as a leader or the organizational vision in art-based media, such as sculptures, poetry, dance, music, stories, or various forms of visual art. Similarly, managers could be asked to develop innovative ideas using processes inspired by art creation, such as iterative improvisations, creating allegorical stories or metaphors, or creating provocation which forces spectators to question their current beliefs about a variety of issues. Finally, art-based methods may simply be the use of existing works of art, such as plays, movies, paintings, or poems, to illustrate various concepts central to organizational theory. Managers may watch excerpts from *Twelve Angry Men* as illustration of negotiation techniques (Champoux 1999), or they may look at impressionistic paintings as a way of exploring leadership visions (Cowan 2007).

5.2 What Can Art-Based Methods Bring to Management Education?

One of the first questions scholars studying art-based methods in management education have to deal with is the question of whether art-based methods primarily are ways of making management education more entertaining and attractive to clients by including unfamiliar and exciting elements from the world of art, or whether art-based methods provide something unique which cannot be provided by other teaching methods used in management education, such as lecturing, project-based teaching, case-based teaching, business games, or role-play simulations. The answer to this question is important because it will tell us whether art-based methods are valuable in their own right or only as ways of supporting

other methods. It is also an important question to answer because if art-based methods do in fact provide means of achieving unique learning outcomes, then educators need to know what these unique learning outcomes are in order to skillfully use art-based methods and evaluate the results. The vast majority of scholars studying art-based methods in management education do so because they passionately believe art has something substantial to offer both managers and society at large. They are therefore naturally inclined to find arguments for the value of these methods. Successfully arguing for the value of art-based methods has the further advantage for scholars that they in this way can create a new and interesting niche for themselves in the academic world and secure funding for research in a field they believe is worth developing and which ultimately has the potential to make positive contributions to society. Such factors can impel scholars to focus on developing arguments for the value of art which are easily understood (e.g., when placed in grant applications), and give less attention to developing more important arguments for the value of art, if such arguments are more difficult to convey convincingly in written form to the people in charge of selecting which research projects to fund.

A common way of making arguments for the value of art-based methods is by presenting art-based methods as ways of facilitating learning processes which are *already* accepted as valuable in management education. This is a very practical and quick way of establishing the legitimacy of art-based methods and thus securing the possibility of doing further research in the area. Thus, scholars have advocated art-based methods by linking them with a large number of established theories which have already earned respect in the field of management education. These theories include theories of reflection, Argyris and Schön's double-loop learning, critical reflection, Jack Mezirow's transformative learning, reflexivity, psychoanalytical theories, depth psychology, theories of art therapy, Otto Scharmer's Theory U, Karl Weick's sense-making theory, Lewin's model of organizational change, Kolb's experiential learning, and Heron's extended epistemology (references are given throughout the chapter).

Steve Taylor and Donna Ladkin (2009) created a typology consisting of four categories into which they organize the types of learning processes scholars have identified in concrete cases of art-based methods in management education. These categories can also be seen as four overall ways of arguing the value of art-based methods. In the following, I present

each of these four processes, show why they are of importance to managers, and give examples of how art-based methods have been used to facilitate these processes. Finally, I use the concept of sensory templates to contemplate the relationship between the art-based methods and each of the four processes they are seen to facilitate. In particular, I argue that art-based methods can be used to help managers become aware of the sensory templates they use in a given situation and to find alternative sensory templates. Thus, art-based methods can assist managers in finding solutions to problems that seem unsolvable to them—as described in Chap. 4. Furthermore, I argue that engaging with art for its own sake can bring about more profound beneficial changes in managers by teaching them how to set aside sensory templates *without* immediately finding alternatives. I expand on the benefits of learning to set aside sensory templates in Chap. 6.

At the end of the chapter, I discuss how the research field of art-based methods in management education draws on two bodies of literature which are based on two different views of cognition: Literature on managerial learning is mainly based in the older symbolic view, whereas the philosophy of art is often based in the embodied view. I argue that this produces an unaddressed tension in the resulting theories.

5.2.1 Skill Transfer

The first process Taylor and Ladkin describe is simply the transferring of relevant skills. In order to practice their art, artists need to develop various skills, and some of these skills are useful to managers in their organizational work. Artists learn and develop their skills through practice rather than through talking about them. For a dancer, it is unimaginable to learn about dance without moving. For a musician, it is unimaginable to learn about music without performing and composing as part of the learning process. It is interesting to note that managers, in contrast to artists, generally don't find it strange if they are presented with a learning experience in which managerial skills are taught mainly by thinking about and discussing theories of management—without any further practice. Some management educators believe that the absence of practice contributes to the difficulty many managers have when they try to

apply the skills they learn on a course in the context of their workplace. These management educators do to some extent use practice-based approaches to teaching, such as role-play, case-based teaching, and mentoring. But it is useful to develop more practice-based methods, and the practices through which artists learn their skills offer new ways of bringing practice into management education, that is, of creating experiential anchors from which managers can develop relevant skills.

Some of the skills artists cultivate through their engagement with art which managers can benefit from learning are very concrete. For example, singers learn to use the muscles in their belly and around their ribcage to support their voice. This gives fullness and resonance to the voice and enables the singer to use the voice for a long time without growing hoarse. Learning to use their voice in this way is also practical for managers. Similarly, actors learn how their body language affects other people. For example, they learn to walk on stage and use their bodies to capture the attention of the audience. Managers can use such skills when giving public speeches or in various negotiation situations. Playwrights and theater instructors develop skills in dramaturgy, that is, in efficiently creating and performing narratives in ways that speak to, capture, and move the audience. A certain level of dramaturgical skill is useful for managers when they create and perform the narrative of the organizational vision or the narrative of an impending restructuring and organizational change process.

Scholars have also identified more abstract skills that can be learned through engagement with art which are useful to managers. For example, Rob Austin and Lee Devin (2003) have identified four key competencies (release, collaboration, ensemble, and play) that the members of theater companies develop through their engagement with theater production. These competencies are developed through practices such as saying "yes, and …" to anything proposed by others in the team. Austin and Devin argue that such practices can be used to teach managers similar competencies and that these competencies are useful when working with innovation in industries where rapid and inexpensive prototyping is possible. Wicks and Rippin (2010) argue that engaging with art creation allows managers to develop two core capacities: "firstly, experientially-grounded and aesthetically-informed reflexivity into the kinds of

questions and challenges which tax us as managers and organizational members, and secondly, the ability to hold, in constructive and inquiring ways, the more problematic and uncanny aspects of what is raised through such an inquiry" (Wicks and Rippin 2010, 275). In other words, they argue that leaders through engaging with art-based methods can develop what Keats calls "negative capabilities". Negative capability is the capacity "of being in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason" (Dewey 1934, 33). This is a useful competency to have when operating in industries with a high level of uncertainty. Several scholars have compiled lists of general competencies dancers develop through their practice as dancers and have suggested that engagement with various dance exercises may help managers to develop such competencies. Denhardt and Denhardt (2006) suggest that engaging with dance can heighten managers' awareness of the interplay between space, time, and energy; sense of the rhythm of human interaction; ability to use images, symbols, and metaphors in communication; creativity and spontaneity in their improvisations; and their focus, passion, and discipline. Bozic and Olsson studied dancers and choreographers and identified "five key elements that support their creative process from idea to performance. These elements are improvisation, reflection, personal involvement, diversity, and emergent structures" (Bozic and Olsson 2013, 59). Based on their research, Bozic and Olsson now run workshops where they train participants in these five key elements by having them create their own choreography. Other scholars simply point out that managers can gain a more refined understanding of the leader-follower dynamic through engaging in exercises normally used to teach various social dances from tango to ballroom to contact improvisation (Springborg and Sutherland 2014, 2015; Matzdorf 2015; Powell and Gifford 2015). Scholars have also looked at general skills related to improvisation, flexibility, and group performance found in jazz musicians (Kerr and Lloyd 2008a) and general skills related to clarity in leading found in choral conductors (Springborg and Sutherland 2014). The skills of musicians and choral conductors can be developed through practices such as letting managers watch jazz musicians improvise, letting managers engage in drumming classes, or giving managers master classes where they first try to conduct a professional choir and then receive feedback from the choir on their leadership.

There exists some, although limited, empirical support for the claim that engaging with art in various ways, such as engaging with exercises used when teaching artists or watching artists at work, can teach managers skills they can use in their daily work. In some of the cases described in the previous chapter, the managers reported that simply participating in the art creation processes had opened up new general ways of perceiving and engaging with their employees and fellow managers. For example, by exploring a problematic situation through the creation of art objects in various media, Frank developed a more open and curious attitude toward colleagues who acted in ways that initially struck him as unfair. A study at Yale Medical School (Dolev et al. 2001) showed that medical students could significantly improve their diagnostic skills by participating in a systematic training of visual skills using fine art paintings. In this study, a group of students were asked to first study a painting for ten minutes and then describe the painting to a group consisting of four of their fellow students. The students were taught to describe the painting using purely visual description. For example, if the students described a person in the painting as looking depressed, they were asked to state the visual impressions that had led them to draw this conclusion about the person's inner state (note the similarity to the exercises described in Sec. 4.5). Furthermore, the teacher used open-ended questions to make sure the students described the full picture—not just parts of it. Although participants in the Yale study were medical students and not managers, it is possible to imagine that attention to uninterpreted visual details would also be beneficial to managers. It could, for example, improve their ability to use visual cues to pick up on employees' motivational level and react accordingly. In a study carried out at Karolinska Institutet in Stockholm, a group of managers was exposed to various forms of art in 12 three-hour sessions over a period of ten months with two follow-up sessions in the following half year (Romanowska et al. 2013). During each session, the managers first watched performances and then engaged in writing and talking about whatever was on their minds. There was no emphasis on relating the experience to leadership or managerial work. Yet, after the program, both the managers'

psychological stress resilience and their social supportive behavior had increased. A revised version of NEO Personality Inventory for measuring "agreeableness" was used (McCrae and Costa 1996) to measure social supportive behavior (Graziano and Eisenberg 1997) and a Sense of Coherence questionnaire was used to measure the managers' ability to cope with stress (Antonovsky 1993, 1996). Furthermore, the managers were judged as more ready to take responsibility and better able to cope with stress by their subordinates. The Developmental Leadership Questionnaire was used for these measurements (Larsson 2006).The group of managers was tested against a control group who participated in a conventional managerial development program. The managers in this group did not develop the traits mentioned above. Managers in the control group were even judged as *less* able to deal with stress and *less* responsible by their subordinates. The findings of the study were corroborated through neurobiological measures of the health of both managers and their subordinates (Romanowska et al. 2011). This study provides strong empirical evidence that engagement with art can be used to develop valuable skills in managers. The fact that there was no focus on managerial work within the program is particularly interesting. I will return to this in the section on the process of making below.

In spite of the empirical support, there are several problems with the argument that art-based practices offer a way for managers to acquire relevant skills. First, Cognitive Metaphor Theory tells us that we can understand a domain of experience we are *less* familiar with by seeing it in terms of a domain of experience we are *more* familiar with. The management consultants who originally developed approaches to management based on the organizations are machines metaphor were engineers and were therefore *very* familiar with the source domain used in this metaphor. Thus, when managers juxtapose the domain of leading a team of employees with the domain of conducting a choir, they are more likely to impose their ideas about leading teams on the experience of leading a choir, and not the other way, since they (most likely) are not particularly familiar with the domain of conducting choirs. Therefore, a certain depth of practice must be necessary for managers to acquire the skills mentioned above and apply them to the context of managerial work. However, it would not be practical to ask managers to become good actors, playwrights, dancers, musicians, choral conductors, or painters as

part of their managerial education. It would take far too long to develop the level of proficiency in playing an instrument that would allow managers to improvise jazz and through *this* experience learn to be creative and spontaneous in their improvisations as managers. Similarly, it would be problematic in terms of time if managers could only learn about the rhythm of human interactions or the subtle interplay between the leader and follower role by first spending ten years becoming skilled dancers. On the one hand, if art-based methods involve no or little practice, it is unlikely that managers will acquire more than stimulating ways to talk about leadership. On the other hand, it is not practical for managers to learn art skills to a sufficiently high level in order to learn (and transfer) the more abstract skills that can be developed through serious, ongoing practice with art creation.

Thus, management educators may look to the arts to identify skills valued by artists that are also valuable for managers. Educators may also look to the arts for inspiration in their efforts to develop methods for teaching such skills to managers. However, the final methods may be art-based only in the sense that the skill taught is also a valuable skill for artists, but it may have nothing further to do with art or art creation. For example, in the Yale study, the skill learned through looking at paintings was the skill of separating visual impressions from the habitual interpretations of these impressions and the skill of setting aside our habitual ideas about what is and what isn't important. Dolev et al. write about their study:

> The use of representational paintings capitalizes on students' lack of familiarity with the artworks. The viewers search for and select all of the details in the paintings because they do not have a bias as to which visual attribute is more important than another. This lowered threshold of observation has direct application to the examination of the patient. (Dolev et al. 2001, 1020)

Thus, the reason for using paintings is that they are *unfamiliar* to the students and therefore the students have fewer ideas about what is important, which makes it easier for them to get to the level of unbiased visual observation. But for this purpose, the skill could have been taught using *any* unfamiliar class of objects—not only fine art paintings.

To sum up, we can say that some scholars argue for the value of managers engaging with art by pointing to certain skills that managers can develop in this way, such as increased control of voice and body language, skills in telling and performing narratives, skills in facilitating and participating in improvisation and creative collaboration, and feeling at ease with uncertainty. However, from this point of view, managerial educators must keep the skill they wish to teach in mind and be open to the possibility that engaging with art may or may not be the most efficient way to teach this skill to *managers.* Educators need to question whether it is possible to teach the valuable skills without the managers first having to acquire skills in working with an art-based medium that are *not* useful to the managerial work. For example, organizational life is already full of uncertainties, doubts, dilemmas, and ambiguities, and some managers would probably include "mystery" in this list. Therefore, managers may not need to engage in art creation in order to learn to abide in uncertainty without reacting in ways that aim at prematurely collapsing it into certainty. Art may be useful as a pedagogical tool for teaching useful skills, but it may not be the best pedagogical tool available. Ultimately, this is a question of developing practices which can draw managers' attention to sensorimotor states which will support them in developing various relevant skills. Although methods used for teaching artists offer a rich source of inspiration for managerial educators, the resulting practices are likely to balance somewhere between art and management practices.

5.2.2 Projective Technique

The second process described by Taylor and Ladkin (2009) is the process of projective techniques. Taylor and Ladkin (2009) describe this process in the following words:

> Langer tells us, "the primary function of art is to objectify experience so that we can contemplate and understand it" (1962: 90). By making art about our own experience, we in effect make that experience exist as an object in the world. It is an object that can contain contradictions (logical and/or moral) as well as unrealized possibilities that are not constrained by

> logic or the limitations of our current lives. In this way, art making enables us to draw upon, and subsequently reflect on, a deep well of "unconscious stuff". (Taylor and Ladkin 2009, 58)

In other words, the creation of art objects can be understood as a way to take a snapshot of one's internal experience and use this snapshot as data one can reflect upon—data which was previously not available for reflection. We can understand this by thinking about the invention of high-speed cameras. When high-speed cameras were invented, humans gained access to data about movement that had not previously been available. This made it possible to answer questions about how birds fly and whether there are moments during the galloping of a horse where none of the hooves touch the ground. Just like the trajectories of fast moving objects vanish so quickly that we cannot scrutinize them with the naked eye, our own internal experience is equally difficult to reflect on because it is occurring internal in individuals and because it is ephemeral, that is, many aspects of it vanish quickly. Just like high-speed photography is a means of documenting the trajectories of fast moving objects, so the creation of art objects makes it possible to take snapshots of the internal and ephemeral experience of the individual and make it external, sharable, permanent in time, and thus possible to scrutinize and reflect on.

When we see art-based methods as a means to facilitate the projective technique process, the value of art-based methods rests on the kind of data that can be captured in these art snapshots. The argument therefore takes on different forms depending on which theories are used.

Reflection: In the mid- and late 1970s, Chris Argyris and Donald Schön, as mentioned in Chap. 2, argued that a core skill for managers was the ability to manage change and that, to do so, managers had to learn to reflect on the process through which they arrived at their decisions about future courses of action. In particular, managers needed to be able to reflect on the assumptions they based their decisions on. However, such assumptions are often unconscious and to make matters worse Argyris and Schön pointed out that managers would often think they were operating from one set of assumptions while in fact operating from a different set of assumptions (espoused theories of action vs. theories-in-use; see Chap. 2). Thus, to be able to reflect on the assumptions managers

actually operate from, Argyris and Schön proposed to make these assumptions conscious to managers through a systematic analysis of the managers' concrete behavior. A manager could, for example, believe that she operated from a deep trust in her employees, but when looking at her concrete behavior one might notice that she checks everything her employees do and insists that no action be taken without her direct approval. By engaging the manager in a systematic analysis of her own behavior, she could be made aware of the unconscious assumptions governing this behavior—and of how these differ from her espoused assumptions. Because making the unconscious conscious is an important part of reflection, many scholars turned to psychoanalysis, depth psychology, and various forms of therapeutic practices in search of methods for doing this.

Scholars in the field of art-based methods who draw on theories of reflection in management education (Argyris 1976; Schön 1975, 1987), psychoanalytical theories, depth psychology, and some theories of art therapy tend to argue that because art-based methods can make experience permanent and external, they can be used to make managers conscious of their unconscious assumptions about themselves and the organization and thus make it possible for these managers to reflect on their assumptions, critically evaluate them, and change them if through this scrutiny they find them erroneous, inaccurate, or outdated. For example, in his paper "Making the Invisible Visible", David Barry (1994) first points out that in the literature on organizational development there is general agreement that surfacing unconscious processes and hidden organizational "games" is important to secure success, but that surfacing this "data" is difficult. He then describes a method used in depth psychology and in art therapy called Analogically Mediated Inquiry (AMI). In AMI clients are asked to create drawings, collages, sculptures, and dramas as analogous representations of their perception of the organization, the team, or other organizational elements. Creating such analogues can make visible the otherwise invisible unconscious processes and hidden organizational "games". Thus, Barry argues that the art-based method AMI is an efficient method to bring about the kind of data the literature on organizational development already sees as valuable. In this way, he makes a compelling argument for the value of AMI as a method to work with organizations. Barry argues for the use of art-based methods in organizational development—

not directly in management education. However, the same argument has been used in later papers dealing with art-based methods in management education. For example, Wicks and Rippin (2010) report on a course where they asked students to create dolls representing themselves as managers. In this way, Wicks and Rippin were able to help their students surface unconscious assumptions about themselves and, in particular, about themselves in their role as leader, and thus make these assumptions available for reflection and possible correction.

Critical Reflection: In the 1990s, scholars with a background in critical theory and critical pedagogy entered the world of management education. These scholars argued that managers needed to develop critical consciousness, that is, the ability to reflect on the power structures and hegemonies embedded in organizational and managerial practices (Alvesson and Willmott 1992a, b; Reynolds 1999). They held that oppressive actions had become normalized in management theory and practice and that as a result managers did not notice the acts of violence, coercion, and oppression they engage in on a daily basis when acting the role of manager in an unreflected way. They saw the development of critical consciousness as an important part of management education because making managers aware of those unconscious and taken-for-granted assumptions which hide the oppressive forces embedded in managerial theory and practices can help managers create new and less oppressive managerial practices.

Historically, there are many examples of art being instrumental in political and social change due to art's ability to create critical consciousness. Famously, Augusto Boal (1985) used theater as a platform through which he could put into practice the philosopher and educator Paulo Freire's ideas about critical pedagogy (Freire 2005). Another famous example of using art to raise awareness of oppression that had become hidden behind normality is the novel *Uncle Tom's Cabin* (Stowe 1852). The novel portrays the cruelty of slavery and its effect on families. It made it possible for (white) readers to empathize with the main characters who were slaves. The novel is generally seen as having been instrumental in the movement that led to the abolition of slavery. A third example is the writings of Leo Tolstoy. Tolstoy expressed ideas about non-violent resistance, both in his

philosophical work *The Kingdom of God is Within You* and in novels like *War and Peace*. His writings had a profound influence on Mahatma Gandhi, Martin Luther King, Jr., and others.

With such historical examples in mind, scholars have argued that the value of art-based methods in management education is that they offer a possibility for cultivating critical consciousness in managers and thus liberating both managers and their employees from oppressive relationships and effectuating political and social change. For example, Steve Taylor (2008) explored the possibility of using a stage reading of his play *Ties That Bind* as an organizational intervention aiming at initiating social change. The play addresses violence in the world of academia, and the stage reading took place at the 2002 Academy of Management annual meeting in Denver. Based on responses from the audience and the actors, Taylor suggests that the stage reading successfully facilitated the first stage of Kurt Lewin's model of organizational change: unfreezing (Taylor 2008). First, it presented data showing that the status quo is problematic, in this case that academia is violent. Furthermore, because audience members had watched the same play, it gave them a common language with which they could speak about this violence. Second, it created emotions of guilt and anxiety in the audience, who were largely academics themselves and thus participate daily in this violence. According to Lewin, such emotions generate motivation for change. Third, it provided a psychologically safe space in which the audience could experiment with change. In this way, the stage reading could contribute to the creation of critical consciousness and social change. In Taylor's example, the play was written by one individual. However, many scholars who see art-based methods as a means for developing critical consciousness advocate *communal* art practices. In particular, theater is used in this way probably due to the rich heritage of techniques developed by Augusto Boal. In the above examples, experiences of oppression are made permanent, external, and thus available for managers to reflect on.

Critical thinking is about gaining a critical perspective on the points of view we take for granted and which seem normal to us, that is, the ideas we have which seem like they could not be different. Facilitators often use group processes as a means to develop critical thinking. Often when we hear about people who think differently than

we do about important issues, we may dismiss the ideas of these people by thinking that they are uneducated, mistaken, suffer from character flaws, or something along those lines. In the research described in Chap. 4, many of the participating managers initially dismissed the viewpoints of employees or management colleagues with which they disagreed. They saw the viewpoints of employees or management colleagues as a result of their egocentrism, their lack of ability to learn, their lack of organizational overview, their negativity, or their laziness. When managers see the viewpoint of another with whom they disagree as arising from such reasons, they can allow themselves not to take this viewpoint seriously. They may think that if the other had the same kind of organizational overview that they themselves have, the other would surely come to the same conclusions about what is the best course of action. Or they can think that if only the other person were not so lazy or so negative, they would surely agree with them. William Isaacs (1999) writes about the importance of respecting that the viewpoints of others come from a place of integrity and that we can never understand these viewpoints fully since we do not have exactly the same experiential history as the other. To understand where the other is coming from, we need to listen deeply. Thus, bringing stakeholders with different and often conflicting viewpoints together and taking them through a process whereby each stakeholder group comes to a deeper understanding of the viewpoints held by the other stakeholder groups is a very efficient way of facilitating critical thinking—and creating more coherent organizational practices. One model for facilitating this is called Theory U. This process was first developed by Friedrich Glasl and Dirk Lemson as a process for conflict resolution (Glasl and de la Houssaye 1975). It was later expanded by Otto Scharmer (2007), and it is now often used as a tool for leading innovation processes. The process can be described as first letting go of one's preconceived ideas, then sensing and being present with what is left, a step called presencing, and finally giving shape to the patterns which emerged during the presencing. Being present with a situation without one's preconceived ideas about this situation is no easy task. Scharmer often captures this difficulty by describing the process in semi-religious terms, such as passing through the eye of the needle or a complete transformation of consciousness. Lotte Darsø (2004) has suggested that art-based methods offer a way to facilitate this crucial step in the Theory U model.

Representing our ideas about an organizational issue in a sculpture or a poem or a drawing can simultaneously make visible our preconceived ideas about the situation and give us a medium through which we may think about the situation without letting our preconceived ideas frame this thinking in a habitual and unconscious way.

Art and Language as Media of Mapping Experience: So far, we have looked at projective technique facilitated by art's ability to make experience permanent and external, thus enabling managers to reflect on assumptions which otherwise might remain unconscious. However, according to Susanne Langer, a philosopher of art, art's virtue is not merely that it makes experience permanent and external (Langer 1951, 1953). Art can also capture aspects of experience which language simply cannot capture. To understand this, we can think about the nature of maps and how the medium used to create maps will systematically distort what we map due to the properties of this medium. For example, when we use a flat piece of paper to map the surface of the earth, Greenland appears to be considerably larger than Australia, even though the area of Greenland is a mere 2166 km^2 compared with Australia's 7692 km^2. This distortion is the result of the stretching that happens closer to the poles when a spherical surface is mapped on to a flat surface. It is a property of the medium we use for the mapping (namely that it is flat) that causes a systematical distortion of that which is mapped (it stretches out land closer to the poles). Similarly, language consists of separate words that appear one at a time like beads on a string. Therefore, mapping our experience onto the medium of language will systematically distort our experience so it appears to consist of discrete events that come one at a time in sequence. This systematic distortion is visible when we use language to map our mental ideas. Langer writes: "[A]ll language has a form which requires us to string out our ideas even though their objects rest one within the other; as pieces of clothing that are actually worn one over the other have to be strung side by side on the clothesline" (Langer 1951, 65). This systematic distortion is also visible when we use language to map our emotions. If we feel two emotions simultaneously, as when we simultaneously love and hate another person, there is no simple way of representing this in language. If we say that we feel "both love and hate" we still have to place the words for the two emotions so one appears before the other. Another solution would be to invent a new word for the composite feeling—but it would

take time before this word was widely adopted. Another way in which the medium of language distorts the experience it maps out is that it strips the experience of its sensory qualities. As discussed earlier, the word "love" shares very few if any sensory qualities with the actual experience of love. Similarly, the word "chair" does not share any sensory qualities with the experience of an actual chair. The exception would be onomatopoeic words, that is, words that are imitations of sounds, such as "whack", "woof", "vroom", "zap", or "boo-hoo". By contrast, the medium of paintings does offer the possibility of more directly representing the visual qualities of our experience. Some paintings are almost indistinguishable from photographs. Painting also, in contrast to language, offers the possibility of representing many aspects of our experience simultaneously. In fact, one of the ways in which paintings distort experience is by making everything appear simultaneously. Even though the use of composition to guide the spectator's gaze from element to element can introduce a limited dimension of time, the elements in the picture are all present simultaneously—unlike in language. Painting has also proven to be a medium that is useful for representing emotional and other inner states. German Expressionism used distorted shapes and colors to express states of anxiety and urgency. Futurism used fragmented shapes, vibrant colors, and subject matters related to machines, youth, and violence to capture inner strength and dynamism. Surrealism used the medium of painting to capture dreams and other subconscious states. Malevich's Suprematism used simple geometrical shapes and clear colors to capture the forces in us that are beyond references to the external world (which is closely related to what I in this book call sensory templates). Abstract Expressionism also used abstract shapes to capture various inner states, whether the spontaneous and personal responses of the artist as in some of Jackson Pollock's work or the meditative inner states found in some of Mark Rothko's work. The medium of music can, like paintings, represent many contradictory or complementary aspects of experience simultaneously. For example, Claudio Naranjo, a Chilean-born psychiatrist and pioneer in integrating psychotherapy and spiritual traditions, proposes that Ravel's Bolero expresses simultaneously three kinds of love. The energetic drive of the bolero drum mirrors passionate love (eros), the steadily moving bass line mirrors brotherly love (phileo), and the soaring melody mirrors generous and unconditional love (agape). Music also offers the possibility to

represent how experience develops over time much more readily than painting, since the music as medium stretches over time. However, the medium of music offers very limited possibility for direct references to specific objects. The exception would be program music, where composers take great pains to represent well-defined phenomena through imitation of sounds. However, program music can be seen as an experiment with the limits of the medium, rather than as an expression of what is characteristic about the medium. Thus, due to their physical differences, different media enables us to capture different aspects of experience. In particular, art-based media enables us to capture aspects of experience which are not easily captured in language (Langer 1951, 1953).

Based on Langer's argument that different media allows us to capture different aspects of experience, scholars in the field of art-based methods in management education have argued that the value of art-based methods is not merely that they provide a pedagogical tool for teaching relevant skills to managers or that art objects can make unconscious assumptions conscious and thus available for reflection. Rather, the value of art-based methods is that using art-based media allows us to capture particular aspects of human experience that cannot readily be captured using the medium of language. Scholars have combined the argument about art-based media's ability to capture aspects of human experience which language cannot capture with various theories pointing out which aspects of human experience are valuable for managers to become more aware of and thus able to reflect on. This has resulted in art-based methods being used to raise managers' awareness of emotions, moral sensibility, aesthetic experience, the emerging future as it can be sensed in the present, complexity, contradictions, ambiguities, tacit knowledge, and presentational forms (a concept related to what in this book is called sensory templates).

Emotions: Stephen Fineman (2000) argues that emotions are intimately linked to a range of organizational issues, such as culture, identity, power, and control. Therefore, emotions in organizations are an area where managers should develop critical consciousness. Fineman argues that whereas emotions have a biological origin, we relate to them through social and moral discourses embedded in organizational practices. He points out that we are influenced by ideas about which

emotions should be encouraged and which should be silenced, which emotions are appropriate to have toward different situations and people, and which emotions are appropriate for men and women, respectively. For example, sadness is often seen as appropriate at a funeral and happiness at a wedding, and in some cultures anger is seen as more appropriate for men than for women. Depending on which social practices and institutions we find ourselves in, we find it natural or even a moral obligation to feel love for ourselves, admiration for successful people, cynicism in relation to politicians, enthusiasm for our work, disgust for criminals or competitors, and so on. If we fail to produce the expected emotions, we may even feel guilt or shame about this. Due to the naturalness which social discourses and practices lend to such ideas about emotional reactions, they often go unchallenged. Thus, emotions can be seen as an oppressed or highly edited voice used for political ends.

Awareness of which emotions arise in various situations in the organization and how these emotions are spoken about and appropriated for political discourses can enable managers to take a reflexive stance in relation to the way emotions are used in the organization. It can help managers become aware of emotional discourses that are damaging to the organization and its employees and help them change these.

Art-based methods can be used for this purpose. In particular, certain art-based media are very good at capturing emotional responses in human experience. Referring to the theory called Expressive Therapies Continuum from the field of art therapy, Taylor and Statler (2014) point out that using clay, a more fluid medium, in management education tends to facilitate more emotional responses than using LEGO, a medium with a high level of internal structure. In general, the use of art-based methods will often generate discussions in the classroom with a higher focus on emotional aspects of human experience—simply because art-based media better allows us to capture and share emotional experience.

Aesthetics: Materials do not only have an impact on the level and kind of emotions participants will express in managerial education. The materials we are surrounded by in our daily work have an impact on how we feel and how we interact with each other—both of which are highly relevant to organizations. For example, think about how you feel and interact with others when you are in a large and bright, spacious and luxuriously

decorated hall with white marble floors and huge gold and crystal chandeliers hanging from the ceiling compared to how you feel and interact with others in a small and softly lit room with thick curtains and soft and heavy couches and armchairs in dark, subdued brown or green colors. Or compare how you feel when you walk through an old part of town with colorful, two or three storey houses and sidewalk cafes and how you feel when you walk through the steel and glass skyscraper financial district with large, clean-swept plazas with gray tiles and no places to sit. The architecture, interior design, and artifacts used by organizations can make employees and visitors feel intimidated, relaxed, energized, part of something important and big, part of something shabby and sad, or part of something fun.

Thus, the aesthetic dimension of organizations is important. It matters what actual sensorimotor experience one has while working and what judgments one has about these experiences, that is, whether one perceives these sensory experiences as beautiful, ugly, grotesque, comical, repulsive, and so on. However, the aesthetic dimension was not seen as relevant in organization theory and management studies before the mid-1970s. Antonio Strati, one of the pioneers in the field of organizational aesthetics, writes:

> The prevalent image conveyed by the organizational literature until the mid-1970s, in fact, was that organizations are made up of ideas which meet and merge on the rational level; ideas, therefore, devoid of eroticism, beautiful or ugly sensations, perfumes and offensive odours, attraction and repulsion. Organization theory and management studies depicted organizations in idealized form by depriving them of their earthly features of physicality and corporeality. This, however, does not correspond to everyday practice in organizations. (Strati 1999, 4)

Thus, aesthetic experience and aesthetic judgment were seen as irrelevant for managers and thus aesthetics was a repressed voice in management theory. To the extent that the aesthetic dimension is seen as irrelevant and ignored, individuals do not develop the ability to talk about their aesthetic (including their sensorimotor) experiences. Steve Taylor (2002) calls this phenomenon aesthetic muteness. Taylor illustrates aesthetic muteness by

telling a story about a series of interviews in which he asked members of an organization about their aesthetic experience relating to a specific episode at a staff meeting. During the meeting a woman proposed that the organization would buy a billboard placed right across from their greatest competitor's new offices and that they could put an edgy play on words relating to their competitor's new logo on this billboard on the day of their competitor's grand opening, where they would invite their board of directors to the new offices. When talking to the employees about the presentation of this idea at the staff meeting, Taylor noticed that they had understood it differently from him. He had thought it was primarily about embarrassing the competitor. But when he asked the presenter herself and the employees who had been present at the meeting, they all told him that it had been about being creative, seizing opportunities, and having fun. However, when he asked about their aesthetic experience of hearing the story, they had difficulties in answer him. Sometimes he would ask what they *felt* during the presentation and they would begin their answer by saying: *I thought that….* Thus, in answering they would rephrase the question from being about sensing to being about thinking. Others would state that they could not remember their aesthetic experience during the brief. Yet others would deny that they had had any felt sense experience during the brief. They just heard what was said and thought it sounded like a good idea—and denied that there was anything more to their experience. Taylor acknowledges that the difficulties in talking with the employees about their aesthetic experience could, at least in part, be due to his lack of skill in eliciting responses about aesthetic experience. However, he, like many other scholars, proposes that art-based methods can be a solution to this problem because art-based media are better than language at capturing the aesthetic aspects of human experience.

In short, the argument for the value of art-based methods goes: The aesthetic dimension of organizations is important to management studies and management practice. Art-based methods offer ways of capturing the otherwise elusive aesthetic experience and make it permanent and sharable and thus available for conscious reflection. Therefore, art-based methods are valuable in management education.

Before proceeding, it is worth pausing and commenting on Taylor's notion that the difficulties in talking about aesthetic experience may be

due to his own lack of skills in eliciting responses about aesthetic experience. In the research on sensory templates, I asked managers about their aesthetic experience of seemingly unsolvable problems. I did not find that the managers were unable to speak about their aesthetic experience. I did, however, find that in order to ask the managers about their aesthetic experience, it was necessary to establish three main distinctions at the outset and in this way make it very clear to the managers which part of their experience I was interested in. In other words, I had to point clearly to the part of experience I was interested in. As described above, I did so by taking the managers through a number of exercises. In these exercises, I asked the managers to describe the inner atmosphere evoked in them by music, images, and words by using only sensorimotor words, such as fast, slow, rough, smooth, heavy, light, and so on. These exercises allowed me to first establish the distinction between sensory and more abstract descriptions of experience. Every time the managers used abstract phrases, such as “the music makes me feel very comforted” or “the picture makes me feel interested” or “this word sounds like a lot of fun”, I would ask them what “comfort”, “being interested in something”, or “a lot of fun” felt like at a physical level. Usually, the managers would answer something like, comfort feels soft, interest feels like quick vibrations in the body, or fun feels like bubbles in the stomach. I also introduced the distinction between words referring to emotions and words referring to sensation. If the managers told me that while listening to the music they felt angry, happy, sad, and so on, I would again ask what these emotions felt like at a physical level. Insisting on the managers only using sensorimotor words to describe their experience is a simple way of pointing their attention in the direction of aesthetic experience. Third, during the exercises, I established a distinction between the sensory properties of the physical objects (music, images, and words) and the sensory experience of their own inner felt sense. This distinction allowed me to ask specifically about the latter. I was not interested in a description of which instruments the manager could hear and what these sounded like or in what palette a painter had used for a painting. These sensory experiences were already available to me. I was interested in the sensory qualities of the managers’ inner felt sense. The managers generally understood these distinctions quickly. Establishing distinctions between sensory descriptions and abstract or

emotional descriptions of experience and between external physical properties of objects and the sensory experience of the inner felt sense allowed me to continuously ask directly about the managers' aesthetic, felt sense experience of organizational phenomena.

Lastly, I found that even though managers were able to be aware of and describe their aesthetic experience while they were having it because the aesthetic experience generally is not seen as something important, the managers would not commit their aesthetic experience of organizational situations to their long-term memory. Therefore, to explore the aesthetic experience, I first asked managers to describe in detail the situation I was interested in. By describing the situation in detailed and concrete terms, such as who were present, what they said, what they looked like, how they moved, and so on, the managers would re-experience the situation. This is similar to playing the music or showing them the picture. While re-experiencing the situation in their imagination, they could notice the aesthetic aspects of their experience and include this in their description. Thus, aesthetic muteness can be seen not as a lack of ability to be aware of and to describe aesthetic experience, but as a lack of having committed this experience to long-term memory and thus being unable to describe it after the event—without first taking time to re-experience it. From research on memory, we know that sensory memory only lasts a few seconds. Thus, this is the window we have to describe aesthetic experience and commit it to long-term or declarative memory, otherwise it is forgotten. These observations suggest that skillful use of language does offer a more efficient medium for talking about aesthetic experience than many proponents for art-based methods give it credit for. At the same time, working with art-based media also offers a wonderful way of capturing the richness of aesthetic experience. I will return to these considerations about how to work with aesthetic experience in the last chapter on Somatic-Linguistic Practices.

Reflexivity: With critical theory and its various branches entering the field of management education, reflective practices have gradually changed. Argyris and Schön focused on becoming aware of the unconscious assumptions managers based their decisions on by analyzing managers' behavior. The goal was to enable managers to adjust their assumptions so they would always match the changing organizational environment.

With critical reflection, the sphere of reflection gradually expanded. It is no longer a matter of managing change efficiently. With critical reflection, the reflection has acquired a distinct ethical turn in its uncovering of power inequalities and the possible repercussions from such inequalities. The reflection has become more complex. It is no longer a matter of testing whether one's assumptions are true, but about including marginalized voices. This new kind of reflection is often referred to as reflexivity. Ann Cunliffe describes the difference between reflection and reflexivity in the following way:

> Reflection is often seen as a systematic thought process concerned with simplifying experience … reflexivity means complexifying thinking or experience by exposing contradictions, doubts, dilemmas, and possibilities. (Cunliffe 2016, 38)

Reflexivity is relevant for managers because the world is increasingly interconnected and complex and voices which before did not have any power now do. These voices need to be taken in to account. Donald Schön (1975) suggested that management in the twentieth century can be divided into generations according to the main question managers had to deal with. Between WWI and WWII, the main question was whether the organization was well organized. From WWII to the mid-1960s, the question was whether the organization fosters creativity and innovation. From the mid-1960s to the mid-1970s, the question was whether the organization can manage change. Extrapolating this sequence of questions, we could say that today the main question is whether organizations can manage complexity, paradox, ambiguity, and contradictions. In other words, are managers able to engage in reflexivity?

Scholars drawing on postmodern theories emphasizing the importance of becoming aware of complexity, paradox, ambiguity, and contradiction often look upon art-based methods as methods for facilitating reflexivity. Language, as discussed above, is not an ideal medium for representing paradox, ambiguity, and contradiction. Art is. This provides yet another argument for the value of art-based methods in management education, namely as a way of capturing and thus facilitating reflection on paradoxes, contradictions, ambiguities, and dilemmas embedded in the experience of managers.

Sensory Forms of Knowledge: Yet another aspect of human experience which may be captured more readily in works of art than in language is what can be called sensory forms of knowledge. Many philosophers have noted that the knowledge we can express in language through propositional statements, that is, statements that can be either true or false, is based on sensory forms of knowledge, which cannot readily be stated through such propositions. This can be illustrated by thinking about skills such as the ability to ride a bicycle. No matter how much propositional knowledge you accumulate about bicycle riding, you cannot actually ride a bicycle without also acquiring a bodily knowledge through practice. However, what the physical practice adds to your knowledge about bicycle riding is not easily stated in propositions. Or to say it in another way, you do not really understand a proposition such as "To keep the balance you need to constantly turn the front wheel in the direction you are falling" before you have learned to do this in practice. This is highly relevant for managers, as management literature is full of propositions about how to manage well—but as the example with bicycle riding suggests, managers cannot be said to really understand these propositions before they can put them into practice. And to learn to put the propositions into practice, the managers need to add a certain bodily knowledge which comes with practice and which cannot readily be stated in propositional language.

The idea that art-based methods can be used to make explicit the sensory knowledge upon which our propositional knowledge is modeled has been given different expressions by Susan Langer (as described above), in Polanyi's concept of the tacit or personal component in all knowledge (Polanyi 1974), and in John Heron's concept of propositional and practical forms of knowledge being based on presentational and experiential forms of knowledge (Heron 1999). It would go beyond the scope of this book to describe and compare these theories in details. What is of importance here is that scholars in the field of art-based methods in management education have suggested that art-based methods can serve the function of capturing and making explicit tacit forms of knowledge (Strati 2003) or presentational forms of knowledge (Seeley and Reason 2008; Grisoni 2012; Taylor 2004). If language were our only medium,

these forms of knowledge would have remained hidden. But through the use of art-based media, it is argued, such forms of knowledge can be made available for our reflection.

Thus, all the various arguments for the value of art-based methods as projective technique focus on art-based methods as ways of capturing aspects of human experience and turning these into data we can reflect on. Contrasting the two processes of skill transfer and projective technique can reveal several interesting points about art-based methods.

5.2.3 Projective Technique vs. Skill Transfer: Experience as Data to Think About or Tool to Think with

Taylor and Ladkin (2009) distinguish between skill transfer and projective technique by suggesting that whereas skill transfer focuses on the *process* of art creation, projective technique focuses on *objects* created. When managers participate in theater games to develop their improvisational or collaboration skills, it is not the final performance that matters, but the *experience* of the process through which the performance was created. Even if no performance is ever created, managers can still learn about improvisation and collaboration during the process of working toward the performance. In contrast, when managers capture their organizational strategy in a sculpture, the product (the sculpture) matters. Managers will concentrate their attention on the sculpture, and if for some reason a sculpture is not produced, the participants would not necessarily learn anything about their strategy.

This is a useful distinction as it is. However, using Conceptual Metaphor Theory (Lakoff and Johnson 1980; Grady 1997), we may add depth to this distinction. Conceptual Metaphor Theory tells us that any experience can play two roles in the process of developing understanding. First, it can be the experience we are trying to understand, that is, our experience of the target domain. Second, it can be the experience we use to understand with, that is, our experience of the source domain. When art-based methods are used as projective techniques, experience is mainly seen as data we can capture and reflect upon. It is presupposed that we

already have the ability to reflect on the experience captured in the art objects. This may or may not be true. When art-based methods are seen as techniques for developing skills, experience is mainly seen as tools we can use to think and act with. The experience of participating in the art creation process becomes the source domain we can later use to understand experiences at work, the target domain. Thus, the distinction between art as object and art as process becomes a distinction between whether we see the art experience as target domain, something we think *about* (object), or as source domain, something we think *with* (process).

When art-based methods are used as a projective technique, we view the sensorimotor experience gained through engaging with these methods as *data we can reflect on*. Creating objects in various art-based media is seen as a useful way of taking snapshots of the ephemeral and internal experience of various stakeholders. This makes the experience stable and external and thus available for analytic scrutiny, evaluation, and reflection. And such reflection, it is hoped, will lead to insights about how to create better, that is, more efficient and profitable, less oppressive, more sustainable, and coherent organizational practices. The question of *what* we use to reflect with is never seriously addressed. It is simply assumed that participants use their rationality, their analytical sense, their intuition, and so on to extract insight from the art objects. What such rationality, analytical sense, or intuition consists of is not addressed. Even though a multitude of theoretical frameworks is used, the basic structure of the arguments for the value of art-based methods is the same. First, scholars point to an aspect of human experience that is important for managers to be aware of according to an already established theory (of organizational learning, organizational change, conflict resolution, reflexivity, etc.). Next, they show that this particular aspect of human experience is difficult to become aware of. And finally, they argue that art-based methods are a useful means of capturing this particular aspect of human experience in stable and sharable forms. This is practical since it immediately established art-based methods as valuable in management education as means of making managers aware of unconscious assumptions, marginalized voices, emotional or aesthetic experience, complexity, paradoxes, uncertainty, inconsistency, ambiguity, tacit or presentational forms of

knowledge, and so on. However, this line of argumentation, regardless of which theories are invoked, emphasizes experience as something to capture and reflect upon and it hides the possibility of using the art experience as a tool to think with. In fact, this line of argumentation does not touch upon what comprises the faculty used for reflecting on the experience captured through art creation.

By contrast, when art-based methods are seen as a means of cultivating skills, the sensorimotor experience gained through engaging with these methods is seen as the very substance of our rationality, analytical sense, and intuition. It becomes part of the repository of experience managers can use to comprehend new experiences, that is, it can become a sensory template. Once a manager has felt the dynamic in a group of people engaged in improvising a theater performance, they will later be able to see collaborations at work in terms of the sensorimotor states they experienced while participating in the theater improvisation exercise—the energy, the flow, the stumbling, the spontaneous reactions, the gaps, the thrill, and so on. The main argument given for the use of art to develop skills is exactly that once managers experience how it *feels* to participate in theater improvisation games or experience how it *feels* to lead and follow in various partner dances or how it *feels* to lead a choir, they will later be able to use these felt experiences as *tools to think about and engage with* organizational practices. This is the reason many scholars argue that managers need substantial experience with the art-based practices in order to develop really useful managerial skills from such practices. However, sometimes an experience can be so strong that even relatively brief exposure to it can supply the manager with a new sensory template. We saw this most clearly in the examples in Chap. 4 where the experience of the learning context became the source for a new sensory template the managers could use to comprehend and engage with situations at work. Frank first experienced how looking at a situation through different art-based media would allow him to see different aspects of the situation. Afterwards, he began to see himself and his colleagues as analogous to different art-based media, each revealing different important aspects of a work conflict. Gary first experienced how the communication between the participants in the initial interviews, where the managers formulated what problems they wanted to work with, gave him more than mere information. Afterwards, he began to see the possibility of using communication as a means to give appreciation, not only information, to an

employee who needed appreciation to thrive. In these examples, the shift occurred after a relatively short exposure to the art-based methods—or in Gary's case to the interview situation. It is worth noting that in these examples the learning came in the form of flash insights. That the new associations were formed after relatively short experiences may indicate that these managers were ripe for this learning.

The distinction of process vs. object is not isomorphic with the distinction between using engagement with art as either source or target domain. The art objects created can play the part of both target *and* source domain. By representing experience in an object, we have already given this experience structure. We have given it structure inherent in the medium we have used, and we have given it structure in the way we have chosen to shape this medium into a representation of our experience. Thus, the art object can also be placed in the position of the source domain, that is, the domain from which we borrow structure we superimpose on our experience of a phenomenon to comprehend it and support our interactions with it. From this point of view, the creation of the art object is not merely a way of capturing data we can then reflect upon; it is in itself a reflection upon our experience. What is particular about this sort of reflection is that it is a wordless reflection. The art object is not merely a representation of experience; it is simultaneously a representation of a particular way of organizing this experience. For example, a manager creates a doll with a nice suit and a big colorful tassel-like object attached to its leg as a representation of himself as leader (Wicks and Rippin 2010). This allows him to speak about that part of his experience he feels is like a big colorful tassel-like object attached to his leg—the weight he carries from his past. However, it is not only a way of capturing this experience and making it permanent in time and external. It is also a way of organizing his experience into (at least) two categories, namely himself and his baggage, and of placing these two elements of his experience in relation to each other, namely one is restricting the leg movement of the other. In other words, the object is a representation of a sensory template, and as we have seen in the previous chapter, sensory templates are not given in experience, but rather are sensorimotor experiences we use to structure other sensorimotor experiences within the process of developing higher abstract concepts.

Similarly, the process of art creation can play the role of source domain *and* target domain. Managers' reactions to the various exercises they go through while guided through a process of art creation reveal the kind of reactions they are likely to have at work. For example, scholars and educators working with dance exercises in leadership training will often argue that the physical ways in which managers lead and follow in dance exercises reflect how they lead and follow in their organizations. Often managers in the role of follower in a dance exercise take their steps before these steps are initiated by the leader. These same managers will often report that when their superior gives them a task, they try to get out of their superior's office as quickly as possible so as to quickly gain control over the task. In other words, they step before the leader has had a chance to clearly indicate what steps he wants. Inversely, many managers in the role of leaders will have a hard time pausing in their lead and providing their followers time to gain stability in their axis. As one manager once said: "If I pause and the follower gains a stable axis, I feel he might resist my next movement" (Springborg and Sutherland 2015). Thus, the anticipation of resistance was visible in the way this manager approached leading both in the physical context of dance and the context of managerial work. If we film managers while they are engaged in a dance exercise, we will have created a stable and external representation which to some degree captures the manager's inner experience in the medium of filmed bodily gestures. We may analyze the filmed gestures in the same way as we would analyze any art object created by the manager. Reflecting on the manager's unconscious gestures and body language can certainly reveal a great deal about the manager's ephemeral, inner experience, and the medium of bodily gestures can show a great deal that is not easily expressed in language or in other art-based media such as poetry or painting or theater. The main difference between such a film and an art object the manager has created to capture his inner experience is that whereas the art object is produced through a process where the manager can *reflect* while creating the art object and where his reflections can *influence* the shaping of the art object, the unconscious gestures captured on the film would be created through an *unconscious* and *spontaneous* process.

Thus, even if the projective technique is very useful, and even if art-based media are useful as a means to facilitate this process, it has (at least) two important limits. First, thinking about art creation as a projective technique can make educators overlook that the process of art creation may offer managers new tools to think with—not only new data to think about. Second, whereas the use of art-based media may be good for projective techniques, sometimes other media, such as spontaneous and unconscious gestures caught on film or descriptions made using sensorimotor words, may be better for the purpose of capturing elusive aspects of managers' experience.

5.2.4 Illustration of Essence

The third process Taylor and Ladkin (2009) identify in the literature on art-based methods in management education is illustration of essence. Taylor and Ladkin describe this process in the following way:

> Like projective techniques, using art to illustrate essence involves art as an object that can be reflected on in the world. However, when art is used to illustrate essence, rather than as a way to evoke personal meaning and sense-making, it embodies universally recognized qualities, situations, emotional responses, or ways of being. (Taylor and Ladkin 2009, 59)

To understand this process, we can build on the metaphor of seeing the creation of an art object as a way of taking a snapshot of internal experience to make it permanent and sharable. Consider the difference between the professional and the amateur photographer. We have all as amateurs taken pictures of some amazing situation only to be disappointed when seeing the picture because the picture did not convey how it felt to be in that situation. The professional photographer, on the other hand, is skilled in using the medium of photography to capture the scene in a way that conveys what is important in that moment. Similarly, other professional artists are better than non-specialists at using their artistic media to create works of art which capture interesting or important aspects of human experience. Artists will often capture aspects of experience everyone else overlooks or avoids or aspects which everyone knows

well, but do not have words for. Other artists may create works that capture the beauty of experiences which are commonly considered ugly—or the reverse. Human experience, like the visual world that surrounds us, is a rich and complex world. Professional photographers, and artists in general, are skilled in using artistic media to notice and capture interesting and important aspects of human experience in works of art.

Therefore, managerial educators have turned to literature (Czarniawska-Joerges and Guillet de Monthoux 1994), theater (Lander 2001), movies (Champoux 1999), and other famous works of art (Cowan 2007) as ways of illustrating complex organizational concepts. For example, the classic movie *Twelve Angry Men* is often used to illustrate negotiation techniques. In the movie, Henry Fonda plays a jury member, juror 8, at a murder trial. When the jury begins the deliberation, everybody believes that the defendant, a young boy from the slums, is guilty—except juror 8. Throughout the movie juror 8 persuades each of the other jury members to critically examine their own prejudice and the evidence presented to them. As a result, all of them end up changing their vote from guilty to not guilty. As the jury members have very different personalities and motivations for their initial vote, juror 8 has to be very flexible in his way of arguing and persuading. This makes the movie a gem for anyone studying negotiation technique and group decision-making. Similarly, the "Houston we have a problem" scene from the movie *Apollo 13*, where the astronauts have to improvise under time pressure to solve unforeseen problems caused by an explosion in an oxygen tank, is often used to teach concepts related to improvisation and problem-solving. Another example is the scene from *The Godfather*, in which Michael Corleone is attending the baptism of his sister's son. As godfather, he is reading out the vows and forsaking the devil while at the same time his men are assassinating the heads of the five other families. This scene can be used to frame teaching about moral dilemmas. Scenes from movies such as *The Hunger Games*, Wolf of Wall Street, and *The Grapes of Wrath*, are often used to illustrate economical concepts and game theory. Shakespeare's play *Henry V* has been used to illustrate how to step into a new leadership role with confidence and unite people around a common goal worth fighting for—even if the odds are against them (Lander 2001). Claude Monet's impressionistic

paintings have been used to illustrate the power of having a vision (Cowan 2007). Impressionism was in itself a new vision for the art of painting, and furthermore, the sketch-like and unfinished quality of impressionistic paintings is an apt illustration of how visions can invite the participatory imagination of spectators/employees through the openness of the unfinished sketch. Using works of art does not only make the teaching engaging and memorable. Works of art also offer the possibility of capturing highly complex dynamics of organizational life in one single symbol—image, narrative, or cinematic experience.

Taylor and Ladkin (2009) point out that both theories and works of art can illustrate essential aspects of human experience in ways that support and guide managers' actions. They proceed to mention a few similarities and differences in how theories and works of art accomplish this. However, I will restrict myself to pointing out one important difference, namely that illustrating something through art makes it possible to directly provide the sensory experience in which one may ground propositions. In fact, artists often seem more interested in providing the sensory experiences with which we can think than in providing the concrete propositions we may use this experience to formulate. Taylor and Lakin formulate this difference by stating that

> Theory states an abstract concept that is meant to have *convergent generalizability,* or be true and the same for all. Art offers a specific illustration that is meant to have each observer connect to it in their own particular way and thus has *divergent generalizability*. (Taylor and Ladkin 2009, 59)

Using the terminology of Cognitive Metaphor Theory, we can state that because a work of art communicates through sensory experience, it can be used as a source domain, as something the individual can *think with*. The experience of the play or the poem or the picture can become the experience in terms of which a manager comprehends his colleagues or a specific problematic situation. A manager using the movie *Twelve Angry Men* as a source domain for understanding negotiations may, for example, think which of the characters a given negotiation partner is more like and let that guide his actions.

When management educators use theory instead of a work of art to illustrate essential aspects of managerial work, they communicate through language-based propositions. However, as discussed earlier, such propositions can be grounded in very different sensory templates leading to very different understandings of the theory and, consequently, very different actions. For example, Maslow's (1943) humanistic theory of motivation claims that once the basic needs are taken care of, human beings are naturally motivated by self-development. This statement will lead to very different managerial actions depending on which sensory template the manager grounds this proposition in. One manager may understand it to mean that "self-development" is a force in humans analogous to the natural flow of a river and that removing their employee's worries about basic needs is analogous to removing rocks that clogs up the flow of this river. Another manager may understand it to mean that "self-development" is another carrot they can use to move employees according to their own plan. The stories in the previous chapter also showed how words could take on very different meanings depending on which sensory template the word referred to. Leadership could, for example, be seen as analogous to pushing people toward goals or as creating connections between people. Language-based propositions will, in most cases, not include any invocation of sensorimotor experience in terms of which we may understand the propositions. As a side note, I believe that theorists can take this as an encouragement to reflect upon which sensory templates they themselves use to comprehend their own propositions—and make these explicit in their texts. This, I believe, could greatly assist in clarifying theoretical presentations.

In practice, when art is used as illustration of essence it brings theoretical concepts to life by explicitly offering appropriate sensory templates in which these concepts can be grounded—thus, remedying the absence of any sensory template provided by the author of the theory. In other words, the sensory template *is* the essence of the theoretical concepts and propositions, which art can illustrate by evoking it.

In the process Taylor and Ladkin call illustration of essence, we once again find the art experience primarily used as a tool to think *with*.

5.2.5 Making

The fourth and last process Taylor and Ladkin (2009) identify in the literature on art-based methods in management education they call "making". Taylor and Ladkin describe this process in the following way:

> Making is concerned with the deep work that goes on "as the artist creates the work, the work creates the artist" (Richards 1995: 9, 81, 119). The product of that work is of little importance. An example of this is Buddhist monks who spend weeks carefully creating a beautiful sand mandala and then pour it into the River Thames soon after its completion. (Taylor and Ladkin 2009, 61)

Making is the least explored of the four processes mentioned by Taylor and Ladkin (2009). However, two related themes stand out in Taylor and Ladkin's discussion of the making process. First, the process of making brings a sense of deep personal integration and a sense that the process *creates* the artist. Second, by mentioning the Buddhist practice of creating sand mandalas, they allude to a kinship between the making process and spiritual practices.

Using the concept of sensory templates can shed light on how engaging with art creation for its own sake can bring a sense of personal integration and wholeness, and can be likened to spiritual practices.

As we have seen above, the use of sensory templates is closely related to purposes. We use sensory templates because they enable and support particular kinds of actions through which we can fulfill various purposes. Therefore, when we do something for its own sake, that is, without any particular purpose in mind, we will activate fewer sensory templates. When acting without a purpose, we do not have to use sensory templates to organize our experience in ways that support us in reaching this purpose. In other words, we interfere less with our experience. We will not see our present situations as analogous to grabbing something pleasurable or to pushing away or avoiding something painful. Thus, we will not add sensations of grabbing or pushing to

our immediate experience. We will not see any aspects of our present situations as analogous to physical obstacles preventing us from reaching a desired object or to straightjackets or ropes or walls preventing us from reaching out for what we want. Thus, we will not add sensorimotor states related to overcoming obstacles or being blocked in our movement to our experience. We will also not see any aspects of our present experience as analogous to physical means, such as hooks or levers or nets, we can use to hook someone or to gain leverage or to catch something in. Thus, we will not add sensorimotor states related to hooking, leveraging, or catching in nets and dragging to our experience. Or experience will be just what it is, pure, fresh, and simple, with much fewer additions stemming from our acts of comprehension and preparation for purposeful action.

When we activate fewer sensory templates, there is less structuring, framing, shaping, and limiting of our perception. We may feel this as states of prolonged concentration and single-mindedness, openness, unbounded sensory awareness, increased receptivity, wholeness and integration, feeling relaxed with not knowing, spontaneous action, feeling connected to everything one perceives, and acting without attachment to the fruits of one's actions. These are all states similar to those produced by spiritual practices.

During the process of art creation, the artist can experience a deep and prolonged concentration and single-minded focus. With no worries about fulfilling a purpose, the artist can engage wholeheartedly in the process without splitting off part of the attention to use as a means of monitoring the progress toward a given purpose. This state is rare in everyday life and in particular in the fast-paced organizational environments where everything is done with a purpose. When we operate with a purpose in mind, we focus our attention on the parts of our experience we need to be aware of in order to fulfill this purpose. We limit our attention to subsets of experience that are relevant to our purpose. Everything else is ignored. This phenomenon is sometimes referred to as inattentional blindness (Mack and Rock 1998). Working without a purpose can open the artist's awareness up to the fullness and richness of the sensory qualities of the artistic material. This state of unbounded sensory awareness is also rare and is sometimes felt as a radical wakefulness. This wakefulness and openness

to sensory experience is part of a general increased receptivity. If there is nowhere to go, then nothing is in the way. If nothing is in the way, nothing needs to be rejected or changed—everything can be received as it is. This increased receptivity includes our own (and others') emotions. As mentioned earlier in this chapter, Stephen Fineman (2000, 2008) has argued that social practices shape discourses in which certain emotions are encouraged and others are silenced. In such discourses, the emotions that are silenced are generally seen as obstacles to fulfilling certain purposes. For example, in Chap. 4 we saw examples of managers trying to silence their anger because they perceived their anger as an obstacle to purposes such as being likable, resolving conflicts, or appearing professional. When we remove such purposes, that is, when we do not need to be liked by certain people, resolve any conflicts, or appear professional, we no longer have a reason to reject (or shackle) the emotion of anger. Having no reason to reject the emotion, we become more receptive toward it. Similar cases can be made for joy, sadness, hate, and other inner states such as wishes, desires, and needs. Lessening the self-rejection brings a sense of integration and increased wholeness, as we are no longer split between the fact of the inner state and the conditions we believe we need to fulfill to reach a given purpose.

When engaged in art creation without a purpose beyond this engagement, we do not only become more receptive toward anything that may arise in ourselves and our environment; we can also be profoundly relaxed—even if we do not know what will happen next. Knowing where we are heading is only useful if we need to adjust our course in the pursuit of a particular destination. When one acts without a destination in mind, then any direction will do and it is not necessary to know in advance where one is heading. Furthermore, there is no reason to act in a premeditated manner, since any action will do. This gives a spontaneous quality to our actions. Through engaging with art creation in this way, the artist may notice how pliable experience is. For example, how experience shifts with the medium of representation. How it contains depths that are unknown to the artist's everyday conscious experience. How categories such as good and bad and ugly and beautiful lose their relevance when the artist dives into the purely sensorimotor play of the art creation process. Feeling

how the perceived world shifts as a result of how we look at it can make us experientially aware of how profoundly we are linked with everything we perceive through our acts of comprehension. The artist who engages wholeheartedly in art creation can experience action that is a goal in itself. Immersion in such experiences is also found in many spiritual practices, and indeed several spiritual traditions use art creation as a spiritual practice precisely because it brings about these experiences. An example of a spiritual practice that emphasizes action as a goal in itself is karma yoga, in which action is performed without attachment to the fruits of this action (Gandhi 2011).

The most profound aspect of the making process is the experience that when we set aside all sensory templates related to achieving a purpose, we can feel an inner state that is deeply healing to be aware of. Our state, before any planning or deliberation, the naked experience before it gets littered with added sensorimotor states through our acts of comprehension, is a state of profound wholeness, wakefulness, kindness, and bliss. I will return to this in the following chapters.

Once the individual becomes familiar with these states of concentration, single-mindedness, openness, unbounded sensory awareness, increased receptivity, wholeness and integration, feeling relaxed with not knowing, spontaneous action, feeling connected to everything one perceives, and acting without attachment to the fruits of one's actions, these states can in turn be used to create new sensory templates. These sensory templates will enable and support radically different ways of approaching managerial work.

Thus, the process of making relates back to the discussion about art-based methods as a way of learning meta-skills. In this discussion, we looked at managers learning to collaborate from the states they experienced while participating in theater improvisation exercises. We talked about managers learning negative capabilities, that is, the ability to be relaxed and comfortable with ambiguity and not knowing, by creating art objects representing ambiguous organizational phenomena. We talked about managers learning more nuanced ways of leading and following from the process of practicing various forms of couples dance. We talked about how leaders participating in the art-based program at Karolinska Institutet became better able to deal with stress, more socially supportive, and more willing to take responsibility. It is interesting to note that in this program after watching a

performance, managers were asked: What is on your mind? This question does not evoke any particular *purpose*. They were not asked questions which imply purposeful action such as: What can this performance tell you about good/bad leadership? or How can you relate this to your work life? Asking managers to engage with existing works of art is often related to the process Taylor and Ladkin (2009) call illustration of essence. However, because the managers at the program at Karolinska Institutet worked with an open question without any overt purpose, the resulting process was closer to that of making—even if the managers did not produce any art themselves.

Of course, asking managers to create poems or paintings or improvised theater and so on without any purpose beyond this activity itself will not guarantee that they will have the kind of experiences mentioned above. Some managers will simply feel they are wasting time they could have used to answer their mail or do something else which they deem more productive. In other words, they will perceive the making process as an obstacle to other purposes. Similarly, if managers understand the logic of what is described here, they may engage in art creation with the purpose of achieving particular states. They will understand such states in terms of a desired object and the making process as analogous to the net in which they will catch these states. *Trying* to get to a state where you are *not trying* to get anywhere fails at the outset.

It is possible to facilitate the setting aside of sensory templates by skillfully persuading or tricking or luring managers into setting aside or forgetting the purposes they usually work with. This can be useful at the beginning to catch managers' interest. However, to consistently facilitate the process of setting aside sensory templates and to teach managers to do so themselves, one has to answer the question: What sensory templates can be used to comprehend and support the act of setting aside sensory templates? Such sensory templates will logically have to eventually lead to the setting aside of themselves. This is a central theme in the remainder of this book.

5.2.6 Art-Based Methods as Methods for Working with Sensory Templates

In the above, we have discussed in depth the four processes Taylor and Ladkin have identified in the literature on art-based methods in management education from the perspective of sensory templates and the

embodied and metaphorical view of cognition. To sum up this discussion, we can say that art-based methods can be used to work with sensory templates in at least three different ways.

First, asking managers to create an art object representing their experience of an organizational issue (projective technique) can be used to reveal which sensory templates the managers are currently using to comprehend and engage with this issue.

Second, asking managers to pay attention to selected works of art created by professional artists can help them find new sensory templates they can use to comprehend and engage with organizational issues (illustration of essence).

Third, asking managers to immerse themselves in art creation for the sake of art creation itself can open the managers to experience profound states, which in turn can be used as new sensory templates enabling them to abide in not knowing, to be receptive and awake, better at dealing with stress, more responsible and socially supportive, and so on (making and more abstract forms of skill transfer).

5.3 A Word on Developing Theories of Art-Based Methods in Management Education

To round off the chapter, I will make a few brief observations about the development of theory in the area of art-based methods in management education. Looking at the theories used by scholars in the field of art-based methods in management education, one can roughly divide these into two categories.

The first major category of literature consists of the theories of management learning embedded in the broader field of learning theory. Scholars draw on theories of reflection (Argyris 1982), critical reflection (Reynolds 1998), reflexivity (Grisoni 2012; Sutherland and Ladkin 2013), or transformative learning (Grabov 1997; Mezirow 1991; Kerr and Lloyd 2008b), and to a lesser degree experiential learning (Kolb 1984; Kolb and Kolb 2008). These theories have roots in the cognitive revolution and are therefore primarily based on the symbolic view of cognition. Thus, embedded in these theories are the assumptions that the

cognitive processes of reflection, critical reflection, reflexivity and transformative learning operate through amodal symbolic representations similar to those found in a computer and that the sensorimotor experience is *data upon which we can reflect.*

The other major category of literature scholars in the field of art-based methods in management education draw upon is related to aesthetic philosophy. The field of art-based methods in management education can be seen as an offshoot from the field of organizational aesthetics, which was founded by scholars who argued that the aesthetic dimension is important to organizations (e.g., Gagliardi 1999; Strati 1999; Linstead and Höpfl 2000; Barry 1994; Guillet de Monthoux 2004; Taylor 2002; Warren 2002) and thus made philosophy of art and aesthetics relevant to organizational studies. These scholars have drawn on a wide range of aesthetic philosophers, such as Giambattista Vico, Alexander Gottlieb Baumgarten, Immanuel Kant, Friedrich Nietzsche, Arthur Schopenhauer, and Hans-Georg Gadamer, and on artists who have written about their philosophical ideas, such as Wassily Kandinsky and Joseph Beuys. Scholars in the field of art-based methods in management education have taken a particular interest in aesthetic philosophers who have connected art and learning. Most notable among these are Susanne Langer, John Dewey, Rudolf Arnheim, and Elliot Eisner. Even though the writing of these philosophers (except Eisner) preceded the development of what is now known as the embodied view of cognition, their ideas can be seen as grounded in such a view, and in many ways they can be seen as antecedents for the later developments in cognitive science. For example, Rudolf Arnheim evocatively writes that "perceptual and pictorial shapes are not only translations of thought products but the very flesh and blood of thinking itself" (Arnheim 1969, v). Thus, we find in the writing of these thinkers the idea that *sensorimotor states are the tools with which we think,* and not only the data we think about.

Thus, scholars working with art-based methods in management education are in effect working with two groups of theories which are grounded in two very different (and on some points mutually exclusive) views of cognition. This conflict mostly goes unnoticed (Springborg 2011, 2012, 2015). For this reason, it is no easy task to forge a coherent view of art-based methods from juxtaposing these two groups of theories.

One result of this unaddressed conflict is that key ideas from aesthetic philosophy are rephrased in the language of the various learning theories, downplayed, or simply left out. For example, as mentioned above, two of Susan Langer's ideas are frequently quoted in the literature on art-based methods in management education. The first is that works of art turn experience into objects and thus make it available for collective reflection. The second is that art-based media can capture aspects of experience which cannot easily be captured in language. Both of these claims are compatible with the symbolic view of cognition since they do not challenge the assumptions that sensorimotor experience only feeds information to the cognitive process. However, a proposition that is much more central to Langer's philosophy is the claim that what is created in the process of art creation are concepts (Langer 1951, 1953). This claim is almost never used in the literature on art-based methods in management education. The reason may well be that this proposition *does* challenge the symbolic view of cognition as it blurs the line between sensorimotor experience and cognitive processes.

Another result is the creation of unnecessary complexity. For example, one recurring theme in the literature on art-based methods in management education is the concept of sensory-based knowledge (Taylor and Hansen 2005), aesthetic knowledge (Strati 2003), or presentational knowing (Grisoni 2012; Seeley and Reason 2008). Such forms of knowledge are often seen as opposed to and different from cognitive or propositional knowledge. Antonio Strati writes:

> Aesthetic understanding, in fact, prompts considerations that question and undermine the exclusive reliance on cognition—on the rational and mental—by studies of social phenomena in organizational settings that take due account of our knowing in practice, as experienced and supported by the senses rather than just the way that we think. (Strati 2003, 53)

However, the idea that aesthetic knowledge is something different from propositional knowledge is an illusion created by the symbolic view of cognition. According to the embodied and metaphorical view of cognition, all propositions are grounded in sensorimotor states. Thus, there are not two different kinds of knowledge—only knowledge where we are

aware of the sensorimotor states in which we ground our propositions and knowledge where we are *not* aware of this. The rational and mental is always grounded in sensory templates. From this point of view, Strati's objection to researchers' exclusive reliance on cognition becomes an objection to researchers being unaware that they themselves may ground their propositions in different sensorimotor states than the people they study in organizations and that this lack of awareness makes researchers neglect the important task of making explicit the sensorimotor states in which organizational members ground their cognition.

Since there is mounting evidence for the embodied view of cognition, giving sensorimotor centers in the brain a central role in cognitive processes, it becomes increasingly important that future developments in the field of art-based methods in management education should be firmly grounded in the embodied view of cognition. The task begun in the present chapter is one of using Cognitive Metaphor Theory and theories of embodied cognition to reformulate and deepen theorizing in the field of art and aesthetics in organizations and in management education, so that such theorizing becomes fully compatible with the embodied and metaphorical view of cognition.

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6

Sensory Templates of Virtue and Vice: Management Spirituality and Religion

In recent years, management educators have looked to spiritual doctrines and practices to find ways of dealing with some of the more pervasive challenges in organizations, such as dealing with health issues and stress, protecting managers against internal corruptive forces when they come into positions of power, and dealing with the lack of a sense of meaning, purpose, and love felt by many managers and their subordinates today (Delbecq 2013, 2014, 2006; Allen and Williams 2016; Kernochan et al. 2007; Neal 1997; Dane 2011; Brendel and Bennett 2016; Jaworski 2011; Calás and Smircich 2003).

In this chapter, I propose that we can use spiritual doctrines and practices more efficiently in management education by understanding such doctrines and practices as means to effectuate particular changes in sensory templates. By knowing which sensory templates we aim at changing we can better direct our efforts and evaluate the results. This chapter is not intended as a full analysis of any particular religious tradition or of any particular usage of religious doctrines and practices in management education. The intention is to illustrate how the concept of sensory templates can be used to deepen one's understanding of religious doctrines and practices in a way which supports their use in management education.

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To argue this point, I look specifically at the use of doctrines of virtue and vice from the philosophy of Plato/Socrates, Aristotle, Christianity, and Tibetan Buddhism in management education. Delbecq (2006) argues that cultivation of virtue is important as a means of preventing the internal forces of human vices in the individual manager from leading to flawed strategic decisions detrimental to the organization, its environment, and the manager's own career. This leads to the question of how virtue can be cultivated. I argue that cultivation of virtue is not primarily a matter of adhering to a particular code of conduct, but rather a matter of adopting specific sensory templates from which virtuous acts follow spontaneously and without any effort. Drawing in particular on Tibetan Buddhism, I argue that fundamental to the cultivation of virtue is the change of sensory template from seeing phenomena as self-existing to seeing them as only existing in dependence on other phenomena. Furthermore, I argue that by teaching virtue without this change of sensory template one risks managers adopting the *appearance* of virtue while perpetuating vice in more hidden forms. I will describe the link between this change in sensory template and virtue in depth below.

I will write only about doctrines and practices with which I have some degree of personal experience. However, it is my hope that among the readers are those who will be inspired to engage in the analysis of other spiritual doctrines and practices as means of effectuating particular changes in sensory templates.

6.1 Spiritual Doctrines and Practices in Management Education

The growing interest in spirituality and religion in management and management education is evident in the foundation of the Management Spirituality and Religion (MSR) interest group within the yearly Academy of Management conference and the many academic journals that have published papers and special issues on management and spirituality, for example, *Journal of Management Education* (2005, 2006), *Journal of Organizational Change Management* (1999, 2002), *Leadership Quarterly* (2005), *Organization* (2003, 2004), *Journal of Social Economics* (1996,

1998), *Pfeiffer Annual of Training and Consulting* (2004), *Journal of Managerial Psychology* 9(2), and *Journal of Organizational Change Management* 7(1). In reflecting on the papers they received for their special issue on "Spirituality, Management, and Organization", published in *Organization* 10(2), Marta Calás and Linda Smircich wrote:

> What we found […] were some shared concerns regarding the limits of science as a mode of understanding, laments about the lack of meaning in work and a sense of lack of purpose in the workplace, and an interest in connecting work with love and social justice. Altogether, it appears that the 'spirituality and organization' discourse is conceived as a means to counteract self-interest at a time when all other messages seem to point in the opposite direction. (Calás and Smircich 2003)

Like art-based methods, spiritual doctrines and practices in management education have been used, directly or indirectly, in many ways and for many purposes. For example, short (60–90 seconds) sessions of focusing on breathing have been used to focus students' attention at the start of class (Crumleyn and Schutz 2010). Meditation, prayer, and other spiritual practices have been used to counter the negative impact on managers' health that can come from working in stressful, fast-paced, unpredictable, complex, and ambiguous environments. Seeing management as a vocational calling or a *service* (Greenleaf 1970) to customers, employees and other stakeholders or simply for the common good has been used to infuse business with a sense of meaning, value, and purpose beyond mere production of goods and services and accumulation of capital. Techniques for cultivating Christian virtues have been suggested as a way to protect leaders (and consequently their organizations) from the pitfalls of human vices and unethical behavior as these leaders rise to power (Delbecq 2000, 2016). The Buddhist concepts of compassion, mindfulness, and no-self have been suggested as practices that support the management teacher in delivering high-quality teaching (Kernochan et al. 2007). Mindfulness has been seen to support the development of a broad range of leadership competencies (Brendel and Bennett 2016). The Christian view of humans as simultaneously created in God's image and fallen from grace has been suggested as a more nuanced alternative to the two views of human nature

that managers according to McGregor generally use to guide their management efforts (Daniels et al. 2000). McGregor proposed that managers use either theory X or theory Y (McGregor 1960). Theory X assumes that humans (or at least the average employee) are lazy, unintelligent, and egocentric and only work to secure a steady income. This view leads to strict managerial control. By contrast, theory Y assumes that humans naturally enjoy improving themselves and enjoy responsibility. This view leads to a more hands-off kind of management. The Christian view of humans as both fallen and created in God's image combines these two views and leads to a management style where managers both trust the angelic aspects and control the devilish aspects of humans. William Isaacs' work at the Dialogue Project at MIT is based on the ideas of David Bohm and the spiritual teacher Jiddu Krishnamurti (Isaacs 1999). Similarly, the Native American medicine wheel (Cowan 2007), Jung's concept of synchronicity (Jaworski 2011) and archetypes (Moxnes and Moxnes 2016), and many other spiritual and religious doctrines have been used in various ways in management education.

It is not uncomplicated to take elements from traditions which aim at bringing about profound transformations in the way humans experience and relate to self, other, and life and use these elements for the purpose of creating better managers in organizations. Consequently, this is done with varying degrees of depth. Spirituality in management ranges from *substantial* leadership practices described by leaders such as Mahatma Gandhi, who was deeply grounded in spiritual traditions (Gandhi 2011), to *superficial* practices which are little more than management consultants using spiritual lingo to market their products. In this chapter, I argue that the depth depends on whether the adoption of religious doctrines and practices results in changes of the sensory templates managers use to comprehend and engage with the situations they encounter in their organizations.

In this chapter, I will focus on the use of practices for cultivating virtues in manager education. I have chosen to focus the chapter in this way for two reasons. First, this work is one of the more developed streams within the field of spirituality and religion in management education. Second, looking at these practices in some depth offers a good illustration

of how spiritual doctrines and practices more generally can be understood as methods for improving management practice by changing particular sensory templates.

Before I turn to the exploration of how to develop virtues in management education, it is useful to address two distinctions: the distinction between spirituality and religion and the distinction between doctrines and practices.

In the field of Management Spirituality and Religion, there is a debate around how to distinguish between spirituality and religion. I will not go into this debate here, but simply clarify that I will use the word "religion" to refer to the doctrines and practices of the major world religions Buddhism, Christianity, Hinduism, Islam, and Judaism. I will use the word "spirituality" to refer to doctrines and practices aimed at improving the spiritual life of humans, which has been developed through the process of distilling what individual teachers believed to be the essence of religious teachings and separating this from what they considered religious ceremonial epiphenomena. Sometimes this distilling is arrived at through comparison between religions or between religions, psychological theory, or non-religious philosophy, including scientific theories. Spiritual teaching can be found in the teaching of individuals who may or may not see themselves as part of a particular religion, such as Jiddu Krishnamurti, George Ivanovich Gurdjieff, Claudio Naranjo, Eckhart Tolle, Jon Kabat-Zinn, Ken Wilber, Byron Katie, Ram Dass, Alan Watts, Hameed Ali Almas, and Marianne Williamson. Whether it is possible to separate religious teaching from ceremonial practices without losing something essential is an important discussion, but one I will not go into here.

I will use the word "doctrine" to refer to specific beliefs or sets of beliefs. Examples of Christian doctrines include the belief that Jesus is God in the flesh and the belief in the existence of original sin. Similarly, the four noble truths and the doctrine of dependent origination are examples of Buddhist doctrines. I will use the word "practice" to refer to activities through which the doctrines can be understood, communicated to students, and adhered to. Contemplative prayer and confession are examples

of practices used in Christianity. Zazen (belly meditation) and visualization of various Buddha figures are examples of Buddhist practices (found in Zen Buddhism and Tibetan Buddhism, respectively). Doctrines are ideas one can believe. Practices are activities one can engage in to investigate those beliefs for oneself and activities which make sense to perform once one has accepted the beliefs. In the vocabulary of sensory templates, one can say that doctrines point to a particular way of organizing experience and practices are methods the student can use to adopt these ways of organizing experience or courses of actions following from this way of organizing experience.

6.2 Development of Virtue in Management Education

When hearing about the teaching of virtues as part of management education, managers may initially be skeptical. A manager may argue that virtues are nice and commendable, but that being bound by a moral code may be a competitive disadvantage which does not help managers manage profitable organizations. From this point of view, virtues may be seen as a luxury—a sort of moral high ground—that can be afforded only when things are going well in the organization.

However, there are strong arguments for why managers should care about the virtues described in religious traditions. André Delbecq was a scholar of complex decision-making at senior management level, the Eighth Dean of Fellows of the Academy of Management, and one of the pioneers in the Management Spirituality and Religion (MSR) movement. Delbecq points out that we often hear stories about leaders who are praised at the start of their career and who later get involved in scandalous behavior which damages the organization—and even threatens the world economy and peace (Delbecq 2016). Furthermore, he points out that empirical research shows that half the time strategic decisions fail it is due to such distorted behaviors of leaders (Nutt 2003). From this point of view, virtue is not a luxury that organizations can only afford when things are going well. From this point of view, virtue protects managers from succumbing to their inner corruptive forces and making

flawed strategic decisions which damage the organization, the organization's environment, and the manager's own career. In an interview Delbecq explained the situation as follows:

> … 50% to 70% of the time strategic decisions—the most important, the most complex decision challenges leaders face—fail largely not because of an absence of information or an absence of analytics. Rather, it is a lack of psychological maturity on the part of the people engaged in the decision-making. There are dark variables like venality, greed, and hubris, but a lot of the failure is much more innocent. It's impatience and unwillingness to explore all the dimensions of the problem; insufficient ability to be sensitive to alternative or nonconfirming voices. Therefore, psychological, and in my view, spiritual maturity are required when you deal with those decisions that are most significant to the calling of the senior leader. At the senior level, decisions aren't "expert decisions" where you connect means and ends within a complex but predictable paradigm. The problems that come to the senior leader are the ones that seem unsolvable, covered with emotional and political intrigue, having greater uncertainty, and that require a discovery process. You have to discover the nature of the problem, you have to discover the elements of the solution, and you have to involve a variety of stakeholders holding disparate points of view while doing so. It requires a patient, sensitive process of deep listening, and the willingness to involve all of the stakeholders. You can't do that if you're anxious, fearful, self-centered, impetuous, authoritarian; so if you're a moral dwarf, it's unlikely you are going to be a successful senior executive. Spiritual maturity makes a difference. (Allen and Williams 2016, 4)

Delbecq (2016) writes that the two main vices leaders at all levels are tempted by and which can lead them to make poor strategic decisions are hubris and greed. Drawing on the Christian tradition, Delbecq suggests that such vices can be countered by the cultivation of corresponding virtues and that in doing so leaders can avoid the detrimental impact of their vices on the organization and on their own career. He exemplifies this by looking at hubris. He sees hubris as composed of arrogance and dominance, which can be countered by the cultivation of humility and love.

Arrogance is a self-aggrandizing vanity and pride which is often supported structurally in the organization by the privileges afforded to the

leader and by the fact that successful leaders are often gifted with visionary thinking, eloquence, quickness of intellect, and courage in action. Being praised for their personal gifts, experiencing organizational success, and being given special privileges can nurture the seeds of arrogance in the leader. As a result, leaders can become less receptive to criticism, start blaming external circumstances for unfavorable results and failures, and become more impatient. They may rationalize their increased impatience by referring to the need for getting things done. Arrogance can be countered by the cultivation of humility. The core of humility is the acknowledgement of the imperfect nature of one's own views, ideas, and action plans. It is not self-debasement or self-devaluation. It is also not being uncritical of others' ideas and going along with everybody else's whims. In practice, it is just the offering of ideas in a tentative way and the willingness to change one's own view when it can be improved or when it simply is wrong. It is focusing one's attention on bringing about good results together with others without being worried about how others may see and evaluate oneself and one's particular contributions. The virtue of humility is sometimes aptly summed up by stating that humility is not thinking less of oneself, but thinking of oneself less. When managers cultivate humility, it brings a climate of openness and inclusion to the organization which is highly motivating for employees.

Dominance is the use of power that is motivated by impatience with the consensus building process. The development of dominance is supported in that management groups often consist of like-minded individuals, and within such groups it is easy to develop the notion that failures in implementation are due to subordinates' laziness, incompliance, or simply their stupidity. Dominance leads to leaders getting out of touch with what is going on in the organization and a false sense of confidence and invulnerability, a sense of over-entitlement, lack of empathy, and protection of self-interests over the interests of the organization and lower level employees. The virtue that can counter dominance is love. In brief, cultivating the virtue of love will make the leader's vision a vision of service, and it will make the leader see the strengths and gifts each employee brings to the organization and use these, rather than wishing the employees were different.

In short, Delbecq suggests that when managers cultivate virtue, they will acquire the patience needed to develop good and well-informed strategic decisions that are more likely to lead to organizational (and personal) success. Virtue is not about giving up anything of real value. It is about cultivating patterns of thinking, feeling, and acting which lead to human flourishing instead of harboring patterns which lead to sub-optimal functioning—or simply to dysfunction.

6.3 Virtues and Vices in Greek Philosophy, Christianity, and Buddhism

Delbecq argues convincingly for the usefulness of cultivating virtues as a way of protecting managers from making flawed strategic decisions under the influence of vices such as hubris and greed. But how can virtues be cultivated in practice? To answer this question, I begin by providing a brief overview of a few key ideas about vice and virtue found in Greek philosophy, Christianity, and Buddhism. I then argue that cultivation of virtue is not merely a matter of adhering to a particular code of conduct, but is better understood as the adaptation of specific sensory templates from which virtuous acts follow spontaneously and without any effort.

The idea that certain vices can be countered by cultivating certain virtues is found in many traditions.

Plato's Socrates described the four virtues of wisdom, courage, moderation, and justice (sometimes referred to as prudence, fortitude, temperance, and justice) (Plato 2000). He saw the cultivation of these virtues as the ultimate good which protects the integrity of the soul. Aristotle created a list of eleven virtues. He related each virtue to a particular domain of life and defined them as a middle way between two vices relating to that same domain. For example, the virtue of courage is a way of relating to the domain of confidence and fear, which can be found as a middle way between two non-virtuous ways of relating to confidence and fear, namely recklessness (too confident) and cowardice (too fearful). Similarly, in the domain of pleasure and pain, self-control is the virtuous middle way between the vices of insensibility and self-indulgence; in the domain of wealth, generosity is found between stinginess and extravagance; in relation to anger, gentleness is found between

Table 6.1 Aristotle's virtues as the golden means between two corresponding vices

Domain	Vice (too little)	Virtue (just right)	Vice (too much)
Fear and confidence	Cowardice	Courage	Recklessness
Pleasure and pain	Insensibility	Self-control	Self-indulgence
Small wealth	Stinginess	Generosity	Extravagance
Large wealth	Niggardliness	Magnificence	Gaudiness
Honor and dishonor	Small-mindedness	High-mindedness	Vanity
Anger	Apathy	Gentleness	Short temper
Truth about oneself	Self-depreciation	Truthfulness	Boastfulness
Pleasantness, amusement	Boorishness	Wittiness	Buffoonery
Pleasantness, daily life	Grouchiness	Friendliness	Flattery
Sense of shame	Shamelessness	Modesty	Self-debasement
Pleasure and pain at fortunes of others	Spite	Righteous indignation	Envy

apathy and short temper; in relation to shame, modesty is found between shamelessness and self-debasement; and so on (see Table 6.1). Christian philosophers, drawing on the Bible and on Greek philosophy, developed several lists of virtues and vices. Famous among these is Pope Gregory's (540–604 AD) seven deadly sins (gluttony, lust, greed, pride, anger, sloth, and envy) and seven heavenly virtues. For the latter, Gregory combined the four cardinal (or human) virtues from Greek philosophy (prudence, fortitude, temperance, and justice) with the three theological virtues from the Bible (faith, hope, and love). Another list of virtues, the so-called contrary virtues, was described in the epic poem *Psychomachia—The War Of The Soul: or, The Battle Of The Virtues, And Vices* written by Aurelius Prudentius Clemens (348–405 AD) (Prudentius 1743). According to this text, each deadly sin can be countered by a specific virtue: abstinence against gluttony, chastity against lust, liberality against greed, humility against pride, patience against anger, diligence against sloth, and kindness against envy. In Buddhism, we find the same basic idea that human beings naturally have flaws which cause suffering. The Sanskrit word used to refer to such flaws is "kleshas". This word has been translated as afflictions, defilements, negative emotions, mind poisons, or vices. As with the Christian vices, there are different lists of kleshas, but three central kleshas are commonly recognized: moha (ignorance, delusion, or confusion), raga (greed, attachment, or desire), and dvesha (hatred, aversion, or ill will). As in the philosophy of Aristotle

and in Christianity, Buddhists operate with qualities which each can oppose a specific klesha: prajna or jnana (wisdom, insight, discriminating knowledge) opposes moha (ignorance); dana (generosity) opposes raga (greed); and metta (loving-kindness, friendliness, benevolence) opposes dvesha (hatred).

Another widespread idea is that cultivation of virtue brings profound happiness, the ability to be happy about behaving in morally good ways, and the experience of and participation in the divine. Thus, cultivation of virtue is simultaneously beneficial for the individual and the individual's community.

Socrates argues that cultivation of virtue is the only possible means of achieving happiness and well-being (translations of the Greek word "eudemonia") and that happiness and well-being cannot be obtained through, for example, acquisition of honors or pleasures (see, e.g., *Apology*). Aristotle emphasizes that cultivation of virtue enables the individual not merely to achieve happiness but to *act* in appropriate and good ways. In Christianity, it is held that cultivation of virtue "make possible ease, self-mastery, and joy in leading a morally good life" (Catechism of the Catholic Church 1995, 1804) and "adapt man's faculties for participation in the divine nature" (CCC 1995, 1812). In Buddhism, the vices trap the individual to wander in circles (samsara) of perpetual suffering, dissatisfaction, and frustration (dukkha). Cultivation of the virtues enables the individual to escape this state of affairs—much like the change of sensory template allowed the managers in the research to escape from various frustrating situations in which certain courses of action seemed like the right thing to do yet never brought the desired results.

Even though the different wisdom traditions enumerate *several* virtues, they generally see these virtues as different manifestations of one thing, rather than separate and independent.

Socrates argued that all virtues are one (see *Protagoras*) and that all virtues are a form of wisdom or knowledge (*Meno* 87e–89a and *Euthydemus* 278d–282a). He gave several arguments for the oneness of all virtues. For example, he pointed out the impossibility of being wise and not temperate since both wisdom and temperance have the same opposite: folly. In another argument, he began by establishing that health, beauty, reputation, and wealth can be either beneficial or harmful depending on whether they are used wisely. He proceeded by saying that likewise temperance, justice, and courage also

need to be used with wisdom to be beneficial and thus virtuous. Therefore, all virtue is wisdom. Referring to things that are usually thought of as good, including virtues, Socrates argued:

> …the discussion they demand is not on the question of how they are in themselves and by nature goods, but rather, I conceive, as follows: if they are guided by ignorance, they are greater evils than their opposites, according as they are more capable of ministering to their evil guide; whereas if understanding and wisdom guide them, they are greater goods; but in themselves neither sort is of any worth … Now what result do we get from our statements? Is it not precisely that, of all the other things, not one is either good or bad, but of these two, wisdom is good and ignorance bad? (*Euthydemus* 281d–281e)

Aristotle adds to this by stating that virtue is not merely *knowing* how to use things but also acting upon this knowledge. Thus, he prefers to speak about *practical wisdom* rather than simply wisdom. He agrees that virtue is a kind of knowledge, but sees this knowledge as a form of practical shrewdness. In Christianity, the cardinal virtues are seen as rooted in the theological virtues (CCC, 1995, 1812) and among the theological virtues love is the primary. In the gospel of Mathew, Jesus sums up the teaching by stating:

> Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind. This is the first and great commandment. And the second [is] like unto it, Thou shalt love thy neighbour as thyself. On these two commandments hang all the law and the prophets. (Matthew, 22:37–40)

In Buddhism, all vices spring from ignorance and therefore all virtue springs from insight. This is similar to Socrates' view, but Buddhism emphasizes that such insight is not a purely intellectual insight, but experiential insight. In particular, according to Buddhism, virtue comes from the direct *experience* of the true nature of phenomena and reality—not merely from being convinced by good arguments. In fact, many Buddhist teachers encourage their students not to believe what they say but to take it

as a starting point for their own thorough investigations, so the students may find out for themselves by letting the investigations take them to the direct experience.

Thus, in spite of their individual differences, the philosophy found in Socrates, Aristotle, Christianity, and Buddhism holds that cultivation of virtue is necessary to counter vices and thus achieve not merely a morally good life but also a content and happy life. Furthermore, these traditions all describe virtue as *one* even though Socrates and Buddhism emphasize its wisdom, Christianity its loving nature, and Aristotle its impact on action.

6.4 Virtue Is Not a Code of Conduct but a Change of Sensory Template

Cultivation of virtue is sometimes understood as a matter of adhering to a particular code of conduct which is considered ethically good. That is, cultivation of virtue is understood as consciously striving to be humble, generous, patient, diligent, and so on, in spite of one's impulses for the opposite. However, in this section, I argue that such a conception of the cultivation of virtue is problematic and not entirely in line with the traditions mentioned above. If we think about cultivation of virtue merely as a matter of adhering to a particular code of conduct and controlling our impulses for vice, we risk our efforts to cultivate virtue becoming a constant struggle and, more importantly, we risk only achieving the *appearance* of virtue while, in reality, we are perpetuating our vices in more subtle forms imperceptible to ourselves. As an alternative, I propose that we understand cultivation of virtue as a matter of changing the place from which we act—that is, changing the sensory templates through which we comprehend and engage with various situations. As we saw in Chap. 4, operating from different sensory templates can make managers *prefer* different courses of action. Therefore, cultivation of virtue can be conceptualized as the adaptation of specific sensory templates from which virtuous acts follow spontaneously and without any effort.

Several of the cases described in Chap. 4 showed that shifts in the sensory templates managers used to comprehend a problematic situation *automatically* changed the managers' behavior so it became more virtuous (more patient, more compassionate, more humble, etc.). Had we asked the managers to act in these new ways without changing the sensory template they used to comprehend the situation, these new ways of acting might have seemed silly, unnecessary, or even counterproductive or harmful to them and they would most likely have resented having to act in such ways. For example, Catharine changed from seeing people like water, which is easily moved, to seeing people like a viscous mass that took time to move. As a result, she began patiently and calmly to engage larger parts of the organization in applying pressure on a certain business unit. If Catharine had maintained her view that (intelligent) people should change their behavior immediately (be moved easily) by the results of the scientific tests, she would have found the task of engaging larger parts of the organization in working on the managers in the business units an unnecessary waste of her time and resented having to do it. However, once Catharine understood the inertia of the managers in the business unit as a natural aspect of human nature, it made sense for her to have patience and to include others in the process. She could see the validity of the values the managers of the business unit were fighting (and even admired these values) and did not blame them for their unwillingness to give these up just because of the test results. In short, when Catharine changed the sensory template she used to comprehend humans, her preferred course of action effortlessly changed.

More importantly, even though the research process focused on finding solutions to managerial problems and not on making the managers more virtuous people, the resulting change in behavior was from acting with anger and blame (a vice) to acting with a relaxed, unforced patience (a virtue). She was still firm and did not allow the business unit to do what they wanted, but she was also not angry with them for trying. Thus, by changing a sensory template, Catharine unknowingly and without any effort became more virtuous. If Catharine had been asked (or forced) to act in more patient ways without changing the sensory template through which she understood the situation, she would likely have acted with anger against this suggestion. In fact, as mentioned in the descrip-

tion of the case in Chap. 4, the company's policy was to encourage collaboration by making this part of the managers' performance measurement. This can be seen as an attempt at enforcing virtuous action. Before the research, Catharine was angry at this policy and saw it as impeding her work and as something she needed to do for appearance's sake. After the change in sensory template, she was no longer angry about this policy and no longer felt it impeded her work.

A similar transformation from anger to patience occurred in the case of Frank, who after the process went to his colleague's office to engage in a non-judgmental and open dialogue about why this colleague had broken an agreement. It is unlikely that the colleague would have responded by admitting that he was at fault and reestablishing the agreement if Frank had acted from an inner state of anger. If Frank had not changed the sensory template through which he perceived his colleague, he might still have engaged his colleague in dialogue, but it would have been with the intention of manipulating him and convincing him that he was wrong, and it is likely that his colleague would have resisted this attempt at manipulation—even if it had been presented in a very "civilized" and "virtuous" way. What allowed Frank to act with the virtue of patience was the change of the sensory template he used to understand his colleague and the nature of dialogue. Yet another example was Gary, who decided to organize weekly meetings with his unstable but brilliant programmer as a way to offer him the acknowledgement and appreciation he needed to work in a focused way. Gary also changed from a form of anger to patience. If he had not changed the sensory template he uses to understand "communication", he would have resented this arrangement and seen it as unnecessary. With such resentment, it would have been difficult to hold meetings where the employee felt that he received the acknowledgment and appreciation he needed to focus.

It is worth noting that even though Catharine initially felt justified in her anger, and therefore expressed it freely through blaming, she knew that it wasn't really helpful in the situation. However, the sensory template she used to organize her experience produced anger and made her feel in the right about being angry. In contrast, both Frank and Gary felt their anger was not fully justified, and therefore they tried to hide or control it. However, trying to hide or control the anger only created inner conflict in Frank and Gary. They

saw anger as something bad that should be diminished, but at the same time, the sensory template they used to organize their experience produced anger. The actions that flowed from this inner state of conflict may on the surface appear civilized, but they are nothing more than rationalized and cool expressions of anger. For example, before the workshop, Frank and Gary might argue their views in a calm and composed way, but without listening to or respecting the other person's views or emotions. They might put in an effort to meet the colleague or the employee because they have learned that this is a good thing to do, but at the same time find it tedious to have to do this. They may think: Why is this necessary? Why can't they just do their job? Why can they not see what is needed in the organization and do it? And they may feel superior to their troublesome colleagues and employees because they themselves appear to be more rational and magnanimous. All of these thoughts and feelings are civilized expressions of the anger produced by the use of particular sensory templates. Such examples show how even if the managers knew that their anger was unhelpful, even if they did not feel justified in their anger, any attempts at embracing the virtue of patience would most likely fail—unless they changed the sensory template they used to comprehend the situation. Inversely, the cases show that when the managers *did* change the sensory template, the virtue of patience was not something they had to force themselves to be, but something that came spontaneously and effortlessly.

In general, if we ask (or force, encourage, push, entice, persuade, etc.) managers to engage in virtuous behavior because it is virtuous, conducive to the larger good, admirable, or for any other reason, without addressing the underlying sensory templates which underpin their current non-virtuous behavior, we are in effect asking these managers to do something that does not make sense for them to do. We are asking them to do something that appears to be silly, unnecessary, counterproductive, or harmful given the way they at present comprehend the situation. It can, for example, appear as if we are asking them to give up something which is valuable to the organization or pleasurable, or beneficial to them personally, for some metaphysical cause of no practical value.

If they trust our authority and knowledge on the matter, they might change their behavior and this may, if we are very lucky, lead to a corresponding shift in sensory templates. But it is equally, if not more, likely that managers will reject the proposition altogether stating that it is lovely to be nice to each other but that this is not possible in the competitive world of scarce resources they operate in, or, if the social pressure to act virtuously is strong, the managers may find ways of *appearing* as if they perform the virtuous acts to gain social approval, while secretly, or even unconsciously, sticking to the non-virtuous agendas. In other words, they may engage in deceit and image management—the vice of vanity. This explains why managers generally espouse the virtuous model II while (unconsciously) operating from model I. In the following quote, Fineman illustrates well how managers have used the virtuous ideals and language of humanistic psychology without changing the fundamental sensory templates of control and manipulation:

> …in recent years, control in many organizations has shifted from being overtly coercive to diffuse. It now aims to engage employees' energy and commitment through empowerment—flattening organizational hierarchies and pushing responsibility downwards. Significantly, it promises a happier employee. At first blush this appears appealing and liberating. Who would not want to be empowered, especially when it is presented as a way of increasing one's pleasure at work? Critical researchers, though, are skeptical. They point to the paradox of management using its own power to "empower" others—but usually on management's terms. Beneath empowerment's humanistic trappings, one can see a subtle form of control aimed at getting more performance from workers, often for relatively less reward, leading one writer to describe empowerment as a "therapeutic fiction". And, indeed, against the success stories of empowerment reported in the popular management literature, there is a growing body of evidence on failures. Far from raising employee happiness, this research reveals increasing levels of cynicism and resistance. (Fineman 2008, 4)

If managers adopt the ideals and language of humanistic philosophy without adopting sensory templates from which these ideals make sense, their words will refer to the same old management of employees as

analogous to the physical manipulation (i.e., pushing and pulling). Managers can speak about “empowering”, “motivating”, “coaching”, and so on and all of these words can be grounded in the same basic sensorimotor experience of pushing objects toward desired destinations, which more truthfully can be referred to as “forcing”, “coercing”, “manipulating”, and so on. To avoid similar situations when teaching virtues based in spiritual doctrines, it is therefore important to contemplate which sensory templates underlie these spiritual doctrines and to address the need for change of sensory templates directly.

Teachers of virtue in the various wisdom traditions have been keenly aware of the risk that simply telling people to be generous, humble, patient, diligent, kind, abstinent, and loving without addressing the inner state from which such virtuous actions flow can lead people to take up the *appearance* of virtue, in language and public actions, without this resulting in any real transformation from vice to virtue.

Aristotle points out that the same concrete action may be virtuous in one situation but not in another. For example, a courageous act is somewhere between cowardice and recklessness, but where to draw the lines between these three kinds of action varies from situation to situation. He proceeds to argue that the only way we can know which acts are virtuous in a given situation is by developing *practical wisdom*. He further proposes that the way to develop practical wisdom is to emulate individuals we know to be virtuous. Thus, for Aristotle virtue resides in this practical wisdom and not in the concrete actions themselves. In the words of this book, practical wisdom can be seen as a matter of adopting sensory templates which allow efficient action, and these can be learned through social learning, that is, by observing someone who already operates from these sensory templates.

In Christianity, we also find the notion that the inner motivation for performing virtuous actions is key and that actions performed for the wrong reasons will generate no merit. For example, a vain or proud person may perform acts of generosity, patience, or abstinence, but because the vain or proud person performs these acts (at least in part) in order to impress others, the resulting acts will merely be a thinly veiled expression of the vices of vanity and pride, rather than actual virtue. This is addressed in the gospel of Matthew:

> Be careful not to practice your righteousness in front of others to be seen by them. If you do, you will have no reward from your Father in heaven. So when you give to the needy, do not announce it with trumpets, as the hypocrites do in the synagogues and on the streets, to be honored by others. Truly I tell you, they have received their reward in full. But when you give to the needy, do not let your left hand know what your right hand is doing, so that your giving may be in secret. Then your Father, who sees what is done in secret, will reward you. And when you pray, do not be like the hypocrites, for they love to pray standing in the synagogues and on the street corners to be seen by others. Truly I tell you, they have received their reward in full. But when you pray, go into your room, close the door and pray to your Father, who is unseen. Then your Father, who sees what is done in secret, will reward you. (Matthew 6:1–6)

When it comes to virtue, it is not merely the concrete acts that matter, but also the place of love from which the acts flow. Engaging in virtuous acts is not only an end but also a means of finding the inner state of love from which these acts make sense and from which one is happy to fulfill them without receiving any reward in terms of recognition. Once this state of love is found, virtuous acts flow spontaneously and effortlessly. Then adhering to a code of conduct is no longer necessary. Too much emphasis on performing the right acts can easily distract the individual from finding the inner state that is the true reward of their practice and from which the practice flows effortlessly. Where Aristotle called the inner state practical wisdom, the Christian tradition tells us that the inner state we are looking for is love. This does not tell us about what change of sensory template we are looking for, but it gives us a test—if we adopt a sensory template and it does not bring about a state of love, it is not the sensory template we are looking for.

In Plato's masterpiece *The Republic*, Socrates investigates through a number of dialogues the virtue of justice. In one of these, Glaucon (one of Plato's half-brothers) challenges Socrates to show that justice is something we would do well to seek for its own sake and not because of any benefits or rewards we receive for appearing just. He begins by proposing that there are things that we value for their own sake and not because they produce any results, like simple pleasures, things that we value both for their own sake and for their consequences, like sight and good health,

and things we value only for their consequences which we would not have for their own sake as they are unpleasant, like physical exercise, an unpleasant medical cure for a disease, and working to earn a living. When he asks Socrates in which category he would place justice, Socrates places it in the second category. Glaucon then claims that most men would place justice in the last category, that is, something that "we should cultivate in return for payment and reputation on account of public opinion, but which purely for itself is to be avoided like the plague" (Plato 2000, 38).

Glaucon's challenge to Socrates is of crucial importance for teaching virtue in management education since many managers would agree with Glaucon. On the one hand, appearing virtuous in the eyes of the public brings important rewards. On the other, not having to adhere to virtuous codes of conduct also brings rewards. If the organization earns a public reputation as highly ethical, they may get bigger market shares and charge more for their products. If the organization earns a reputation for unethical behavior, their customers may boycott them. Organizations may, for example, gain a reputation for high ethics through having a matching gifts program, like General Motors and Apple, where the organization matches any donation, within a certain range, any of their employees gives to selected charities. Other organizations, like Fairphone, gain a reputation for being ethical by making their supply chain transparent and producing their products with minimal harm to people and the environment. Such initiatives may come out of real virtue, but as we have seen above, they can also come out of vice. If an organization can keep their unethical conduct secret and still gain a reputation for being ethical, they can gain both the rewards of positive public opinion and the freedom to engage in unethical behavior when it is profitable to do so. Furthermore, if these initiatives are motivated because it is good business to be recognized as virtuous by society, it is not actually virtue—although they are still wonderful initiatives. Glaucon's question is whether there are reasons for virtuous behavior beyond the reward that such behavior may elicit from the public.

Glaucon proposes that Socrates should show that an unjust man who has the reputation of being just is worse off than a just man who has the reputation of being unjust. Showing this, he claims, would prove that

justice is desirable for its own sake and not merely for the rewards a *reputation* for being just may bring. He then delivers a speech in defense of the unjust life (which later would be of great inspiration to Thomas Hobbs (1651) in his formulation of social contract theory). Glaucon proposes that justice is simply an agreement people come to when they have both profited by doing wrong to others and suffered from others doing wrong to them and found that the pain of the latter outweighs the benefits of the former. Having experienced this, people create laws against doing wrong and call these laws justice. Based on this view, he then argues that an unjust man who has a magic ring of invisibility that enables him to do anything he likes and be sure to get away with it while preserving a reputation for being just must be happier than a just man who throughout life suffers the punishments of being seen as an unjust man by society. Referring back to Chap. 2, we may say that Glaucon sees the praise of justice as avoidance of the cognitive dissonance stemming from the discrepancy between our adherence to just laws and our desire to act unjustly.

Socrates takes up this challenge and delivers a fairly long argument in defense of justice. Socrates' argumentation is an argument by analogy in which he suggests that one can analyze what justice is in a city and then by analogy examine whether it is the same in an individual. The main thrust of his argument is that justice is the state of a system (either the city or the individual) where each element is performing its proper task in harmony with all other elements. In the individual, this is the state where wisdom rules both the spirited (emotional) and the appetitive (instinctual) parts of our soul and the individual acts as "a perfect unity of diverse elements, self-disciplined and in harmony with himself" (Plato 2000, 141). In other words, it is a state where impulses to do great things and impulses to seek pleasure are both guided by and not in conflict with reason. Defining justice in *this* manner shows that just actions are those which, guided by wisdom, generate and preserve this inner state of harmony. By contrast, unjust actions, guided by ignorance, are actions which bring about inner conflict and ruin the unity of the individual—regardless of whether the unjust action is punished by the external environment or not. Socrates concludes that the just man is happier than the unjust, because "when the body's natural constitution is ruined, life seems

not worth living, even with every variety of food and drink, and all manner of wealth and power" (Plato 2000, 143).

Socrates' defense of justice is in effect a change of the sensory template through which we can comprehend the virtue of justice (and any other virtue). This change in sensory template, in turn, changes what course of action the individual prefers. Glaucon models his comprehension of justice on the sensory template of two forces pulling us in two opposing directions—the forces being our desire to do injustice to others and our desire to be safe from injustice done to us by others. He sees justice as a rationalization of the compromise where we renounce the most desirable possibility of taking from others whatever seems good to us in order to receive the benefits of being sure others do not take from us what we would like to keep. In Chap. 4, we saw several examples of managers using this sensory template of finding a balance point between two opposing forces to comprehend various situations, and we saw how using this sensory template often leads to the creation of apparently impossible choices between two indispensable but mutually exclusive options. In Glaucon's case, the use of this sensory template makes the virtue of justice appear as nothing more than the desire for safety, and it makes it appear to be in opposition to following one's desire. Three courses of action are enabled and supported by this way of comprehending the situation. One can renounce one's desire and enjoy the safety of being protected by the law. One can renounce the benefits of being accepted by society and enjoy the freedom to follow one's desires untamed. One can keep immoral actions secret in an attempt at preserving the benefits of a virtuous reputation while simultaneously acquiring the benefits of following one's desire unhindered.

Socrates, on the other hand, defines justice as a state of internal unity and harmony and as actions which preserve this inner state. In this way, he shows that there is no real difference between being virtuous and following our desire, once we recognize that what we desire most is to be happy in a state of unity and harmony. Gaining wealth and power through actions that ruin our inner harmony is not desirable because rather than helping us, this prevents us from achieving the happiness we ultimately desire.

This argument builds on one of Socrates' fundamental beliefs, namely that all human desires are *ultimately* for good—never for evil. When people do bad things, they either lack the knowledge that it is bad or they (mistakenly) think it is a necessary means to get what is truly good (*Gorgias* and *Meno*). If we examine the cases in Chap. 4, we see that any

impulse to blame or attack employees or fellow managers does not arise from any inherently malignant part of the manager, but is part of frustrated attempts at reaching something good, such as the smooth operation of the organization and the well-being of self and others. Impulses to blame or attack employees or fellow managers are never an end in themselves. According to Socrates, we may see that all concrete desires are ultimately a desire to be happy, in the fullest sense of the word, combined with more or less informed ideas about the means through which such happiness can be reached. In the words of this book, all desire is desire for happiness plus the sensory templates through which we comprehend what happiness is and how we achieve it.

In Buddhism, ignorance is seen as the main vice from which other vices, such as greed and hatred, spring. In particular, it is ignorance about the way in which phenomena (including the phenomenon of self) exist that makes us inclined to either grasp (greed, attachment, desire) or push away (aversion, ill will) such phenomena. Thus, as in the philosophy of Socrates/Plato, it is ignorance that is at the root of the vices—rather than a desire to engage in vices for their own sake. However, Buddhism specifies that vice springs from a *mistaken ontological assumption*. Three doctrines in Buddhism describe the mistaken ontological assumption which is the root of vice and suffering. Though they may sound different at first, these doctrines are in fact synonymous. Buddhism states that our ignorance is that we see phenomena as permanent even though they are impermanent (the doctrine of impermanence), that we see phenomena as independently self-existing even though they only exist in relation to and dependence on other phenomena (the doctrine of dependent origination), and that we see phenomena as having a substance or essence of their own even though they are empty of inherent existence (the doctrine of emptiness). Most people will state that they *do* know that all phenomena are impermanent and eventually vanish. We know that all humans eventually die. We know that the Earth with everything on it will eventually be destroyed when the Sun starts burning helium instead of hydrogen and expands to a red giant swallowing the earth. And we know that the Sun itself will eventually burn out. From modern physics, we also know that even the smallest particle of matter can change into energy and thus stop existing as that particular particle of matter. Similarly, academics with an inclination toward social constructionism

will state that they *do* know that phenomena only exist in relation to other phenomena as social constructions. A chair is only a chair as long as it exists in a context where social convention defines and uses it as such. A handshake is only a form of greeting by social convention. However, according to Buddhism, such proclaimed knowledge is merely our espoused theories—not our theories-in-use. No matter what we *claim* to believe, we still *act* as if phenomena were permanent, existing independently, and had their own substance. Having this mistaken ontological assumption at the heart of our theories-in-use is, according to Buddhism, the root of all vice.

Before proceeding, it is worth mentioning that Buddhism is sometimes understood as stating that *nothing* exists. This is not so. Nagarjuna (150–250 AD), a highly influential Buddhist philosopher and often considered one of the founders of Mahayana Buddhism, proposed that the ontological view of Buddhism is a middle way between realism, where things are seen as existing in themselves, and nihilism, where nothing exists. Lama Yeshe writes succinctly about Nagarjuna's view of the empty nature of phenomena:

> Things do exist, but not in the concrete way we habitually suppose. The challenge of cultivating the correct view of emptiness is to refute completely all notions of independent self-existence without denying valid interdependent existence. (Lama Yeshe 1987, 66)

According to Buddhism, certain practices such as meditation or prayer can calm the vices, but the only thing that can permanently eradicate the vices (and thus bring virtue) is correcting our mistaken ontological view by gaining insight (prajna or jnana) into how phenomena truly exist. Such "insight" is not a matter of understanding or believing something upon hearing compelling arguments and explanations. Such "insight" refers to actually *experiencing* phenomena as impermanent, existing interdependently, and empty of inherent existence in one's everyday interaction with these phenomena. It is a transformation of one's lived experience. In other words, it is a change in our theories-in-use—not merely a change in our espoused theories.

Gaining insight into how all phenomena are empty of inherent existence, we also gain insight into the nature of the mind beyond phenomena. We come to experience the mind in which phenomena arise as analogous to empty space. Compared to the *content* of the mind, the mind *itself* is peaceful, clear, unmoved and untouched by any phenomenon it may contain at any given moment—just like physical space is untouched by the physical objects it contains at any given moment. Experiencing the true nature of the mind—before the emerging of any phenomena—leads to the realization that the core of who we are is an indestructible peace, love, happiness, and so on, and that while the content of our mind can *blind* us to this fact by distracting us, it can never *alter* it. Therefore, when we are aware of the true nature of our mind, virtue is not the result of conscious striving but emerges spontaneously and effortlessly.

> The deep, peaceful clarity of our essential mind is the nature of love. And in this calm atmosphere the disturbances of hatred and anger have no place. While absorbed in this deep state of awareness, there is no chance of a harmful thought to agitate us. It is not a question of consciously deciding to refrain from anger and behave virtuously; this loving, benevolent feeling arises spontaneously and effortlessly from the depth of our being. (Lama Yeshe 1987, 76)

In the above section, I have argued that cultivation of virtue is not simply a matter of adhering to a code of conduct and consciously putting in an effort to be generous, humble, patient, diligent, kind, abstinent, and loving and to control one's impulses for the opposite. While engaging in such acts does have a certain value, if one engages in these activities without any change in the state from which one acts, one risks reproducing vice in more hidden forms rather than cultivating virtue. Furthermore, I have argued that changes in sensory templates can bring about virtuous actions in a spontaneous and effortless way. Just like operating from different sensory templates made some of the managers in the research described in Chap. 4 prefer different courses of action, so operating from certain sensory templates brings a preference for vice, whereas operating from other

sensory templates brings a preference for virtue. In other words, changes in sensory templates can make individuals happy to act virtuously, rather than striving to do so due to social pressure and against their own inclinations. Finally, I have argued that Buddhism can be understood as stating that the change in sensory templates that brings a spontaneous and effortless preference for virtue is a change from seeing phenomena as permanent, self-existing, and possessing their own substance to seeing them as transient, dependently arising, and empty of inherent existence.

Thus, the question of how to cultivate virtue becomes a question of how to make the view of phenomena as impermanent, existing interdependently, and empty of inherent existence a basic sensory template upon which we found our theories-in-action. In the next chapter, I will describe a selection of practices that can help bring about this shift. However, it is useful to further clarify the link between the mistaken ontological view and vice and to make a few remarks on how it is possible to talk about sensory templates if nothing has inherent existence.

6.5 How Does Perceiving Phenomena as Self-Existing Lead to Vice?

To understand how perceiving phenomena as self-existing leads to vice, we must first understand how Buddhists see the true nature of human beings.

According to Buddhism, our true nature (and the true nature of everything) is primordial happiness, perfection, and bliss—not a state of lack. When our experience is undivided by any acts of comprehension, we feel happy, whole, peaceful, alive, blissful, lovable and loving, and so on. This experience has been called Nirvana, Moksha, and other names in different wisdom traditions and it has often been likened to space in that it is ever present, everything occurs within it, and we rarely notice it, because we are too focused on the things in the space instead of the space itself. In the following, I will call the totality of this experience "core space" and the individual aspects, such as happiness, wholeness, peacefulness, aliveness, etc. I will call "core states".

When we move into action, including acts of comprehension, we generally do so in ways that make us lose awareness of core space—just like we may lose awareness of physical space, when we focus our awareness on

interacting with another person, writing an article, or some other task for which awareness of space does not seem to be necessary. Core space never disappears, but when we move into action in a way that does not include it, we lose awareness of it while engaged in this action. To understand this, you can think about how your feet do not disappear while you are writing an email, but since you (probably) do not use your feet for writing the email, you will generally lose awareness of them while engaged in this task.

Momentarily losing awareness of one's feet while writing an email is not a significant problem, since we can always direct our awareness to them when we need to. However, because many of our acts of comprehension are more or less continuous, the loss of awareness of core space is more or less permanent. Even though core space is always present and available to us, we are continuously too busily engaged in various tasks to notice it. Even when we are not engaged in any external tasks, we are still engaged in inner tasks, such as planning, daydreaming, reproaching ourselves for something, or interpreting, thinking, or emoting, and we often engage in such activities in ways that make us lose awareness of core space. Furthermore, because many of these activities are unconscious, we do not perceive that it is our own engagement in various inner tasks that excludes us from being aware of core space. Instead, we feel as if we have lost it, and since we vaguely remember how blissful, peaceful, alive, and so on it was to feel it, a strong desire to find it again arises in us.

If our efforts to find the seemingly lost happiness of the core space are guided by the belief that all phenomena have a substance of their own, this will start a chain of events leading to suffering, perpetual disappointment, and the vices of greed and hatred—and their many variations. This unfolds as follows. First, we will believe that the happiness we seek (being a phenomenon) is something in itself. If happiness is something in itself and we do not feel it, it must necessarily be because we do not have it—we lack it. This will lead us to search for objects or situations from which we can receive the seemingly lost substance of happiness. We search for things that can fill our happiness vacuum—so to speak. Because the expectation that certain objects can give us the substance of happiness we seek is based on the wrong premise that happiness is a self-existing substance, it will lead us to one disappointment after another. However, these disappointments will not necessarily lead to the alteration of the

underlying beliefs that happiness is a substance, that we lack it, and that we have to find it somewhere. When the acquisition of a particular object fails to bring us the expected happiness, we interpret such disappointment to mean that we were wrong about happiness residing in this *particular* object, and we look for happiness in another object. We do not interpret it to mean that our governing belief that happiness comes from objects is wrong. In other words, we engage in single-loop, rather than double-loop, learning.

We may, for example, believe that we can acquire the substance of happiness through the possession of wealth. Obtaining wealth may initially bring us in touch with the ever-present happiness insofar as the acquisition of wealth may pacify some of our mental actions, such as worrying about the economy, that otherwise distract us from being aware of the happiness of core space. In other words, the cessation of our worries will bring a momentary gap in our mental activity, which normally distracts us from core space, and thus we may become aware of it and feel it as happiness. However, because we believe that happiness is a substance, we will take this situation as confirmation that wealth did, in fact, bring us the substance of happiness. However, as soon as we begin to act in our habitual ways, we will once again lose sight of core space/happiness. Instead of seeing that it is our own engagement with our thoughts that once again began to distract us from sensing the ever-present happiness, we believe either that we need more wealth to regain our happiness or that wealth was not the thing that could bring happiness after all. We may, for example, think that we also need to acquire the right partner from whom we can gain the substance of happiness. Believing this, we may go through many partners and every time a new partner fails to consistently bring us lasting happiness, we blame the partner—rather than the mistaken premises underlying our search, namely that happiness is a substance, that we are lacking it, and that we need to acquire it from an external object (or person). Chögyam Trungpa (2002) has argued that individuals search for the substance of lasting happiness (i.e., lasting release from suffering) in several different kinds of things—but that it is the grasping for happiness as if it were a substance in itself that is the problem. He writes that people look for happiness in three kinds of things: in purely material phenomena, in knowledge, belief systems, points of view, or philosophies, or in emotional states or states of mind such as the peace or well-being one may experience during meditation. However, as long as we see happiness as a substance that we are lacking and that we need to get from something, it does not matter what

that something is; it will eventually lead to disappointment. The material objects are lost or broken or cease to please us. The philosophies or points of view are proven to be limited or wrong. The physical, emotional, mental, or spiritual states are always changing. Even our ability to reach profound or elevated spiritual states will not relieve us from suffering. When we approach the spiritual work with the intention of trying to obtain happiness by collecting spiritual highs, it will only cause more suffering because such highs never last. Chögyam Trungpa fittingly calls this attitude toward spiritual practice spiritual materialism.

Since every disappointment prolongs our perceived separation from the happiness we seek, our desire gradually intensifies, and our pursuit of objects we believe can bring us happiness, as well as our rejection of anything that seems to stand in the way of this pursuit, becomes more desperate. Greed is the wish to possess something potentiated by the mistaken belief that this something will bring us the happiness we feel we have been lacking for too long. Hate is the wish to reject something potentiated by the mistaken belief that this something stands between us and something else that would bring us the happiness we feel has been lacking for too long. Thus, greed and hatred are nothing other than our strong desire to feel the happiness of the core space combined with the mistaken view that phenomena are self-existing and that they therefore can be the source of the happiness we are longing to feel.

In the above, I have used the search for happiness as an example. A parallel argument can be made for love, vitality, freedom, security, peace, power, unity, purpose, meaning, and other phenomena we may strongly desire, since all of these, like happiness, in reality, are part of the experience of core space. Trying to acquire these things as if they were substances we are lacking will lead to disappointment, and the energy of such disappointment and the feeling of being separate from and lacking these essential phenomena will lead to the states of mind we call greed and hate.

If on the other hand we realize that phenomena are *not* self-existing and that happiness (and the other phenomena mentioned above) is not a substance we are lacking and need to obtain from any source, we may see that happiness is a name for the experience of core space, which is always present, and that the reason we lose sight of it is that our awareness is taken by various forms of action—including the actions related to our search for happiness. The lack we feel is part of the sensory template we use to comprehend and

enable our search for happiness. We see ourselves as analogous to an empty cup needing to be filled with the substance of happiness. Using this sensory template to guide our search for happiness will always make us feel lacking and make us lose sight of the fact that unbound happiness is always already present to us in every moment.

Seeing both happiness and our perceived lack of it as dependently arising rather than self-existing leads to a radically different approach to dealing with happiness—just like the changes of sensory templates described in Chap. 4 lead to radical changes in the managers' approaches to their problematic situations. The search for happiness then becomes a matter of becoming aware of the activities our awareness is currently caught up in, disengaging our awareness from these activities, and thus making it possible for us to notice the happiness that is already here. Many of the activities that take our awareness away from the happiness that is already present are unconscious activities. Therefore, to disengage from such activities, we must first become conscious of them. Every time we become conscious of and disengage from such activity, we experience something like relaxation, expansion, opening, flow, unburdening, melting, freedom, bliss, peace, and happiness. In other words, we experience the core space.

This is why disengaging from habitually applied purposes in the process of art creation leads to a sense of increased wholeness (as discussed in Chap. 5). When we disengage our awareness from the habitual pursuit of a particular purpose, this pursuit will no longer distract us from being aware of core space—that is, from being aware of wholeness, happiness, and bliss. Because ceasing activity enables us to become aware of the preciousness that is always already present in us, Buddhists often describe spiritual work as a matter of *becoming what we already are*.

Once we have become aware of core space, we can start learning to move into action *without* losing sight of this space. Becoming aware of core space is sometimes referred to as *realizing* it and learning to act without losing awareness of the space is referred to as *actualizing* it. Actualization is not a matter of learning not to think, but rather learning to think in a way that includes awareness of core space—just like you can learn to engage in physical tasks while maintaining an awareness of physical space. One way of doing so is to make the experience of core space the ground of as many of our concepts as possible.

In Chap. 7, I will present a selection of concrete practices through which one can engage in this kind of work.

To sum up, core space is always present to us, and when we feel it, it feels like happiness, wholeness, peace, bliss, and so on. For example, seeing happiness as something in itself makes us try to grasp whatever we believe is a source of it and reject whatever we believe is blocking our access to it. Because engaging in such actions makes us lose awareness of core space, it seems to us that we are constantly failing in our pursuit and that happiness is elusive. This turns our grasping into greed and our rejection into hate. This is how perceiving phenomena as self-existing leads to vices of greed and hate and, inversely, why seeing that phenomena have no inherent existence leads to virtue.

In this chapter, I have argued that we can use spiritual doctrines and practices more efficiently in management education by understanding such doctrines and practices as means to effectuate particular changes in sensory templates. To illustrate this, I have looked at doctrines of virtue and vice and proposed that virtue can be cultivated by changing the sensory template we use to understand the nature of phenomena from something permanent and self-existing to something transient and empty of inherent existence. When we see phenomena such as happiness as empty of inherent existence, it no longer makes sense to greedily grasp at them or hatefully reject anything that seems to block our access. The more we see phenomena as empty of inherent existence, the more we can let them change without this change triggering greed or hate. The more we see phenomena as empty of inherent existence, the more virtuous acts arise spontaneously and effortlessly.

6.6 Neutral Sensory Aspects Revisited

Before we move on to the next chapter, I will pause and address two questions. Due to limited space, I will deal with these in a light manner, rather than a thorough one. The first question is: How can we think about sensorimotor experience if phenomena are empty of inherent

existence? And the second is: Why does core space appear to us as if it had sensory qualities?

Throughout the book, I have written about neutral sensorimotor experiences such as heavy, light, pulling, pushing, lifting, wet, dry, expanding, warm, cold, and so on. I have claimed that such experiences are the basis for sensory templates. It is worth taking some time to consider what we are talking about when we talk about such neutral sensorimotor experiences.

The neutral sensorimotor words above do not refer to any single concrete experience. They refer to aspects of experience which we never experience in isolation and which are defined relative to other experiences. We learn what these words refer to by comparing and contrasting various experiences. For example, we can learn what the word "blue" refers to by having someone who knows what blue is point out various blue things, such as a blueberry, a Smurf, and a blue sky. We can then discard the elements that are different to these three phenomena, such as size, texture, movement, intentions, and personality traits (the latter mostly found in Smurfs). We can then isolate the color range which is common to the blueberry, the Smurf, and the blue sky and realize that this is what the word "blue" refers to. Furthermore, our teacher may point out turquoise and violet objects to show us the limits of how we can use the word "blue". Once we have distilled the blueness from our experience through this process of comparing and contrasting, we gain the ability to think about blueness separate from any object, even though we never actually *experience* blue separate from something that is blue. In other words, we gain the ability to simulate "blue" and to use this simulation to think with. We may, for example, imagine things that are not normally blue as blue, such as a blue giraffe or a blue pizza. Or we may use simulations of "blue" to represent certain emotional states as when we say that we are feeling blue. Similarly, by comparing and contrasting various experiences, we learn to simulate other sensorimotor aspects. For example, by comparing heavier objects with lighter ones and comparing warmer objects with colder ones, we develop concepts of heavy, light, warm, and cold. Once we learn to simulate heavy, light, warm, cold, we can begin to use simulations of these

sensorimotor aspects to think with. We can imagine new combinations of sensorimotor experiences which we have not experienced in nature. And we can use heavy, light, warm, and cold as sensory templates to understand work tasks as either heavy or light and people's attitudes toward others as either warm or cold.

Distilling sensorimotor aspects from our experience in this way is a mental achievement. It may seem strange to consider it a mental achievement to know the meaning of heavy, light, warm, and cold since most people accomplish this at a very young age. However, if we think about the training various artists go through, we can see how learning to distil sensorimotor aspects from our experience is a mental achievement. Graphic designers will through the process of contrasting and comparing learn to make more refined distinctions between colors than untrained individuals are capable of. Once they have accomplished this, they will have gained the ability to think with these color distinctions, both to imagine designs using very precise colors and to use their ability to distinguish color as sensory templates to structure other domains of experience. Musicians will through the process of contrasting and comparing learn to distinguish between the timbre of different instruments. Musicians may, for example, compare the timbre of different brands of clarinets and of clarinets playing in different registers and contrast these with the timbre of oboes and bassoons and other instruments. Through this process, musicians learn to recognize individual instruments in the midst of a symphony. They also learn to imagine what a melody would sound like if played on these instruments even if they have never heard this. And they learn to use their ability to simulate timbres of various instruments as sensory templates to structure domains of experience.

Thus, sensorimotor states are something we learn to distill from our experience by comparing and contrasting different experiences.

In the previous section, I have introduced the notion of the core space and claimed that this can appear to us in many different forms—yet that it in itself is nothing but empty space. We can understand this by noticing that empty space can feel different when we compare it to different objects in the space.

Just as children learn what blue is by having someone who knows point out experiences containing the element of blue and just as musicians learn to pick out the sound of an individual instrument from the complex sound of a symphonic orchestra by listening to this instrument playing solo, so it is possible through various spiritual practices and under the guidance of a qualified teacher to become aware of the experience of core space as it appears to us in experiences of unity, peace, vitality, bliss, spaciousness, happiness, love, and so on. And learning this enables us to also recognize core space in the midst of our complex everyday experience.

Since it is our engagement with acts of comprehension that distracts us from noticing core space, we can learn to recognize core space by comparing different experiences where we are more disengaged from acts of comprehension and contrasting them with experiences of being more engaged in acts of comprehension. Because our acts of comprehension limit our perception to only include the elements we believe to be relevant in a given situation, disengaging from these acts is experienced as comparatively more whole. Because our acts of comprehension split our experience into categories, disengaging from such acts is experienced as comparatively more unified. Because our acts of comprehension make our mind active, disengaging from such acts is experienced as comparatively more peaceful. Because our acts of comprehension take energy, disengaging from such acts is experienced as comparatively more energized. Because our acts of comprehension compel us into specific kinds of action, disengaging from such acts is experienced as comparatively more immovable and settled. Because we interpret core space in the light of what we have experienced just before we notice it, its initial appearance can greatly vary—just like a white sheet of paper will initially appear as having the color opposite to the one we have been looking at just before we turned our gaze to the white paper. Because core space is empty, it can simultaneously feel more alive and more peaceful, lighter and heavier, more stable and more flowing than the sensory templates we use in our acts of comprehension. Recognizing our own acts of comprehension and disengaging from these is key to learning to recognize the empty core space. In the following chapter, I will describe a selection of practices that can be helpful in this endeavor.

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7

Somatic-Linguistic Practices (SLP)

In this final chapter, I present a selection of concrete practices for working with sensory templates in general and for realizing core space and learning to move into action without losing awareness of this space in particular. I have called these practices Somatic-Linguistic Practices, because they are based on developing somatic awareness and on attention to language. The practices can be used in conjunction with art-based methods and spiritual practices—or on their own.

These practices aim at effectuating a number of interrelated changes in the sensory templates the practitioner uses to understand phenomena, such as sensorimotor experiences, "inappropriate" emotions and impulses for acting, self, and taking action (see Table 7.1). This is not an exhaustive list, but merely a way of illustrating the breadth of the shifts in the system of our cognition, behavior, and environment these practices can effectuate. Changing *these* sensory templates will make it easier for managers to become aware of and change other sensory templates when necessary and thus make them more able to achieve efficiency in their work.

The practices in this chapter are divided into three main groups. The first group of practices aims at making managers aware of the sensory templates they are currently using to represent and engage with organizational

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Table 7.1 Practices and their intended changes in terms of sensory templates

Practice	Phenomenon	Change in sensory template
Noticing which sensorimotor states are tools we think with	Sensorimotor experience	Sensorimotor states can be tools we use to think with, not only data we can think about Sensorimotor experience can be caused by our own acts of comprehension, not only by the situations we are in
Realizing how we are reaching for core space, which is always already present	"Inappropriate" emotions and impulses to act	Emotions and impulses for acting which seem inappropriate are not necessarily something we need to get rid of, repress, or control. They are often energies we can learn to use to become aware of core space
	Self	We are not like empty containers needing to be filled with something good and to avoid being filled with something bad. We are already core space, which is everything we are ultimately reaching for
Moving into action without losing awareness of core space	Taking action	Taking action is not a matter of acquiring the things we ultimately want, but of becoming aware of what we already are and of learning to deal with situations without forgetting what we are

reality. I have already mentioned some of these in Chap. 4, when I described the warm-up exercises I used in my doctoral research. These practices support managers in noticing the degree to which the sensations they experience when they engage with a particular situation are tools they (automatically and unconsciously) use to think with, rather than sensations caused in them by the situation itself. These practices can enable managers to solve seemingly unsolvable problems by evaluating and changing sensory templates as described in Chap. 4.

The second group of practices aims at making managers aware that all their impulses for actions and related emotions are *ultimately* motivated by a desire to reach a state of happiness, well-being, vitality, peace, satisfaction, and so on and that this state is in fact the ever-present core space. This is important because it means that what social discourse may

label as inappropriate impulses for action and inappropriate emotions are not something we need to get rid of, repress, or control, but are something we can learn to use to become aware of core space. Through these practices, we can also become aware of how we, through our own acts of reaching for happiness (and similar phenomena), lose sight of it. Finally, these practices will over time change the self-perception underlying our actions. Instead of acting from a place of lack, as if we were empty containers needing to be filled with something good, such as happiness, satisfaction, love, and so on, we will act from the felt experience that we already are core space, which is everything we are ultimately reaching for.

The third group of practices aims at integrating the realizations we have from the first two groups of practices so that more and more of our theories-in-use will be grounded in these. In other words, they are practices through which we can learn to move into action while maintaining awareness of core space. We can do so by grounding our understanding of any abstract concept (positive or negative) in various experiential aspects of core space so that when we use these concepts to move into action, we will maintain awareness of core space.

It is worth cautioning that the practices described here are not easy. They are best learned under the guidance of someone who knows them well. Furthermore, it is essential to have achieved a thorough proficiency in these practices for oneself before instructing others in their use. It is also important to know that some of these practices can bring up difficult psychological states and it is therefore good to have therapeutic training and work experience when using these practices as teacher/facilitator, so as to be equipped to handle such situations. Finally, if one finds oneself pushing through difficult psychological states to get results from the practices, one must stop and recognize that one is using the sensory template of pushing through a barrier to get something one feels separate from. Such reflection can help one recognize how the use of this sensory template is distracting one from noticing what is already present. This being said, engaging with these practices in the right environment is both profoundly transformative and fun.

7.1 Noticing Which Sensorimotor States Are Tools We Think With

As detailed in Chap. 3, we use sensorimotor states to represent all phenomena. We may, for example, represent the phenomenon of "power" through sensorimotor states such as "resisting being moved" or "moving heavy objects". We may represent the phenomenon of "decisiveness" through sensorimotor states of "moving swiftly" or "cutting through something". As we saw in Chap. 4, using different sensorimotor states to represent phenomena such as "people", "appreciation", "communication", "morale", "leadership", and "conflict" has a significant influence on managers' efficiency.

However, we are usually thoroughly unaware of which sensorimotor states we use to represent different phenomena. We are even unaware that many of the sensorimotor states we experience while engaged with a particular situation are produced by ourselves through our acts of comprehension, that is, they are tools we think with. Instead, we believe these sensorimotor states are caused by the situation we are dealing with.

Before we can work on increasing our efficiency by evaluating and changing our sensory templates, we will have to become keenly aware of the way we use sensorimotor states to think. In the following, I present four practices we can use to make this clear to ourselves.

You can engage in these four practices together with a partner or on your own. If practiced with a partner, one person can listen without commenting in either words or gestures while the other person is exploring a particular theme for a set period of time (e.g., 10, 15, or 20 minutes). After the exploration, neither the listening nor the speaking partner will comment further on the exploration, but simply relax and let it go. This is an important part of the practice.

When practicing in pairs, it is common that people in the listening role initially feel that it is rude not to comment either in words or gestures. They may feel they are unable to reassure the other that they are listening and are interested if they do not comment in some way. However, after having tried the listening role a few times, most people experience that being liberated from the demand to comment and to *actively*

demonstrate that they are paying attention enables them to be much more present to what the other person is saying and much more able to listen. Inversely, it is common that people in the speaking role initially feel strange about speaking to someone who does not comment in either words or gestures. They may read the lack of commenting as lack of interest or disapproval, or they may feel that it is pointless to talk to someone if they cannot elicit a reaction. However, after having tried the speaking role a few times, most people experience that it is a great gift to have someone listen to you without any interruption for an extended period. There are many important questions we do not have ready answers for. This exercise gives the speakers time to formulate their thoughts and discover what they have to say about a particular topic. Most conversations do not allow us time to discover what we have to say. Instead, we are used to reading other peoples' feedback while we speak and adjust our speech accordingly. If someone smiles and nods, we know they like what we are currently saying and we may feel inclined to talk more about this. If, on the other hand, they look puzzled or disapproving, we may begin to explain ourselves in an effort to convince the listener or to withdraw or adjust our statements in an effort to please the listener. If the listener looks bored, we may try to present what we are talking about in a more interesting manner, or we may simply change the subject to something we hope the other will find more interesting. Thus, the comments and gestures (including facial expressions) of the listening partner exert great influence on the course of the speaking partner's exploration. When the listening partner stops commenting, the speaking partner will have the rare opportunity of letting their exploration be guided solely by their own interest. This is a precious gift. This gift is deepened by the agreement that neither of the partners will comment on the exploration at any point after it has been carried out so that the self-directed discovery process of the speaking partner may continue in the days following the exercise.

The first practice described below is the practice of the listening partner. The three following practices are practices for the speaking partner. I describe the first practice as a personal practice and the three following as facilitated practices. However, when practiced with a partner as described above, the three last practices will be facilitated by the speaker him- or herself. When facilitated by a professional facilitator, it is important that

this facilitator uses the techniques lightly. Many times in my role as a facilitator, I have had a question ready in my mind only to discover that if I do not ask this question, the person I'm working with answers the question a little later on of their own accord—without me saying anything. When people arrive at questions by themselves, it is a stronger and more impactful process. Therefore, one of the most powerful tools of a facilitator is the first practice of being present in listening without following any impulse to comment—that is, to stay quiet.

7.1.1 Noticing Sensory Templates Without Following the Implied Actions

One of the main reasons we do not notice the sensory templates we use is that we too readily engage with the actions they imply and that doing so captures all of our awareness. Therefore, the first practice is simply to listen to someone else speaking while consciously and continuously relaxing one's body and noticing any impulses for action that emerge without acting on any of these impulses. If you notice the urge to make a comment on or disagree with or correct what is being said, you simply register this urge, notice what it feels like in the body, and then relax without acting. If you feel the impulse to agree with or support or build on a point made by the speaking person, you also register this impulse, feel it in the body, and relax without doing anything. If you feel bored, uncomfortable, or uneasy and wish to change the subject, you again notice this, feel it in the body, and let it be without doing anything to change the subject. If what is being said reminds you of a story from your own life, and you feel the urge to relate this story, you can simply notice the urge, what it feels like in the body, and relax. Every such urge or impulse can be felt in the body as an activation or tension—as if the body were getting in gear and ready for some physical, emotional, or mental movement. Instead of acting on these urges or impulses, you can observe the related bodily activations—and then allow these activations to relax and pass by without following them—like sitting at the bus stop and deliberately choosing to miss every bus by relaxing the impulse to get up and board the bus when each bus arrives.

Once you get good at this, you can also begin noticing more clearly what motivates the urges or impulses. Maybe you think that the other would benefit from your input. Maybe you feel something will go horribly wrong unless you take action. Maybe you believe that saying whatever it is you want to say will make you appear to others as brilliant, smart, interesting, caring, strong or something else that you would like others to see you as. Or maybe you simply want to make people laugh because you like laughter and don't like things to be too serious—or the reverse. Regardless of your motivation, you can allow yourself to waste one opportunity after another and be more interested in noticing what kind of opportunities you are pulled toward and how this pull feels in the body.

Two things are important to be aware of. First, the non-acting should not be achieved by tensing up in an effort to *block* yourself from acting. Such tensing up is in itself action. The non-acting is better achieved through an attitude of being too comfortable in yourself to act or of allowing yourself to deliberately waste opportunities to act. You see them, and you let them pass by without going for them. Second, while listening in this way, you may experience urges and impulses to improve the way you "listen without commenting". You may feel that you should relax more or that you should try harder to notice what impulses emerge. You may even get ideas about the practice which aren't part of the practice as it is described here. You may think that you should be able to remember your urges afterwards and write them down or that you should try to change the impulses that emerge when the other person is speaking so that you have more appropriate impulses. People get many such ideas when they are introduced to this practice. However, such urges can also be regarded as urges that you neither have to oppose nor follow. They are simply urges arising in relation to your own practice rather than in relation to what the other person is saying. But you can treat them in the exact same way.

Through this practice, you develop the ability to maintain a double awareness of a stimulus (e.g., another person speaking) and your own automatic responses to this stimulus as they arise. Sometimes what the other person is saying will be so interesting that you forget to pay attention to yourself. You will get sucked into their story. At other times, you may become so preoccupied with relaxing and noticing internal impulses that

you forget to pay attention to what the other is saying. Neither is a problem. Every time you notice that you have lost awareness of either self or other you simply return to the double awareness.

This practice is excellent preparation for starting to notice sensory templates, as these are much easier to notice when we do not follow the actions they imply. It is also good preparation for meditation since in meditation you can listen to your own thoughts and emotions in much the same way that you are listening to the other person in this practice. Finally, over time the inner awareness of impulses arising and falling away becomes an awareness of core space, and you will have learned to listen to someone without losing awareness of core space. This is a great step toward learning to act without losing awareness of the inner bliss that is always here.

7.1.2 Noticing and Describing Sensory Templates

The second practice is to simply notice and describe as precisely as possible the sensorimotor states which are activated when contemplating various questions about social situations or abstract phenomena. This is the practice I used with the second group of managers in the research described in Chap. 4. For example, to explore the phenomenon of "power" one can contemplate questions such as: What inner atmosphere arises when you think about "power"? What does "power" feel like at a physical level? Or one can speak about social situations related to power for some time and then notice and describe what one feels like in the body after having spoken about "power". Or one can take pictures of physical objects that give one a sense of "power" or that have a powerful feel to them and then notice what sensorimotor qualities these objects have in common. The description of "power" can, of course, be made in other media than language and photography, such as sculpture, movement, drawing, collage, and so on.

Simply thinking or speaking about an abstract phenomenon will activate the sensory templates one uses to represent this phenomenon. Therefore, all one has to do to find out which sensory templates one uses to represent a given phenomenon is to speak or think about this phenomenon for some time and notice the internal sensorimotor states that arise.

When, for example, the managers who participated in the research described in Chap. 4 spoke or thought about their problems and then described the internal sensorimotor states that were activated in them, they were in effect describing the sensory templates they used to represent and structure their experience of the problematic situation. When Ira spoke about the meetings she couldn't control, she began to feel something explosive and sharp, something flickering, diffuse, and unclear, and something tense and stiff. These were the sensations in terms of which she represented and structured her experience of the situation. When Anna spoke about the lack of commitment to common decisions she experienced in the management team, she felt things moving in opposite directions or moving out of sync. These were the sensations in terms of which she represented and structured her experience of the situation.

One can explain this practice through an image. You can imagine that the phenomenon you wish to explore is like a pebble and you are like a pond. When you ask yourself about the phenomenon, it is like throwing the pebble into the pond. When the pebble hits the water, it creates ripples. The exploration is simply the act of receiving these ripples without focusing one's awareness on any single ripple in particular—that is, paying attention to and describing the states of thought, emotion, and bodily sensation that arise in you when you contemplate the question.

As mentioned in Chap. 5, in the discussion on how to elicit responses about aesthetic experience, certain distinctions can be useful for this practice. I will now briefly expand on these distinctions.

The first distinction is between abstract and concrete descriptions of one's inner states. When asking managers to notice and describe the inner states that are activated when they speak about a particular phenomenon, they may describe this through concrete sensory words, such as "warm/cold", "fast/slow", "moving up/down/outward/inward/forward/etc.", "rough/smooth textures", and so on. Such descriptions are good because they stay close to the sensorimotor states—they do not add much to the states they describe. However, sometimes managers will describe their inner states by using more abstract words, such as "interesting", "repulsive", "friendly", "creative", "complex", "chaotic", or simply "good" or "bad". Such words do not directly reveal what sensorimotor experience

they refer to. They are not close enough to the sensorimotor states under investigation. Therefore, whenever a manager describes his inner experiences in terms of such abstract concepts, one can ask what these concepts feel like at a purely sensory level. Doing this, one may discover the sensorimotor states the abstract words refer to. The word "chaotic" may refer to the sensation of many parts moving fast in different directions or to the feeling of spinning uncontrollably. The word "interesting" may refer to the sensation of a warm glow or of grabbing something and pulling it close, and the word "repulsive" may refer to the sensation of vomiting or of pushing something away. Clarifying what sensorimotor states abstract words are grounded in is important, as they may refer to different sensorimotor states for different people.

The second distinction is between neutral and value-laden words. More abstract concepts are not only problematic because they do not reveal directly which sensorimotor states they refer to, but also because they add value judgments to the description. Consider, for example, the above-mentioned abstract words. "Interesting", "friendly", and "creative" are generally seen as positive, whereas "repulsive" and "chaotic" are generally seen as negative. Since value judgments are also represented through sensory templates, such descriptions will muddle the picture by adding to the sensorimotor states that are currently active in the manager (more on this in the following section). Therefore, it is good to use *neutral* descriptions. It is worth mentioning that even though sensorimotor words are less likely to include value judgments, they sometimes do. For example, the word "vomiting" *does* refer to a concrete sensorimotor experience, but it is far from neutral. The word "vomiting" generally has strong negative connotations of sickness and nausea. A more neutral description could be "something moving up and out of the body". Describing it in this way, one may become aware of the relief of vomiting. Similarly, the word "cold" can be a neutral description of temperature, but it can also have negative connotations, such as "unfriendly" or "harsh". To determine whether a manager is providing a neutral or value-laden description, one can pay attention to the manager's tone of voice, bodily gestures, and facial expressions.

A third distinction is between emotions and sensations. A manager may describe the inner states activated by thinking of or speaking about

a particular phenomenon as "sad", "happy", "frustrating", "frightened", or "enthusiastic". These words also do not directly reveal the sensorimotor states they refer to. In fact, these words only tell us that the phenomenon in question is represented through the same sensory template as the emotion mentioned, but they do not directly reveal what that sensory template is. Therefore, when managers use emotional words to describe the sensations triggered by talking about a phenomenon, we can point the manager's awareness in the direction of the sensory template by asking what the actual sensation of the emotion is. If a manager says the phenomenon triggers a sensation of happiness, the facilitator can ask: What does this particular kind of happiness feel like in terms of physical sensations? If a manager says that thinking about the phenomenon makes her feel frightened, the facilitator can say: Good, what does this being frightened feel like in terms of physical sensations? If a manager says that thinking about the phenomenon makes him feel enthusiastic, the facilitator can ask: What are the sensations you feel that you recognize as "enthusiasm"? Or the facilitator can ask: What is the actual sensory experience that you call "enthusiasm"? If one is dealing with strong negative emotions, one needs to be skilled in reminding the manager that they are exploring how they represent this emotion and help them keep the description neutral. Otherwise, the facilitator risks talking the manager into experiencing strong negative emotions which will shut down the capacity for exploration (and will be generally unpleasant and unnecessary). I will return to the question of strong emotions below. If what arises in the manager is not an emotional state but an episodic memory or a similar thought state, one can treat these in the same way: Let the manager describe the memory and then direct the manager's awareness to the sensory states embedded in this memory.

A fourth distinction is between actual physical properties of a phenomenon and the sensations the manager uses to represent the phenomenon. These may or may not be the same. For example, if we ask a manager to describe the sensations triggered by thinking about a particular conflict, he may start to describe what the room he was in looked like or the temperature in the room. In such cases, it can be beneficial to direct the manager's attention to internal sensations. Managers may also begin to describe a headache or a sore back. In these cases, it is up to the

skill of the facilitator to know when these sensations are states the manager uses to represent the situation under investigation and when they are merely a matter of the manager having had a bad night's sleep, having been sitting still for too long, or other purely physical circumstances unrelated to the manager's acts of comprehension through sensory templates.

As we saw in Chap. 4, the practice of becoming aware of which sensory templates are used to represent various phenomena is valuable for managers because it opens up the possibility of evaluating whether a given sensory template enables and supports efficient managerial actions, and it brings the possibility to change the sensory templates if the one the manager currently uses does not enable and support efficient action. Furthermore, as we saw in Chap. 6, knowing that the sensations experienced originate from our own acts of comprehension rather than from the situation itself can prevent managers from acting from vices such as greed or hatred and allow them to act from virtues such as patience and kindness.

7.1.3 Placing Sensory Templates on a Timeline

The third practice is to distinguish the sensorimotor states used to represent a particular phenomenon from sensorimotor states used to represent reactions to and ideas about this phenomenon. One can imagine placing the sensorimotor states which emerges when contemplating a phenomenon on a timeline, and sorting these states by seeing some as reactions to others. As a rule of thumb, it is more interesting to become aware of earlier sensorimotor states, insofar as later sensorimotor states are mere consequences of the earlier ones.

When we begin the practice of noticing and describing the sensorimotor states we feel while thinking and speaking about a particular phenomenon, we may not only sense the sensorimotor states we use to represent the phenomenon itself, but also the sensorimotor states we use to represent our reactions to and ideas about this phenomenon. To notice the sensorimotor states we use to represent a phenomenon itself, it is therefore useful to imagine what the phenomenon would feel like if we didn't have to react to it at all. When facilitating this process, it is useful

to notice what the individual managers' reactions to the phenomenon under investigation are and to ask them what the phenomenon would feel like if they did not have to react to it in these ways.

We may, for example, try to find out what sensory template a particular manager uses to represent the phenomenon "power". If the manager thinks "power" is something dangerous that needs to be controlled, then thinking and speaking about "power" will most likely bring a sense of inner tension. This tension is not the sensorimotor state through which the manager represents "power" in itself, but rather a sensorimotor state through which he represents the idea that "power is something he needs to control". The tension represents "control", not "power", but if the manager thinks power always necessitates control, the manager will feel this tension he uses to represent "control" whenever he thinks about "power". To point this particular manager's awareness to the sensory template he uses to represent "power" in itself, one can ask: What would "power" feel like if it were absolutely safe? Or the facilitator may first set a frame by stating that the danger of "power" lies in how people *use* power and then ask: So, what does "power" feel like if you feel it while sitting still, without using it for anything? Or what would "power" feel like if you knew it would never be used? Such questions may at first be baffling to the manager, but given time, the state he uses to represent "power" in itself is likely to emerge into his consciousness. And becoming aware of the state representing "power" separate from the tension used to represent "control" may offer a completely new experience of what power is.

Similarly, another manager may believe that "power" is something she has to struggle to acquire and to hold on to. This manager will most likely feel sensorimotor states of physical struggling and of physically grasping whenever she thinks about "power". This may lead her to believe that the sense of struggle or grasping *is* what the phenomenon of "power" feels like and she may therefore not notice the subtler sensorimotor states she uses to represent the phenomenon of "power" *in itself*. To point *this* manager's awareness to the sensorimotor states she uses to represent "power", one can ask: What does "power" feel like if you didn't have to do anything to have it? Or what does "power" feel like if you have it and you—for some unknown reason—know with certainty that you can never lose it no matter what you or others do? Again, such questions are likely to bring awareness to the sensorimotor states the manager uses to represent

"power" and experiencing the sense of "power" separate from the sense of "struggle" may give her a very new understanding of what power is and new ways of engaging with power—and possibly a new way of understanding herself as unconditionally powerful.

Ira's case, described in Chap. 4, illustrates well the use of ordering sensorimotor states along a timeline and paying special attention to the earliest of these. When Ira was asked to notice and describe the inner sensorimotor states she felt whenever she was thinking and speaking of the staff meetings which got hijacked by certain problematic employees, she described several sensorimotor states. Ira felt something explosive and sharp, something flickering, diffuse, and unclear, and something tense and stiff. Each of these sensorimotor states can be seen as Ira's reaction to the previous state. The tense and stiff sensation was an attempt to distance herself from the discomfort of the two others states. The flickering, diffuse, and unclear sensation was an attempt to cover over and dampen the explosive and sharp state—hiding it from her employees. The sense of explosiveness was in itself composed by two sensations where one was a reaction to the other—the sharp energy and confinement of this energy. Confinement was a reaction to the energy because Ira saw this energy as dangerous and as something she needed to control and hide. Initially, Ira saw "anger" and "frustration" as the combined experience of all these sensorimotor states. However, when Ira distinguished between the different sensorimotor states and allowed herself to feel the first sharp energy without any of the reactions, this initial sharpness no longer felt like "anger" or "frustration", but rather like "clarity" and "leadership". This example suggests that *hidden within the experience of anger and frustration lies the experience we would call "clear leadership",* and the way to realize this is to experience the energy without any of one's habitual reactions to this energy—in particular without one's attempts at controlling it or acting it out.

Thus, a useful tool for the practice of distinguishing the sensorimotor state used to represent a phenomenon from the states used to represent reactions to and ideas about this phenomenon is to organize the sensorimotor states which emerge when thinking of the phenomenon on a timeline. Moving toward earlier sensorimotor states is a way of uncovering the state one is using to represent the more unelaborated or

uninterpreted phenomenon, that is, the phenomenon in itself before we begin reacting to it. It is a way of focusing one's exploration on the sensory template that creates the mess and not getting lost in all the sensations which are just natural consequences of using this initial sensory template. In Ira's case, we could have talked at length about her rigidity or her sense of confusion, but these were just inevitable consequences of seeing the sharp energy as something bad she needed to control and hide. Even her lack of ability to control the meetings was a mere consequence of this negative value judgment on the initial spontaneous emergence of the sharp energy. Giving too much attention to such inevitable consequences would be a waste of time. Anything that comes after the value judgment is bound to be flawed because it builds on the flawed premise that the sharp energy is bad and needs to be controlled and hidden. To help managers become aware of what lies at the start of the timeline, one can begin from any sensation and ask questions such as: What is this sensation a reaction to? What would you experience if this sensation were not there? What are you trying to do with this sensation? Asking such questions is a way of becoming aware of the state through which one initially represents the phenomenon before having any further opinions or ideas about it.

In practice, people will often categorize phenomena as either good or bad. If an individual thinks a phenomenon is good, he may feel he needs to grasp it, move toward it, or clear away obstacles that prevent him from getting to it. If an individual thinks a phenomenon is bad, she may feel she needs to push it away, move away from it, or block it from coming toward her. Thus, the simple act of judging a phenomenon as good or bad already adds sensorimotor states to the representation of this phenomenon. This is why neutral descriptions are so useful. Neutral descriptions direct our attention to the experience before any value judgments.

Practicing distinguishing between the sensorimotor states used to represent a phenomenon and the sensorimotor states used to represent reactions to or ideas about the phenomenon is a way of deepening one's awareness of how the process of using sensorimotor states as sensory templates operates in one's own system. It allows us to see how the phenomena we deal with (e.g., frustration or anger) are not self-existing entities but are brought into existence through a process of compiling sensorimotor

states together in a particular order. Seeing this clearly has a profoundly liberating effect on us and supports us in correcting the mistaken ontological assumption that phenomena are permanent and self-existing and thus in becoming more efficient and virtuous.

7.1.4 Sensory Templates and the Individual's Personal History

The fourth practice is to notice how our reactions to aspects of our everyday sensorimotor experiences are shaped by what these sensorimotor experiences have come to represent due to our personal history with them.

One particularly interesting area where managers can use this practice is situations where managers (or their colleagues or employees) are unable to give up particular attitudes, even though they *know* these attitudes to be unwarranted and not beneficial. For example, a manager may experience herself becoming overly controlling in relationship to a team of employees, even though she rationally knows that the team is highly skilled and responsible and work best without her interference. However, even though she rationally knows that there is no need for being controlling, she simply cannot help it. Another manager may feel himself inadequate in situations where his education and years of experience make him *more* than adequate. He may know this, yet this knowledge does not dispel the sense of inadequacy.

Such situations may seem strange to both the managers themselves and to their colleagues. It may be attributed to character flaws in the managers. She is just like that. That is just his personality.

However, if we ask these managers to first describe in detail the sensorimotor states related to "control" or "inadequacy" and then ask them what or whom these sensorimotor states remind them of, the mystery may well be solved. The woman may notice that the sense of control feels tense and anxiously alert and that she knows this state from her mother, who was often tense, anxious, and controlling. Thus, just as this manager when she was a child would turn to her mother when she felt the need for reassurance, she now turns to that inner state of control when she wants to feel reassured because she unconsciously uses this sensorimotor state to *represent* her mother. In other words, the reason the woman cannot let

go of being controlling is not that she is just like that, rather it is because being controlling brings about a sensorimotor state that to her unconscious represents her mother. Therefore, she turns to being controlling to get the same kind of reassurance a child can get from turning to her mother. Similarly, the man in the examples above may notice that inadequacy feels collapsed and fragile and that this reminds him of his father. As a child, he would develop the habit of turning toward the thing in the room that felt collapsed and fragile, namely his father, whenever he wanted support. Continuing this habit in his adult life, he recreates the energetic feeling of his father internally whenever he feels the need for support. These connections between concepts such as "reassurance" and "support" and the sensory qualities of our primary caretakers are formed like the primary metaphors discussed in Chap. 3, where, for example, the sensation of warmth from the closeness of our caretakers' bodies becomes a sensorimotor state representing "affection"—a metaphor that is visible in expressions such as "a warm smile", "a warm person", and inversely "a cold shoulder".

It is very useful for managers to know that humans sometimes call forth inner states, such as confusion, fear, collapse, anger, doubt, and so on, not because the situation they are in is confusing, scary, overwhelming, offensive, or ambiguous to them, but because they use these states to metaphorically represent a parent to whom they as children learned to turn to find, for example, "comfort", "support", "guidance", "security", "connection", and so on. Reacting to these inner states by trying to clear up the confusion, calm the fear, give a pep talk, deal with whatever seems to be the cause of the anger, or make things less ambiguous will *in these cases* not work, because the state is a symbol used to represent something important. Thus, managers need to react to what the symbol represents—not try to remove the symbol. In fact, trying to remove the state will to the individual's unconscious feel like trying to remove their parent and this will make them hold on to the state for dear life.

This dynamic can be understood by looking at the case of Einar (described in Chap. 4) who tried to deal with a dissatisfied employee by solving whatever this employee was dissatisfied with. But every time he solved one thing, the employee found new things to be dissatisfied with, or he found flaws in Einar's solutions. In this case, it is possible that the employee is turning to dissatisfaction in the hopes of finding something there that he found in a parent who had a perpetually dissatisfied disposition

but who also was a source of human connection and of appreciative attention to the employee as a child. Thus, instead of trying to deal with the things the employee claimed to be dissatisfied with, Einar could have heard the dissatisfaction as a way saying: "I would like to feel human connection and appreciative attention". If this is so, Einer would do better taking five minutes to engage in friendly conversation with the employee—instead of running off and trying to solve the alleged problems the employee mentioned, thus creating a disconnect and giving no appreciative attention to the employee. Talking directly to what the state of dissatisfaction *represents* will work much better than taking the dissatisfaction at face value. It is analogous to learning that a word (the dissatisfaction) means something other than we thought it meant. Knowing the true meaning, the manager can react appropriately. That being said, of course sometimes employees are simply dissatisfied, confused, fearful, collapsed, angry, or in doubt due to the situations they are in, and as a manager one *does* have to take this at face value. The better one knows these kind of dynamics in oneself, the better one becomes at distinguishing between the two types of situation.

Of course, a manager should neither become a psychologist nor a substitute parent for their employees. But managers can benefit from practicing recognizing this type of mechanism in themselves. Over time, this will teach managers to recognize this type of mechanism in others. This practice has the particular advantage that it teaches the practitioner to listen more deeply and with more compassionate understanding to the seemingly irrational tendencies in humans. As we begin to understand how seemingly problematic attitudes are used as representations for something extremely valuable, we gain trust in and love for humanity and ourselves. Such human insightfulness will greatly increase the manager's efficiency.

7.2 Realizing How We Are Reaching for Core Space, Which Is Always Already Present

The second group of practices aims at making managers aware that all their actions, desires, and even their so-called negative emotions are *ultimately* reaching for the ever-present core space, that is, for happiness,

love, vitality, satisfaction, and so on. Through these practices, we can begin to experience this space directly and to become aware of how the very ways in which we reach for it make us lose awareness of it.

I will present three practices in this group: (1) Noticing what states we are ultimately reaching for and becoming aware that these are already present to us. (2) Becoming intimately familiar with the inner states we are avoiding and noticing that they are the same states we in other contexts are reaching for. (3) Being present with the sensorimotor experience of difficult emotions.

7.2.1 Noticing that the Happiness We Are Ultimately Reaching for Is Already Present

One of the most pleasant and easy ways of realizing that what we ultimately want is to feel core space and that this is always already present to us is to explore the deepest positive intention behind our wishes to change things in our lives. It could be impulses to obtain something we do not yet have which appears good, such as winning a competition, outperforming colleagues, passing one's targets, getting a higher managerial position or a higher salary, getting public praise or awards, or making others conform to one's personal moral ideologies. It could also be impulses to avoid something which appears bad, such as losing a competition, being demoted, failing in reaching one's targets, making mistakes, public blame/criticism, or disrespect.

Connirae Andreas developed a process she called Core Transformation process (Andreas and Andreas 1994). This process focuses on revealing very deep positive intentions behind any wish to change something in our lives. In short, the process is facilitated by first repeatedly asking about the positive intention behind a certain impulse or wish until a so-called core state is reached, and then repeatedly asking how feeling this core state transforms the various aspects of experience touched upon through the first part of the process. In Core Transformation, the starting point is generally something the individual finds problematic about himself, such as an impulse to procrastinate, shyness, or a tendency toward explosive outbursts of anger. However, the process can start from any strongly felt impulse to change something internal or external to the person.

For example, a manager may be unhappy about his current position and have a strong feeling that he would be happier if he got promoted. After some initial preparation, the facilitator would ask this manager to imagine that he has gotten the promotion he wanted and to notice if there is any experience he would like to get through having this promotion which is even more important. The manager may notice that what he finds attractive about getting the promotion is that he feels this would give him a sense of being more respected by others in the organization. The facilitator would then again ask the manager to imagine that he has exactly the kind of respect he wishes for—fully and completely—and to notice if there is any experience he would like to get through having this respect which is even more important. The manager may notice that he relaxes deeply when imagining that he has this respect. Thus, this relaxation is what he wants to gain through getting the respect from others that he believes he would gain from being promoted. The facilitator would then ask the manager to imagine that he has this relaxation completely and fully and to notice what experience he would get through that which is even more important. In answering this question, the manager may become aware of dissolving in a profound state of peace. This is what Andreas calls a core state. Feeling this state is what the manager ultimately wants. Andreas describes five core states that she has experienced with clients: (1) being/wholeness, (2) inner peace, (3) love, (4) OKness, and (5) oneness (Andreas and Andreas 1994, 19). Note that these core states are different ways in which core space can appear to us.

When the core state is felt, the facilitator shifts the line of inquiry and starts asking how feeling the core state changes the manager's experience of the various elements he mentioned in the first part of the process. For example, the facilitator will ask how feeling the deep sense of peace would enrich the manager's sense of relaxation, transform his relationship to wanting respect, transform his activity relating to being promoted, and finally transform his experience of being in his current position. In answering such questions, the manager may notice that when he already feels the core state of peace, his relaxation is deep and effortless and he no longer cares about respect or even about the promotion, because what motivated him to try to change his state was that he thought this was necessary to feel peace.

Once he feels peace, he realizes that he does not need to go through the long chain of events he (unconsciously) thought he had to go through to get to the peace. He may, of course, still want to be promoted, but he would approach this in a completely different way, as he would no longer be motivated by a thirst for peace.

Going through this process shows the manager that what is ultimately driving his attempt to be promoted is his longing for peace. However, the reason he does not feel peace is not that he is separate from it and needs to do a lot of things to get it. The reason he does not feel the peace is that trying to do all of these things keeps him so busy that he does not notice that the peace is always already there. In other words, the process can change the manager's theory-in-use of how to find peace. As long as the manager sees the desired phenomenon of peace as a self-existing entity he is separate from, he will formulate ideas about what conditions to fulfill to obtain this phenomenon. This leads to the formation of long chains of conditions because the condition for achieving one phenomenon becomes yet another phenomenon one has to acquire: (1) to attain "peace" one has to relax, (2) to attain "relaxation" one has to be respected, and (3) to attain respect one has to have a high position in the organization. However, feeling the peace strongly without having fulfilled any of the conditions in this chain offers experiential evidence that one is *not* separate from the deep sense of peace and that one does not have to fulfill any of the conditions in order to feel it. This opens up the possibility of seeing the state of deep peace as something that is always already present, from which one is, in fact, inseparable, and seeing that it is because one is too occupied with the activities one thinks will bring peace that one loses sight of peace.

Over time, this practice can lead to the experienced knowledge that all that we long for in terms of peace, love, power, support, vitality, connection, joy, appreciation, satisfaction, passion, belonging, and so on is always already present in every moment. These states are not contingent upon any action. The only reason we do not feel these states is that we are busily engaged in the activities we believe are necessary to attain them and that we have not learned to sense them on their own and to move into action without losing awareness of them.

Sometimes people ask whether we would not become passive if we felt we have all of these things before any action. The fact is the opposite. The more we feel we have all of these things, the less time and energy we lose in fruitless search for them. Instead, we become like happy children, who are probably the most energetic people in the world. We still want to do things in the world, but our actions will be motivated by what our activities *can* bring us. We work to write a book so the book will be written and read by others. We develop new products to fulfill certain functions. We sell those products so that we earn money. We do not do these things in order to receive love or peace or satisfaction or any other such core state. Managers who learn this will be much more focused, rooted, and stable in their work since they do not unconsciously feel that they are fighting to attain or preserve love, peace, power, support, vitality, and so on through their work.

7.2.2 Becoming Intimate with and Surrendering to States We Normally Avoid

Another way of realizing that what we ultimately want is to feel core space which is always already present to us is to surrender to the states we try to avoid or get rid of. This practice is more demanding and should be facilitated by a competent teacher and with sensitivity to timing. I describe the practice here because it illustrates important points about how to work with sensory templates.

This process is in a sense the inverse of the process described in the previous section. Instead of exploring the result of *succeeding* in either achieving something desirable or avoiding something undesirable, in *this* process one explores the result of surrendering oneself to the consequences of utterly *failing* to either achieve something desirable or avoid something undesirable. Instead of asking what obtaining something that appears attractive would enable one to experience, in this process one would ask about the experience resulting from completely giving up the idea of ever obtaining it. Instead of asking what avoiding something that appears unpleasant would enable one to experience, in this process one would ask into the experience resulting from completely giving up

any effort to avoid it. People who have had a history of feeling under pressure to perform positivity often like this practice more than the previous one as they feel relief in acknowledging and speaking openly about their negative experiences.

To illustrate this process, one can think of a manager who feels that she does not receive sufficient appreciation from her colleagues for her work. She may be trying hard to receive appreciation in various ways, but feels that she is failing at eliciting the appreciation she longs for. In the previous process, the facilitator would ask the manager to imagine that she *did* receive the appreciation she wants and to notice what experience she would like to obtain through having the appreciation, which is even more important to her. In this process, however, the facilitator would ask the opposite question: What would it feel like if you never received any appreciation for the rest of your life? What experience would you have if you completely gave up any hope of being appreciated and relieved yourself from any efforts at eliciting it? At first, this line of questioning leads to experiences which appear bleak. The manager may say that she would experience hopelessness or emptiness or profound disconnection. However, as we have discussed in Chap. 4, such negative descriptions of a particular phenomenon add a sense of pushing them away, which may add feelings such as anger and resentment or collapse and self-loathing depending on whether the blame for feeling negative states is directed outwards or inwards. Therefore, the facilitator would continue by guiding the manager to notice what these phenomena feel like *in themselves*, separate from the judgments and reactions to the phenomena. The facilitator can do this by asking questions such as: What does the absence of hope feel like if there is no need for hope? What does emptiness feel like if it is not a problem? What happens if you willingly try to feel more disconnection? It is important to word these questions in ways that spark a sense of safety and curiosity in moving closer to the dreaded experience. This is the practice described above of distinguishing between the sensorimotor state representing the phenomenon one is avoiding and the sensorimotor states representing one's avoidance of this phenomenon. What is initially surprising to many people is that through this practice one will reach the *same* core states as in the previous practice. The manager in our example may notice that when there is no hope there is also no effort, and

that being freed from having to engage in any effort leaves her feeling very settled and grounded. Similarly, she might notice that emptiness feels like a relief and contains a sense of wholeness and freedom, and that being completely disconnected is a profoundly peaceful state.

Another manager may complain that he feels stuck in a particular situation, and he wants to do something about this—but nothing he does seems to work. The facilitator could ask this manager what it would be like if he remained stuck forever and relieved himself of the demand to get unstuck. (Notice how the question is worded to make the efforts to get unstuck seem like a demand or a burden and the letting go of these efforts as being relieved of this demand or burden.) This question may at first seem ludicrous. The thought of being stuck forever may appear as a scene out of Dante's *Inferno* and not an option worth considering. However, if the manager goes with it, he might notice that the stuckness *on its own*, when he no longer judges it as a bad thing, simply feels solid and immovable. In allowing himself to feel this state of solidity and immovability, he may discover that it is profoundly grounding. He may feel settled in himself and from this place of solidity, grounding, and settledness, he may deal much more efficiently with the situation in which he thought he was stuck.

Some of the stories from the research described in Chap. 4 also illustrate this practice well. When Ira stopped avoiding frustration and anger, it initially appeared as a monstrous and hideous state. But when she stopped judging it as something bad, she discovered that the central part of the experience of frustration and anger was a core state of clarity and aliveness. Similarly, once one stops avoiding being stuck, surrenders oneself to being stuck, or becomes intimately acquainted and friendly with the sense of being stuck, one might feel that the core state hidden in the experience of being stuck is a sense of profound stability. The core of sadness is a sense of exquisite freshness and tenderness. The core of our hate is a sense of profound stillness, peace, and power. The core of our insatiable desires is a sense of profound bubbling joy and spontaneous creativity. I will return to this in a section below.

The first time someone experiences this process it seems very surprising. It seems as if the most dreaded phenomenon for some inexplicable reason transforms into something wonderful. However, the underlying

mechanism is the same as in the previous practice. When we stop our actions, in particular our acts of comprehension, we start noticing that that which is there before any action is the very happiness and fulfillment we were searching for through our actions—and we may see that it was being busy with our actions that made us lose sight of it.

This practice has several pitfalls. I will mention two here.

Once individuals have experienced how being present with a state they initially perceived as very uncomfortable and as something to avoid can transform this state into something very precious, they may begin to use this practice with the *intention* of getting rid of the uncomfortable states. Such attempts are likely to fail because the individual is not actually letting go of either their avoidance of the uncomfortable state or their judgment of this state. Instead, they are tolerating the state while waiting for it to change. This can lead to people doing something that can best be described as holding the uncomfortable aspects of their present moment experience as if they were holding something disgusting with two fingers at arm's length—waiting for the supposed reward of this practice. However, as long as one sees the experienced state as something one wants to get rid of, this very act of comprehension will prevent one from realizing what the state feels like on its own—without the value judgement. This pitfall can be avoided by (1) consciously relaxing the body while meeting the experience; (2) assuming a friendly and welcoming attitude toward the experience; (3) imagining that one is physically bringing the experience closer, rather than pushing it away, or moving toward it, rather than away from it; (4) taking care to describe the experience in *neutral, sensory* terms; or (5) actively trying to get more of the unpleasant experience, *as if* it were a good thing. In short, one should not merely be with whatever one is experiencing, but be with it in a friendly and relaxed manner.

Another pitfall related to this practice is that the discomfort one feels about the experience one wishes to avoid can become so strong that it shuts down one's capacity to sense. In short, the practice can be too overwhelming for the individual. This too will impede the realization of the core state beyond one's judgments and avoidance of the experience.

This is why this process has to be facilitated in a gentle way and with sensitivity to timing. In the therapeutic practice called Somatic Experiencing, developed by Peter Levine (1997), facilitators use a technique called titration, where they shift the individual's attention back and forth between a pleasant state and the uncomfortable state they are trying to become intimate and friendly with. Even though Somatic Experiencing was originally developed to work with trauma, titration can also be used in combination with the practice discussed here. If the individual has had conscious experiences of any core states, these are particularly powerful resource states that can be used in titration.

The practice of becoming intimate with or surrendering to what we avoid has the advantage that it makes the individual more courageous, curious, relaxed, and grounded. When one has repeatedly experienced that laying down one's defenses against experiences which at first glance appeared as something to avoid at all cost results in experiences of exquisite core states, one becomes less intent on avoiding such experiences in general. Over time one may even become excited about diving into seemingly unpleasant experiences. As managers learn to recognize the core states underneath the kind of experiences they under normal circumstances try to avoid, they expand the inner territory they can comfortably inhabit. There will be fewer situations they shy away from since fewer situations will produce in them emotions or states they are unwilling to feel. Situations can only control one's behavior insofar as one is unwilling to feel or afraid of feeling the inner states one feels in these situations.

7.2.3 Being Present with the Sensorimotor Experience of Difficult Emotions

From time to time, all managers experience intense and difficult emotions, such as anger, hatred, sadness, desire, shame, fear, boredom, and stuckness. Working with these emotions offers yet another potent practice through which managers can become aware that what *ultimately* motivates their actions and related emotions is the wish to feel the core space and that this core space is always already present to them.

When difficult emotions arise, managers (like all humans) will usually try to get rid of them either by repressing them or by discharging them through various forms of expressive actions. Managers may repress emotions of anger, hatred, sadness, and desire simply by denying that they have such emotions. One manager may, for example, feel angry about a situation, but pretend that she is unaffected and calm. Another manager may feel sad, but pretend that he is happy. Managers may also repress difficult emotions by minimizing their effect on them. One manager may, for example, feel anger, but pretend that this has no bearing on his actions as a manager—that he is above this emotion. Another manager may feel sad, but claim that due to her professionalism, this does not affect her—that she can shake off this emotion and pull through. However, emotions do not disappear or lose their influence over us simply because we deny that they are there or we deny that they have an impact. Managers may also try to get rid of difficult emotions by discharging them in various ways. Sometimes this happens in overt ways, such as when a manager explodes with anger and shouts at employees or other colleagues. Other times it happens in more controlled, socially acceptable, or "civilized" ways, such as when a manager expresses anger through cynical, sarcastic, or degrading remarks or by withdrawing emotionally. Often the more controlled ways of discharging difficult emotions will break down into more overt and raw ways of discharging them in situations where the manager feels under pressure. Thus, "managing emotions" is often merely a temporary solution. Furthermore, keeping strong emotions under control creates inner tension and takes a lot of energy. Thus, it is very problematic to try to get rid of difficult emotions either by repressing them or by discharging them. The very idea that difficult emotion is something to get rid of comes out of using the sensory template of seeing such emotions as analogous to harmful substances one must avoid.

A third option is to practice being present with the sensorimotor experience of the difficult emotion. To give it full permission to unfold internally (not repressing it) *without* discharging it through any actions. When we become present with our emotions and feel them without repressing or discharging them, we can become aware of the sensorimotor states of the emotion beyond any social and moral discourse veiling the emotion. Then it becomes apparent that the experience of any emotion (including the so-called

negative emotions) contain the experience of aspects of core space, such as vitality, peace, love, happiness, and satisfaction, and that all emotions are forces that, if we do not interfere with them, will bring our awareness to particular aspects of this core space. When we see emotions as forces directing our awareness to the core space, it no longer makes sense to try to get rid of them. Instead, it makes sense to yield to them. And let them take our awareness to the preciousness that is always already here.

Due to limited space, I cannot deal with this practice in the detail it deserves. However, for the purpose of the present book, it will suffice to mention a few illustrative remarks on how managers generally relate to emotions of anger, hatred, sadness, and desire and how one's experience of these emotions can be transformed by being present with them at a sensorimotor level.

From anger to strength, courage, and leadership: As we saw in some of the cases described in Chap. 4, managers are often aware of their own anger but find it highly problematic. They may see anger as something that creates and escalates conflicts, as a sign of weakness, having lost control, or failing as a leader, as something unsympathetic, or as a form of emotional betrayal of their employees. Consequently, they may try to manage, limit, get rid of, or hide their anger. However, the energy of anger will find ways to push through any boundaries we may place around it, and what we usually associate with anger are the forms it takes when it has to force its way through the boundaries we place around it. These can be overt outbursts of anger or more covert (and socially acceptable) forms of anger, such as blaming, trash talking, judging, emotional distancing, or rigidity. However, such expressions of anger do not show what anger really is. To get to know what a formidable force anger really is and what it is capable of doing for us, we have to be present with it, rather than seeking to control or discharge it.

Catharine felt justified in being angry and expressed it through the socially acceptable form of blaming. Frank and Gary both saw anger as unpleasant and harmful and tried to control it. However, both expressed anger by avoiding or withdrawing from the person they were angry with and judging that person as problematic. Helena felt that anger was inappropriate for a manager and that it would only demoralize her employees if she expressed it in any way. For Helena, anger was expressed through rigidity

and an overly correct and perfectionist attitude. Ira saw her own anger as something that would make her less likable, and she tried to hide it, even for herself, through confusion. She expressed her anger by relating to her employees both through purely rational considerations and arguments—what she called “small pieces of theory”—and through looking down upon their concerns.

However, by describing the emotion of anger through neutral sensorimotor words, these managers became present with the sensorimotor experience of anger, and this transformed their experience of their anger. Instead of experiencing it as something problematic, they began to experience it as inner warmth and expansion, as a sense of relaxed inner strength, as personal presence, and as something that enabled them to be direct in their communication and to take leadership.

To become present with the sensorimotor experience of anger you can begin by considering questions such as: What is your relationship to anger? How do you avoid it? Are you afraid of it? Do you get angry quickly? How do you discharge anger? Do you use anger to avoid feelings of hurt, vulnerability, sadness, or dependency? Do you allow yourself to feel anger in some situations but not in others? Do you allow the feeling but not the expression of anger? How do you express anger? Do you shout or do you become rigid, distant, or overly focused on rules? Do you camouflage anger as humor? What do you think would happen if you did not deny, hide, limit, or control your anger? The goal of contemplating these questions is not to determine when and how it is good to express anger. It is not to find the right way of managing anger since anger in its essence is not something that needs management. Instead, contemplating these questions will make you more aware of when and how anger is present in your everyday experience. This gives you an opportunity to become present with the sensorimotor experience of anger.

When you are more aware of the concrete situations in which you feel anger and of how you deny, hide, limit, or control it, then you can think about such situations and imagine what it would be like to allow the energy of the anger to flow freely through your body without any of the moderation or control you normally use and without discharging the anger through any particular actions. In the beginning, you may imagine all the horrible things your anger would make you do if no law or morals or fears

of the consequences were holding you back. When you let yourself imagine this without judgment, you will feel the surge of energy through your body. Once you feel this energy of the anger strongly, you can forget about the concrete situations and just pay close attention to the felt sense of the energy itself. Then you may notice that the energy hidden within anger enlivens you and makes you feel expanded, warm, alive, adventurous, excited, engaged, strong, and courageous. It will make you feel you have a surplus of energy to meet the world and any challenge. It will separate you from dependencies and feelings of smallness. When you do not repress or discharge anger, it shows itself as true strength, which is one form in which you can experience the ever-present core space. When you allow this energy to liberate and enliven you, you become able to imagine much better ways of dealing with the situations in which you got angry—just like Ira, who came up with the idea to use color codes to manage the meeting agenda. These ways of dealing with the situation will often not feel angry, but will feel alive, direct, and relaxed.

The problematic expressions of anger come not from the emotion itself, but from the ways in which cultural discourses around anger have taught us to interfere with it and place limiting boundaries around it without recognizing that this means putting limits around the flow of our own life force.

From hate to power and peace: Managers sometimes use the words "hate" and "anger" interchangeably. However, hate and anger are two very different emotions. Hate is a cold, controlled, and calculated wish to hurt, get revenge on, kill, or obliterate something or someone, whereas anger is the hot and impulsive move to assert oneself. For many, hate is a far more frightening emotion to feel than even the most violent outburst of anger, because hate can feel inhuman. Therefore, the emotion of hate is often more hidden than anger. Fewer managers are consciously aware of their hate than of their anger. Similarly, expressions of hate will for most managers be more subtle, controlled, covert, and difficult to become aware of than their expressions of anger.

In spite of this, it is possible to become aware of hate in ourselves by learning to recognize the particular ways we as individuals express it and the related sensorimotor experiences in our bodies. Hatred is expressed in calculated, strategic, intelligent, precise, *and seemingly rational* ways, but it involves a severing of the connection to empathy and love.

It can be directed toward hurting others or toward hurting oneself. When hate is directed toward others, one may smile at them, pretend to be their friend, and gain their trust, and exactly at the moment they are at their weakest and most vulnerable and dependent on our support we may turn on them. When we feel hate, we may often deceive even ourselves. We do not see the betrayal of our friend for what it is. Instead, we are likely to feel we have the best of reasons for turning on our friend at that precise moment. We can often defend our behavior with all the force of eloquent rationality and justify it by pointing to something they did or didn't do or to other circumstances. What we point to may be true, but will often be a very selective truth. Hate can also be expressed through casual and seemingly innocent remarks that are deeply hurtful but where it is not possible to reproach the perpetrator for their remark. In such circumstances, one may also deceive oneself and be unaware of the underlying cold wish to hurt that motivated the remark. We may justify ourselves by stating that it was just an innocent remark with no bad intentions. We may even believe that we said what we said in an attempt at being helpful to the other. For example, a colleague may be overjoyed by a recent promotion and you tell this colleague that the last person to hold that position had a breakdown after only half a year. You may believe that you are only trying to warn your friend about a possible danger. However, such a remark may also be motivated by hate seeking to eliminate your colleague's joy. When hate is directed toward oneself, it can result in self-sabotage. For example, when managers in the pursuit of personal and organizational goals neglect to take care of their own health, do not allow themselves sufficient rest, or do not prioritize their family and friends and thus over time cut themselves off from the nourishing relationships, emotional connection, and support of friends and family. Again, it is possible to deceive oneself and believe that one's behavior is rational and necessary and that it does not have great consequences. Only when one suffers a breakdown does one notice how hateful one's actions were toward oneself. Hate can also be expressed through a profound inability to see the underlying positive intentions in both one's own and others' emotions and actions. Indeed seeing some of one's own emotions as something to get rid of is an expression of self-hate.

To be present with the sensorimotor experience of hate, you must first detect the situation in which you feel hate and then welcome it without judging it or discharging it. Since hate often involves a great deal of self-deception, this is no easy task. You can begin by contemplating how hate manifests in relation to different people, such as superiors, employees, management colleagues, customers, competitors, politicians, your own family, your partner, strangers, teachers, and yourself. When do you engage in some of the behavior mentioned above? When do actions you believed to be innocent, friendly, and rational bring harmful consequences to others or to yourself? When do you feel powerful and calm, but unloving? When do you feel you want to destroy or annihilate something or someone in a strategic and calm manner? When do you seek revenge? Because hate is discharged through highly destructive actions, it is easy to believe that hate is something that needs to be fought and eradicated. Furthermore, trying to get rid of hate may be tempting since this emotion for most managers is severely at odds with their self-image. However, it is important not to try to get rid of this hate. Trying to get rid of hate would in itself be an act of hate because it would be an attempt at cutting off something that is, like it or not, a part of you.

Instead, you can give hate full permission to speak. You can notice what you would like to do when you feel hate if no laws or moral imperatives or fear of the consequences were holding you back—however, without actually doing this. Often you will find that hate holds a wish to completely obliterate something or someone. You can then imagine that you yield to this wish and that you successfully carry out this obliteration. As you do this, you can notice what inner state that brings you to, which is even more important. Once everything has been obliterated—including yourself—you may notice a state of inner darkness and stillness. At this point, you can forget about the specific situations in which you felt hate and focus your attention on the sensorimotor experience of this stillness. You may then notice that this stillness simultaneously feels like profound peace and ultimate power. When everything is wiped out, there is nothing left but profound peace. At the same time, the ability to calmly obliterate every image in your mind, to cut through all inner turmoil of thoughts and emotions to this black stillness, is the ultimate power. When you do not repress or discharge hate, it shows itself as both peace and power, which is one form in which you can experience the core space.

When you practice becoming present with the sensorimotor experience of difficult emotions, it is, as mentioned, important to feel the emotions without discharging them. This is particularly important with hate since the way in which we discharge hate can be very subtle and very destructive, and because it contains a stronger component of self-deception than other difficult emotions. Therefore, it is particularly important to work with a skilled teacher when working with hate.

From sadness to loving-kindness and compassion: Another emotion that may be difficult for managers to feel is sadness (and related emotions, such as vulnerability). Many managers will judge sadness (and vulnerability) as weak, defeatist, non-functional, a sign of collapse, as the emotions of victims and not of winners, or simply as useless or even an obstacle to the pursuit of organizational and personal goals. Such judgments lead managers to see sadness as a sign that something is wrong and they therefore avoid it. However, sadness is something much more profound than what we usually give it credit for. It is not a sign that something is wrong. It is a function of our system, the profundity of which we do not grasp. To get to know what sadness really is, we have to be present with it and allow it to show us its true nature.

To be present with the sensorimotor experience of sadness in itself, you can begin by contemplating what your relationship to sadness is. Do you allow yourself to feel sad? Or is sadness something you simply do not feel? Do you limit sadness? Do you only allow it for a limited amount of time? Do you allow the feeling but not expressions, such as crying? Do you allow sadness even if you do not understand its causes or do you only allow sadness when you feel it has a ‘legitimate’ cause? Do you only allow the crying when you are alone? Do you use sadness to avoid other emotions, such as anger? Is your way of relating to sadness similar to your mother’s or father’s way of relating to sadness? You can also contemplate how you avoid, block, hide, resist, restrict, or control sadness. Do you cheer yourself up whenever you feel sad? Do you use food, chocolate, movies, or work to distract yourself from sadness? Do you get angry or despondent as a way to cover sadness? What do you think would happen if you allowed yourself to feel sad? Do you fear you would be perceived as weak? Do you fear that you would become non-functional? The purpose of contemplating these questions is not to fix

or change anything about the way you relate to sadness or to feel more sadness or to determine when and how it is appropriate to feel sad. The purpose of contemplating such questions is to acknowledge and feel sadness and vulnerability when these emotions are there and to clearly see and disengage from the ways in which you interfere with these emotions. In this way, you can become more present with the sensorimotor experience of sadness.

When you begin to allow sadness and vulnerability without interfering with these emotions, you can pay attention to the sensorimotor experience of sadness and vulnerability in themselves—separate from the sensorimotor experience of our reactions to and ideas about these emotions. In doing this you may notice how sadness and vulnerability can feel as if your skin is thinner, and if you do not perceive this as a danger, you can enjoy the lightness and permeability of this. It can feel very tender, like fresh new leaves that have just unfolded and are still a bit moist. You may notice how after crying, you can feel unburdened, lighter, and you can feel a sense of inner moistness and freshness—like inner springtime. Sometimes sadness feels like an inner balm that calms and soothes the agitation of emotional pain.

When one starts to know sadness in this way, one develops a willingness to be present with sadness, rather than seeing it as something wrong one needs to fix or get away from. When we are not in a hurry to fix or get away from sadness, we develop ease about dealing with emotionally painful things—both in ourselves and in others. This willingness to be present with sadness without doing anything about it is real compassion. Being present with sadness and the pain that causes it brings the possibility of healing. If we are unwilling to be with sadness, because we see it as something wrong that needs to be fixed, we can only offer pity to others and self-pity to ourselves. This pity is a kind of sympathy plus emotional distance. Because of the emotional distance in pity, it does not bring the possibility of healing that compassion brings. Willingness to be with sadness enables us to come out of emotional dramas, which in essence is avoidance of pain, and it brings capacities for compassion, loving-kindness, trust, a sense of humanness and human connectedness, and the possibility for emotional growth. Thus, there is great dignity, beauty,

growth, power, and intelligence in sadness. When you do not repress or discharge sadness, it shows itself as loving-kindness, compassion, and depth of humanity, which is one form in which one can experience the core space.

From wanting to joy: Yet another emotion managers may shy away from acknowledging in themselves is wanting. Wanting is the emotion of strongly longing to acquire or possess something. It can be experienced as an intense wish, desire, urge, or craving for something. This emotion may be less stigmatized among managers than anger, hate, and sadness since it can be seen as the driving force behind ambition or self-interest or the impulse to go for what one wants. However, managers may still hold themselves back from acknowledging the depth of their wanting. Thus, like the other emotions, they may perceive it as an emotion they need to avoid, control, limit, or hide. Some managers may hold back from feeling their wanting because they see it as greedy, egocentric, or childish. They will only allow their wanting insofar as it coincides with what is for the good of the organization or other people. Other managers may allow themselves to feel their wanting, but only insofar as it is directed toward certain socially accepted objectives. They may, for example, feel it is okay to want promotions to more prestigious positions, responsibility for larger budgets, a bigger office, or more influence on strategic decisions. However, they may not feel it is okay to want to work less, to be admired, to have unilateral control, to break the rules, to put their own agenda over that of the organization, to wear shorts and flip-flops, and to do and say other things that are taboo in the organizational culture. The wanting is kept within the limits of what is socially accepted in the organization, in management culture, and in the broader society in which the organization operates. Yet other managers may deny part of their wanting to avoid disappointment in case they fail to get what they want or in case they get what they want only to discover that it wasn't what they hoped it would be. Thus, there are many reasons to avoid feeling what one wants. However, our wanting, like our anger, hate, and sadness, is not quite what we think it is. To know what it is, we have to become present with the sensorimotor experience of it beyond the social discourse around it.

To become present with the sensorimotor experience of the wanting in itself, you can begin by acknowledging the depth and breadth of your wanting and refrain from limiting it to what is acceptable or realistic. You can contemplate questions such as: What would you want if there were no limits? What are your particular reasons for keeping yourself unaware of what you want? How do you manage, control, avoid, or hide your wants? What are your secret wishes and wants? Once the energy of wanting starts to flow more freely in you as you acknowledge one want after another, you can pay close attention to the sensorimotor experience of the wanting itself. Then you may feel how your wishes and wants start bubbling forth like an inner fountain and how this feels carefree, light, and joyful. Furthermore, you may notice that this inner joyful bubbling is what you want most of all and that when you feel it, you care more about feeling the energy of wanting than about getting the particular things you want. When you do not repress or discharge your wanting, it shows itself as bubbling joy, which is one form in which you can experience the core space.

Being present with the sensorimotor experience of difficult emotions can teach managers to recognize the preciousness of such emotions and see that they are far more than what we give them credit for when we perceive them as something problematic we need to avoid, control, limit, or hide. Similar to the examples above, our perception of other difficult emotions can be transformed when we are present with the sensorimotor experience of them. For example, fear can bring us to wakefulness, shame to humility, boredom to ease, stuckness to groundedness, and so on.

The practice of being present with the sensorimotor experience of difficult emotions can be seen as a combination of noticing what these emotions are ultimately reaching for (first practice) and surrendering to something we would normally avoid (second practice).

The advantage of working with emotions is that they contain energy. When we become present with them, they both show us the direction in which we need to move our awareness to notice core space, and they provide the energy we need for our awareness to penetrate to the core space. Furthermore, learning to be present with emotions we would otherwise reject brings an ever-increasing sense of wholeness and love, because we are rejecting fewer aspects of ourselves—and others.

7.3 Moving into Action Without Losing Sight of Core Space

The third group of practices aims at learning to move into action (including acts of comprehension) without losing awareness of the core space. This can be done (1) by grounding more and more of our concepts (both positive and negative) in the experience of core states; (2) by contemplating how one would act if it were true that all we search for is always already present to us, and that the parts of us we perceive as problematic are in fact merely misguided attempts at reaching the core space; (3) by remembering core space before we act; and (4) by observing our language and detecting concrete situations where we revert to using old sensory templates which make us lose awareness of the core space. Once we have detected such situations, we can contemplate how we can understand what we experience in those situations from the viewpoint of the new sensory templates we are trying to adopt.

7.3.1 Grounding Concepts in Aspects of Core Space

One practice that can be used both to develop the capacity to perceive various aspects of the core space and to develop the capacity to move into action without losing awareness of core space is to compare the sensorimotor states we use to represent clusters of phenomena.

In the previous practice, we saw how being present with the sensorimotor experience of difficult emotions changed the way we experience these emotions from something we should avoid, control, hide, or get rid of to an expression of and a direct route to various aspects of the core space. Learning to recognize core space within the composite experience of a difficult emotion plus the social and moral discourses surrounding this emotion is analogous to the musician learning to hear a single instrument playing within the symphonic orchestra. When we learn to do this, engaging with these emotions (and the social and moral discourses surrounding them) will no longer make us lose awareness of the core state—at least

not entirely. In the same way, we can learn to recognize core states within a long range of composite experiences, by comparing clusters of phenomena (including emotions) which on the surface appear to be very different, but at their heart share the same aspect of the core state.

To explore this, I have often engaged managers (and students with other professions) in a particular game. I may begin by asking them to spend five minutes imagining that they are feeling heat, energy, and expansion in every part of their body. I then ask them to assume that this sensorimotor state of heat, energy, and expansion is something positive and tell me what kind of phenomenon it feels like. People will typically answer: vitality, strength, taking leadership, courage, adventurousness, life force, excitement, enthusiasm, autonomy, fearlessness, and so on. Then I tell them to assume that *the very same sensorimotor state* is, in fact, something bad and tell me what kind of phenomenon it now feels like. They will then typically answer: anger, frustration, being out of control, ruthlessness, recklessness, abuse, bullying, and so on.

This simple game shows that the same core state of heat, energy, and expansion is used to represent such diverse phenomena as taking leadership, strength, courage, anger, frustration, and ruthlessness. Certainly, these phenomena feel different, but the game shows that at their heart they contain the same core state.

The game described above can be played using other core states. Doing so leads to the formulation of different clusters of concepts. In Table 7.2, I have listed positive and negative concepts people typically link to seven different core states. The categorization of core states used here is loosely adapted from the work of A. H. Almaas, Karen Johnson, and Faisal Muqaddam (Almaas 2002, 258–331).

Once we ground concepts in terms of various aspects of core space, we can better engage with these concepts without losing awareness of the core space. Once we are able to recognize the core state of dynamic warmth and aliveness in phenomena, such as courage, strength, aggression, and anger, we can better engage with these phenomena without losing awareness of core space. When we learn to recognize the core

Table 7.2 Groups of positive and negative concepts grounded in similar sensorimotor states

Core states	+ Good	+ Bad
Red, warmth, energy, expansion	Strength, taking leadership, courage, adventurousness, life force, vitality, excitement, autonomy, fearlessness	Anger, frustration, being out of control, ruthlessness, recklessness, abuse, bullying
Black, stillness, darkness, slowness	Peace, power, mystery, intimacy, safety	Hate, loneliness, death, emptiness, doubt
Green, flowing like water, soft tenderness	Compassion, kindness, humanness, flow, growth, newness, emotional tenderness	Sadness, vulnerability, weakness, defeat, non-functional, collapse, being defenceless, giving in, yielding, surrender
Yellow, lightness (both in weight and hue), bubbles, upward motion	Joy, happiness, carefreeness, wishing, delight, childlike, unburdened, unattached, light-hearted, curious, visionary	Wanting, foolishness, insubstantiality, superficiality, carelessness, naïve, childish, uncommitted, flaky, insincere, disloyal, stupid, silly
White, solidity, stability, unmoving, heavy	Supportive, confident, patient, committed, steadfast, persevering, determined, grounded, neutral, impartial, in control	Boredom, unresponsive, superior, lack of aliveness, imprisonment, restrictive, rigid, stubborn, headstrong, being stuck, impersonal, cold, controlling
Pink, fluffy softness	Appreciation, being welcomed, things being perfect as they are, loving and lovable	Weakness, wearing rose-colored glasses

state of stillness within phenomena, such as peace, power, hate, and loneliness, it will profoundly transform our perception of and engagement with these phenomena - so that instead of separating us from core space, these perceptions and actions will highlight our inseparability from core space. When we can detect the lightness of core space within

phenomena such as happiness, our wanting, carefreeness, carelessness, curiosity, and superficiality, our engagement with these phenomena will no longer lead us to lose awareness of core space.

Everyday usage of the positive concepts in the table above will sometimes be grounded in sensorimotor aspects of core space and sometimes in other sensorimotor states. It is important to realize this because only when concepts are grounded in aspects of the sensorimotor experience of core space will they support us moving into action without generating a feeling of being separate from core space that in turn lead us to lose awareness of core space. For example, everyday usage of the concept "patience" is often grounded in the sensorimotor experience of resisting the forces in us that urge us to move a project forward faster or to give up on a tedious task. When "patience" is grounded in such sensorimotor experiences of holding back certain impulses, trying to act patiently will lead us to become so occupied with trying to deal with the inherent conflicts that we lose awareness of core space. However, we can also ground the concept "patience" in the core state of ever-present ease and stability beyond the world of phenomena. When "patience" is grounded in this sensorimotor experience, acting with patience will connect us deeper with and reaffirm our inseparability from core space. Everyday usage of the concept "power" is often grounded in the sensorimotor experience of forcing other people to do something against their will. When "power" is grounded in such sensorimotor experiences, trying to act with power will lead us to become so occupied with the ensuing moral and practical problems that we lose awareness of core space. We can, however, also ground the concept "power" in the sensorimotor experience of how the stillness of core space cuts through and dissolves all phenomena. When "power" is grounded in this sensorimotor experience, acting with power will connect us to the primordial stillness of core space. Everyday usage of the concept "courage" is often grounded in the sensorimotor experience of forcing oneself to do frightening things in spite of the force of fear. Trying to act courageously, when "courage" is grounded in such sensorimotor experiences, will once again create conflicts that take our awareness away from core space. We can, however, also ground "courage" in the sensorimotor experience of the dynamic aspect of core space. When "courage" is grounded in this sensorimotor experience, acts of courage simply reaffirm how life is always surging through core space regardless of the content of our mind.

Everyday usage of the *negative* concepts in the table above will usually be grounded in the sensory template of something we need to push away—an obstacle to something we want. However, we can also understand them as expressions of our desire to feel core space combined with the misguided idea that core space is something we need to grasp. This latter view enables us to act in ways that preserve awareness of core space. For example, "joy" is a name for the lightness of core space. If we believe that this lightness is a thing we can grasp, we may try to grasp it by pushing away everything we represent through the sensorimotor experience of heaviness, such as problems or difficulties or responsibilities. Engaging in such actions makes us careless, superficial, and irresponsible. If we view the impulses to be careless, superficial, and irresponsible as something to get rid of, our awareness will get absorbed in this fight, and we lose awareness of core space. If we recognize the impulses to be careless, superficial, and irresponsible as nothing other than expressions of our desire to feel the lightness of core space plus misguided ideas about how to achieve this, we can direct our awareness to the ever-present lightness of core space we wish to feel. When we become aware of the lightness, the "negative" impulses dissolve on their own since we now feel what we wanted to feel. Similarly, "confidence" is a name for the immovability of the core space. If we believe that this immovability is a thing we can grasp, we may try to grasp it by pushing away anything we represent through the sensorimotor experience of movement, such as our own or others' vitality and spontaneous impulses. Engaging in such actions makes us controlling, rigid, and lacking in aliveness and spontaneity. Again, any impulse to be rigid, controlling, and to limit our aliveness and spontaneity are merely misguided attempts to find the feeling of the immobility of core space. Fighting these impulses, we lose ourselves in the battle. Seeing them as an indication that we have lost awareness of the immobility of core space, we can disengage from our acts of comprehension through which we lost this awareness, and when we regain awareness of the immobility of core space, the "negative" impulses dissolve without a fight.

In short, acting from the perspective that seemingly negative impulses and personality traits are attempts to become aware of core space connects us to core space. Acting from the perspective that such impulses and traits are obstacles we need to overcome will distract us even further from core space.

Thus, grounding concepts in various aspects of core space supports us moving into action while remaining aware of core space.

7.3.2 Using New Sensorimotor States as Sensory Templates in Concrete Situations

The simplest way of actualizing a new sensory template is to contemplate the question: If the situation or the phenomenon were analogous to the new sensorimotor state, then how would you interact with it? For example, one can contemplate how one would act if it is true that happiness, peace, love, support, freedom, vitality, and so on is analogous to core space, which is always already present—not analogous to objects one can acquire or lose.

The cases in Chap. 4 show how changes in sensory templates change managers' behavior. When Anna began to see the situation in her management team as analogous to the sensorimotor state of bringing things together, rather than changing the trajectory of moving objects, she stopped trying to convince the others to behave in certain ways and began to deal with the management team by building stronger relationships with the other members in both formal and informal ways. When Becky began to see the situation with the customer service employees who did not feel appreciated as analogous to riding a bicycle with the brakes on, rather than Sisyphus work, she stopped trying to make the employees feel appreciated and began looking for the friction in the system. She found that the friction was the department manager's insistence that all decisions had to be approved by him personally and she solved the problem by telling him to change his management style. When Catharine began to see the overly autonomous employees in the business unit as analogous to a big, viscous, sticky mass, rather than water which can be poured easily from one glass to another, she stopped blaming them for their behavior and began to patiently work on them from many sides, by strategically presenting her data analyses to relevant people in the organization. When Dorothy began to see her challenge of generating more sales for the children's theater as analogous to weaving a net, rather than pulling a cart, she stopped trying to pull the weight on her own and began searching for and involving a large number of individuals, both inside and outside the organization, in the search for a solution. When Einar began to see the employees in the

dissatisfied operations team as five individual voices, rather than one united wall, he stopped collectively encouraging them to complain less and began to encourage the quiet ones to speak their mind more. When Frank began to see his colleagues as analogous to a different art-based medium than himself, rather than a force that was pushing him, he stopped pushing back and began to take a real interest in his colleagues' viewpoint—which had a disarming effect on them and solved the problem. When Gary began to see communication as a conduit for appreciation, rather than merely for information, he began to speak *more* with his problematic employee, rather than leaving him alone in an attempt not to bother him.

In all of these cases, the actualization of the new sensory template came about by simply noticing which actions came to mind when seeing the problematic situation as analogous to the new sensorimotor state. The process of noticing which actions a new sensory template affords can begin by sensing the sensorimotor state while vividly imagining a situation in which one wishes to use it. However, in the research, many of the new actions emerged back at the workplace. The new actions became apparent when the managers encountered their situations after having found the new sensory template in the workshop. It was in this meeting that the ideas for new courses of action emerged—often spontaneously and to the surprise and delight of the managers themselves.

The second half of the core transformation process described above is an example of this process of actualizing a new sensory template. Before the core transformation process, the individual's actions are based on the sensory template of the individual being *separate* from a particular core state. When the individual, after the first half of the process, feels strongly *connected* to the core state, it is possible to look at the initial situations and notice how one wishes to engage with this situation when one's actions are based on the sensory template of being inseparably *connected* with this core state.

7.3.3 Letting Ideas for Action Emerge from Core States

A third practice for learning to move into action without losing awareness of core space is to simply pause and pay sustained attention to core states every time we notice them. In other words: spending *time* sensing them. By

spending time sensing core states without trying to do anything beyond that, one will start to become more conscious of and more familiar with them. Furthermore, spending time sensing core states will provide the experience of feeling these states without having done anything. Over time, such experience will dissolve our ideas about what we need to do in order to feel happy, joyful, stable, patient, strong, alive, peaceful, powerful, loved, loving, free, and so on. We begin to notice that these are words describing the state we are in before any action—the core space. This dissolves compulsory behavior aimed at attaining these phenomena through manipulating our present circumstances. The more you feel that you are able to feel the core states without doing anything, the freer you are to use your time and resources to do what is important—instead of wasting your time chasing these states through actions that will not bring them anyway.

A common objection to this practice is that if one can feel all of these things before any action, one no longer has any incentive to act and would thus remain passive and uninterested in any activity. However, in practice, this does not seem to happen. On the contrary, when one no longer wastes energy searching for these states, moving from one disappointment to another, one becomes more productive and does more work of value to others.

Another common objection is that feeling core states without doing anything to attain them is self-deception. People often object to feeling power without having any influence; feeling loved without having anyone expressing this emotion toward them; feeling happy without having anything to be happy about. However, this objection is formulated on the premise that core states are produced by certain circumstances. Thus, the objection presupposes its conclusion and thus is not a real objection. In fact, the perception that we are separate from core space is the real self-deception.

The practice of paying sustained attention to core states means merely to pause every time one becomes aware of one of these states and take time with it. It doesn't matter whether the state comes about by engaging in one of the practices mentioned above, by listening to someone who feel and describe the state, or the state merely arises spontaneously. When you become aware of it, pay attention to it.

Management educators often speak about different leadership styles, such as strong leadership, visionary leadership, appreciative leadership,

supportive or servant leadership, and so on. Sometimes we are presented with recipes for how to be a strong, visionary, appreciative, or supportive leader. While the inspiration for concrete actions can be useful, following these recipes does not guarantee that we come across as strong, visionary, appreciative, or supportive—or that we feel ourselves to be so. Just like sticking to a code of conduct does not guarantee virtue. Instead, it is possible that these leadership styles can be understood as a simple matter of acting while being aware of various aspects of core space. In other words, it is not a matter of the actions, but of the state from which we act. If we are aware of the dynamic, energetic, and expansive aspect of core space, we will act as strong leaders. If we are aware of the immovable aspect of core space, we will act as supportive leaders. If we are aware of the soft and tender aspect of core space, we will act as appreciative and servant leaders. If we are aware of the stillness of core space, we will act as powerful leaders. If we are aware of the lightness of core space, we will act as inspiring leaders.

7.3.4 Working with Language Patterns

A fourth practice for learning to move into action without losing awareness of core space is by noticing when one automatically reverts to the old sensory template of feeling separate from core space. This is a way of identifying the areas in which the new sensory template of being inseparable from core space has not yet taken hold and thus identifying the areas where further contemplation can be fruitful. In practice, this can be done by first writing freely about the phenomenon or situation for which one wishes to adopt the new sensory template and then analyzing one's own text.

To understand how this practice works, we can consider the process of adopting any new sensory template. For example, after the workshop, Anna (case described in Chap. 4) wanted to adopt the sensory template of seeing the collaboration issues in the management team in terms of the sensorimotor experience of bringing things into contact instead of in terms of coordinating movement. To support the process of adopting this new sensory template, Anna could have taken time to write freely about the issues in the management team and then analyze her own text by underlining every time she used expressions based on the old sensory template of coordinating movement, such as "we need to walk to a common beat" or

"we are heading in different directions" or "in the meetings, we agree on where to go". Once she had found these expressions, she could contemplate how to talk about the same themes, using the new sensory template. Doing so would help her experience the situation from the new sensory template and gain insights from doing so. For example, contemplating the themes pointed to in the above statements might bring insights like "we need to build relationships with each other", "we do not have relationships with each other", and "due to our lack of relationship, we end up having very different understandings of what we agree on during the meetings".

For this practice to work, it is important that the student engages in the writing without self-censorship. From the theories of threshold concepts and troublesome knowledge (described in Chap. 2), we know that it is possible for individuals to learn to speak superficially from a new viewpoint while continuing to think and act from an old viewpoint. However, we also know that this incomplete adoption of the new viewpoint is revealed when the individual speaks in a more engaged and detailed way about the subject to which the view is applied. For the writing exercise to work, the text has to reveal the places where thought patterns are still based on the old sensory template. One can get students to produce such texts by letting them write before they do any work on finding new sensory templates. One can also give students the instruction of writing without stopping for five minutes—a technique sometimes called non-stop writing. Finally, one can get students emotionally engaged in expressing their view and then ask them to start writing.

As we know from the work done on assimilation vs. accommodation (described in Chap. 2), changing the deeper layers of how we organize our experience is difficult because we use these deeper structures in many different areas. Thus, changing certain sensory templates is a matter of considerable restructuring of one's conceptual system. The writing exercise can help identify all the areas where we revert to using the old sensory template.

7.4 Skillful Acts of Comprehension

This book began by asking the question of how to deal with seemingly unsolvable managerial problems. The starting point for answering this question was the work of Chris Argyris and Donald Schön on how to

increase managers' efficiency through double-loop learning, that is, by making managers aware of the assumptions they are basing their actions on (their theories-in-use) and of how these often differ from the assumptions they *believe* they are basing their actions on (their espoused theories). Argyris and Schön found that engaging managers in double-loop learning is difficult (Argyris 1990). To deepen our understanding of why engaging in double-loop learning is difficult, we looked at several mechanisms described in various psychological theories. Based on new research and theoretical developments in cognitive science which show that cognition is metaphorical and embodied in nature and on nine real-life cases, I then demonstrated that a particularly important class of assumptions managers base their actions on are sensory templates. Sensory templates are assumptions about which concrete sensorimotor experiences more abstract phenomena, such as power, motivation, commitment, success, negotiation, communication, value, and so on, are analogous to. Sensory templates are important because using different sensory templates can make a situation appear either as an unsolvable managerial problem or as something the manager can efficiently deal with. Working at the level of sensory templates is a way of engaging in double-loop learning, which bypasses many of the mechanisms that make this learning difficult. In the following chapters, we saw how art-based methods are useful for making managers aware of which sensory templates they use, and we saw how cultivation of virtue can be usefully understood as a matter of changing sensory templates in such a way that virtuous actions follow spontaneously and effortlessly. Finally, I proposed a series of practices for working with sensory templates and suggested that the work with sensory templates is underpinned by certain interrelated sensory templates we use to understand phenomena such as sensorimotor experiences, "inappropriate" emotions and impulses to act, self, and taking action.

The adoption of particular sensory templates is a personal commitment. The consequences of making such a commitment will be revealed as the lived experience of one's life. It is one of the most important commitments one makes, since all one's choices, actions, and experiences are shaped by this commitment. Michael Polanyi writes eloquently about such commitments to the ways in which we participate in our acts of comprehension:

> Comprehension is neither an arbitrary act nor a passive experience, but a responsible act claiming universal validity. Such knowing is indeed *objective*

> in the sense of establishing contact with a hidden reality; a contact that is defined as the condition for anticipating an indeterminate range of yet unknown (and perhaps yet inconceivable) true implications. It seems reasonable to describe this fusion of the personal and the objective as Personal Knowledge. Personal knowledge is an intellectual commitment, and as such inherently hazardous. (Polanyi 1974, vii–viii)

Most of the sensory templates we use in our acts of comprehension we have unconsciously adopted from parents and society. We have never chosen them for ourselves. This book argues for consciously choosing to adopt particular sensory templates which have been passed down through generations in various wisdom traditions and which new developments in cognitive science support. Some of the implications of committing to these particular sensory templates are described in this book. In particular, I have argued how adopting these sensory templates increases managers' efficiency and virtue and that this will benefit the individual manager, the organization, and the organization's environment. However, more implications will be found by future generations who choose to make the experiment of living their lives committed to these particular sensory templates.

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