

# **Transformative Management Education**

Working Paper 73

November 2006

DR JOHAN ROOS\*
Director

\*Imagination Lab Foundation – CP 2124 – 1110 Morges 2 - Switzerland Tel +41 21 802 0685 - Fax +41 21 802 0686 - <a href="www.imagilab.org">www.imagilab.org</a> &

The Bo Rydin/SCA Visiting Professor of Strategy Stockholm School of Economics

Imagination Lab Foundation researchers communicate their findings to interested readers through the Working Paper publication series. This paper should be considered preliminary in nature and subject to subsequent revision.

#### Abstract

Educational experiences may become transformative when they boost participants' capacity to intuit and improvise with imagination, which can be done by combining the benefits of playful construction work with spontaneous drama. In this chapter I ground this claim in humanistic theories and illustrate its practice with two executive education sessions designed for this purpose. Finally, I reflect on these sessions in light of the previous discussion and offer a few simple guiding principles for educators who want to move in this direction.

Key words: education, transformative, imagination, spontaneity, intuition, improvisation, non-scripted drama, thinking from within

#### Transformative education

"...the feeling in the room changed. We moved from profane space to sacred space. The conversation was now more authentic" Anding (2005: 490). According to Quinn, teaching becomes transformational when it change participants' state of being from externally driven and self-focused to internally driven and other-focused. From his terms "being state," "expressions of who we are", and "moral power" it is evident that Quinn thinks of teaching as he thinks of leadership: the success is more dependent on who we are than on the styles and techniques acquired to perform. But, as I will argue in this chapter, acquired techniques matters a lot for creating the context for transformative management education.

I agree with Quinn on the basic assumption that transformation takes the learning experiences to new heights. Like him, I have also observed how people in management education not only gain new skills, but suddenly get a whole new understanding of what they already knew. Moreover, I have come to see and appreciate the tremendous difference between management education that have the look and feel of abstract and austere intellectual reasoning, and ones that engage participants like in sports, arts and other activities where emotions and subjectivity is not only accepted but even demanded.

Over the last decade I have experimented with and developed effective and engaging ways to encourage management education participants to (i) describe, create and challenge (imagination), (ii) quickly access existing knowledge without rational thinking (intuition), and (iii) in the spur of the moment practice this knowledge in new and adequate ways (improvisation),

seem to favor transformation of the kind Quinn describes. The purpose of this chapter is to describe and illustrate how such transformation can spring from boosting imagination, intuition and improvisation among groups of managers. My overall message is straightforward: hands-on construction activity combined with non-scripted drama boost imagination, intuition and improvisation which, in turn, create favorable conditions for transformation. First, I describe what I mean by transformation. Secondly, I provide two illustrative narratives of management education sessions that manifest transformation. Thirdly, I reflect over these illustrations in view of the theory and offer some concluding remarks and advise for practice.

# Framing transformative experiences

Quinn witnessed fleeting, very positive experience of total absorption in time, space and task, which resemble what in the literature is called "peak performance." The literature has described peak performance in terms of timelessness (Mainemelis, 2001), flow (Csikszentmihalyi, 1990), aesthetic experience (Sandelands and Buckner, 1989), and collective virtuosity (Marotto et al. 2007). Such peak performance has enduring consequences, including creativity, heightened self-awareness, and increased alertness of what is going on in the immediate environment (Garfield 1987; Lanier and Privette 1996; Thornton et al. 1999). Inspired by this literature I see transformative management education as an example of peak performance.

What causes such peak performances? The group task (Leavitt 1996), the group leader (Bass 1985; Burns 1978; House 1977), and the group members (Kirkman and Rosen 1999) can all play important roles. Marotto *et* 

al. (2007) highlighted the intricate interaction among these three agents - the task, leader and group members - for creating peak performance. Their participant observation-based research stressed the important relationship between how group members interact with one another, but also with their task, and found that an aesthetic-oriented transformative state - collective virtuosity - seem to occur during fleeting periods of engaged interaction and deep experience, which are actively catalyzed by group members and/or the leader. But, it is the leader/facilitator who carries the greatest responsibility for creating such circumstances. In spite of careful planning, it follows that the management educator can only hope to have created favorable conditions for such transformation in the particular group, place and time, as there are no guarantees it will happen by default. Hence, the question to address is: What can we do to create favorable conditions for such peak experience in management education? One answer is rooted in the epistemology called "constructivism" and what it means in practice, but the mental state of spontaneity and the intuition and improvisation it enables, complements the picture.

## Constructing and expressing from within

In the first part of the 20<sup>th</sup> century Swiss developmental psychologist Piaget proposed that learning is an active and constructive engagement with the world, which he called constructivism (see Inhelder and Piaget 1958). The basic idea of constructivism is that we make ideas about the world *from within* as opposed to just getting ideas from the outside. When we reflect on our experiences we generate our own ways to make sense of the experiences.<sup>1</sup> In

Piaget's term we make our own meaning by changing our internal cognitive structures to new inputs - accommodating - and not just by assimilating new inputs into preexisting cognitive structures, i.e., our values, beliefs and/or assumptions. Thus, for Piaget to transform means to accommodate not just assimilating on the surface. Because knowledge is not merely transmitted verbally but must be constructed and reconstructed physically and mentally by the learner we need our own practical experience ('actions-in-the-world') to accommodate. For example we can make mental models or tinker with objects using our hands. Bruner (1986) further stressed the importance of hands-on problem solving for learning and that instructors should use openended questions and extensive dialogue so that students can make connections and discover principles for themselves. To really learn and change we need to interact and strike a balance with the world, people and things included, ideally using our hands and modelling minds to find new ways.

Harel and Papert (1991) added to Piaget the notion that learning happens most effectively when the learner is internally driven in constructing a public entity, whether it's a go-cart or theory of gravity. In the spirit of Piaget they stressed that the key to learning is that people get the opportunity to project their ideas and feelings from within, rather than repeating what others have prescribed as the correct view or way. The difference from Piaget is in the heavier emphasis on tangible constructions (and the use of computer-based learning). By physically constructing our ideas we both articulate tacit knowledge, and change what we come to know. Hence, constructionism extends the Piagetian constructivism by emphasizing the active process of

physically manipulating materials to discover new ways or interacting with the world, and potentially, also to accommodate/transform.

Although it is often a whole body experience most of the manipulation of objects is done with our hands. Already more than 150 years ago the respected anatomist Sir Charles Bell (1840) argued that all serious account of human life simply must acknowledge the central importance of the hand. Recently, Wilson (1998: 7) reiterated this message about the critical role of the hand for human intelligence: '...any theory ... which ignores the interdependence of hand and brain function, the historical origin of that relationship, or the impact of that history on developmental dynamics in modern humans, is grossly misleading.' These ideas help us further clarify the message from constructivism and its extension in constructionism: to allow for transformation in management education participants in educational experiences should use their hands to experiment, to question, and to explore from within. In psychology these beneficial effects have been known since Carl Gustav Jung's experiments almost a century ago and was further refined by subsequent psychotherapists (see Roos 2006).

## **Acting it out**

The hands-on construction activity can be significantly boosted when combined with non-scripted, that is, spontaneous drama (*ibid.*) Whereas theatre is communicating the experience to others (Greek *theatron*: 'a place for seeing/showing'), drama is fundamentally a personal experience (Greek *drao*: 'I do' or 'struggle'). *Non-scripted* drama means internally driven, non-

planned but facilitated verbalizing and/or physical movements straight "from the gut."

In the 1920s Jacob Levy Moreno created practices and theories for group psychotherapy and personal development. In "psychodrama" the group focuses on one individual's issues while in "sociodrama" the group deals with a shared issue. He believed in the positive forces of the inner resources and that a symbolic communication from within, via a creative process that was healing in itself, was beneficial to achieve a healthier future. The desired outcome of this practice is release of ideas, thoughts and repressed material from the unconscious, accompanied by an emotional response and relief (Breuer & Freud 1895/1982; Malchiodi 1998; Dayton 2005), in other words, catharsis-like experiences. Thus, non-scripted drama helps people to act out their issues in a way that impact them on cognitive, social and emotional levels. Instead of just reason about issues, non-scripted drama nurtures peoples' imagination, intuition and improvisation capabilities. Combined with the benefits of constructivism (and constructionism), potentially transformative per se, non-scripted drama hold the potential to boost imagination, intuition and improvisation. Let's look closer at how these activities favour peak performance.

## Imagining necesse est

Imagination is an integral part of the wider human experience. Imagination can be seen as the capacity to 'see as,' which is a fundamental cognitive faculty through which complex reality is made understandable (Thomas 1999). It can also be seen as the capability to collect from

experiences the potential patterns and correlation that can compose a robust representation of the world (Deacon 1997). Others have distinguished different kinds of imagination. For instance, the descriptive one, which allow us to describe the world as we see it right now; the creative one, which allows us to come up with entirely new ways to see the world; and the parodic one, which allow use to challenge and even destroy what we do not like (Kerney 1988; Roos and Victor 1999). The very notion of imagination recognizes that we do not experience the world in an unmediated way, but instead experience it "from within," *mediated* through interpretation.

Although the literatures share a view that imagination mediates perceptions and understanding, imagination is not only a pure intellectual ability to 'image' or 'imagine' something. Imagination has a behavioral as well as material dimension in addition to the much discussed cognitive one. In an organizational context, descriptions, creations and challenges articulated by managers are typically a blend of these dimensions (Burgi and Roos 2006). Thus, what and how we think what we do (sit, walk about, wave our arms, etc.) and what we use (flip charts, cases, video, pens, etc.) matters tremendously when we imagine. In context of management education, when participants physically manipulating materials with their hands, and act out meaning through facilitated role-play, they practice more fully and actively their imagination compared to listening to an instructor, reading a text case, watching a video clip, sitting dialoguing around a table, or even when they jump up and down to place Post-It notes on a wall board. Rather than being story-listener, or story-teller only, participants combine the three dimensions of imagination to take on the additional symbolic roles of handymen and architects (*ibid*), that is, multi-sensual story-*makers*. By using more fully their imagination people create favorable conditions for peak performance.

# Spontaneity favours intuition and improvisation

When people under favourable conditions combine construction work with non-scripted drama they also nurture a fleeting and creative mental state of spontaneity, during which intuition and improvisation happens more easily. Like imagination, spontaneity is essential to the human condition. For instance, Meyer (1941: 151) said: "...the very condition and foundation of spirits, readiness and action...that which the person may be expected to rise to and to rise with on his own, 'sua sponte,' ... 'an all-important characteristic quality of a person. Maslow, (1962), suggest that spontaneity is one of a dozen attributes of self-actualized people having a creative, authentic and healthy life. In this chapter spontaneity is defined as an emergent, mental state of heightened attention to the environment combined with increased self-awareness of thought and feelings, during which people are ready to immediately decide to act (Roos and Roos 2006). Thus, spontaneity is not automatic, instinctive reflexes, nor is it a disorderly, emotional, uncontrolled or impulsive activity. It is a state of mind, 'a readiness of the subject to respond as required' (Moreno 1946: 111). Spontaneity enables thoughts and feelings to freely emerge 'from within' the people involved whereby they can become aware of, access and even change their values, beliefs and assumptions. This way, during spontaneity we increase the possibility to accommodate in Piaget's sense, and we also create favourable conditions for peak performance. Intuition and improvisation is how this is done.

The term intuition remains unclear in the literature,<sup>ii</sup> but its value has been recognized for centuries. For example, more than a century ago Fitz-James Stephen wrote (Stephen and Posner 1874/1992: 270) "The one talent which is worth all other talents put together in all human affairs is the talent of judging right upon imperfect materials, the talent, if you please, of 'guessing right'". In this chapter intuition means the process by which people come to immediately know without conscious awareness or rational deliberation.

When we intuit we access deeper levels of cognition and emotions. We use our intuition at many times, but the (the state of) spontaneity is particularly fertile for this mental and embodied process. It is through our intuition we just know (and feel) the right answer, the best way of framing a problem, the appropriate next step, etc. The inherently creative mental state of spontaneity favours intuition – suddenly we just know or feel things are, or are not right. Quinn's (Anding 2005) testimony of "the light bulbs just went on" may exemplify how his participants suddenly via intuition gained insight.

Improvisation too is a somewhat fuzzy concept in the literature, but in this chapter it means an action with a very short time span between events leading up to the decision to act (or not to act) and the very act. This is similar to Moorman and Miner (1998: 702), who defined improvisation as the time gap between '…composing and performing, designing and producing, or conceptualizing and implementing.' Thus, while intuition is an internally-oriented (mental) process to know without knowing quite how, improvisation is an externally-oriented action, which the actor, at the spur of the moment, knows and feels is appropriate in the particular circumstance. Improvisation is a way to practice knowledge gained from intuition and other sources.

Although we improvise in our daily life, the creative mental state of spontaneity favour improvisation. Out of the blue we "just do it." Like intuition, improvisation often coincides with peak performance, and thus, the transformation discussed in this chapter. Quinn's (Anding 2005: 492-493) testimony of how he unexpectedly had to deliver an executive education session exemplifies improvisation and how it can help induce transformation.

## Recap

Let's illustrate how imagination, intuition and improvisation, and the transformation it may cause, may unfold in practice. To this end I will present two narratives of management education sessions that, to some extent, became transformative. In both cases I designed and delivered a similar half-day session for groups of approximately 20 senior executives attending a weeklong in-company programs. My role was as an external faculty/expert and participant observer. In both cases I used the *Thinking from Within* (TfW) approach (Roos 2006)<sup>iii</sup> that, in essence, combines Piaget's (playful) constructivism with Moreno's (spontaneous) psycho-/socio-drama. In practice, the TfW approach encourages people to use their hands to construct together meaningful objects and, through non-scripted drama techniques, make the scene come alive and develop symbolic communication. The intended effect is to boost people's capacity to imagine, intuit and improvise for the higher-level purpose to creating a transformational experience.

# Illustration 1: UtilityCo

# Background

A large European utility company, fictitiously called UtilityCo, wanted to help further develop the 'strategic thinking' capability of a group of senior leaders, especially in the area of post-acquisition integration. The company was very successful and had recently gone through a series of more or less successful acquisitions. To this end the senior leadership contracted a business school to design and deliver an in-company program focusing on post-acquisition integration. The program unfolded over five days, with preprogram assignments and post-program follow up projects. The purpose of my session was to develop a complementary and shared understanding among participants about the current, rather messy post-merger situation.

## The session unfolded

To achieve the objectives I split participants into two parallel groups and guided them through a carefully designed warming-up process, aiming to make them more open, aware and receptive as well as appreciate the mind-body connection. Practiced hands-on construction with a broad variety of hard and soft hobby and modeling materials, e.g., Play-Doh, Lego, wood, cotton wads, and ready made as well as natural objects, e.g., toy cars and fruits. We also practiced role-playing and speaking in first person, e.g., taking on the role of a specific object. Only when the groups were hungry and open for further activities I regarded them as ready to enter the action phase.

During the action phase the participants used various materials to practice their newly developed skills to metaphorically visualize and

internalize in three dimensions and improvise dramatic ways to describe their organization from within. After considerable effort and engagement each group arrived at a shared, elaborate construction they thought and felt portrayed the post-acquisition situation. Using dramatic techniques they shared the essence of their constructions in taking different positions in first person format. The two stories highlight different aspects of their internal, organizational landscape.

## Group One's story:

My heart is in (the home country). I have a chain inside, which connects my different parts, but the chain is too short so it does not connect all of them. I have a periscope to look for opportunities, but currently the glass is foggy, so I am not sure what I am seeing. I really like that my various parts are making good progress in their own way. Formally and officially, I am fully 'integrated,' but in reality I am full of holes and gaps. This really concerns me. I need to grow the chain some way to close these gaps before they cause damage to the rest of me. Looking outside I must satisfy customers more than I do now. In fact, I need to remove the barrier between the customers and me, but I am not sure how.'

## Group Two's story:

I have an outer and inner world. I am firmly anchored to my monopolistic and 'fat cat' past (pointing at two red blocks), which I would like to see reduced in size. Internally, I consist of three regional parts. At my center I have my rational, technical knowledge (green soft apple). From that core I have built many bridges to my various internal parts, but they look different. Specifically, I have a solid bridge to Region A, a thin line to Region 2, and complex structure connecting Region C, which among the mess consists of a small shining bridge to country X. This unevenness doesn't feel right.

In my outer world I see a prosperous future in Europe, but the financial markets constrain me. I really try to treat my customers well, but there is a barrier between us (fence). Just outside me, and next to the past I want to shy away from, is complicated political machinery, which is spinning around in strange ways. One of the wheels, the most imposing one, is the political system in our home country.

A range of energy issues, like alternative fuels, which I think I understand, circumvents me. Yet, what I cannot really comprehend are the many 'soft' issues (pink mushy brain halves), like attitudes among young people. I am afraid these issues, which I cannot fully grasp, are incompatible with my own technical knowledge and attitudes. Look, I'll show you (illustrates this by moving the pink soft brain halves and fails to connect them with the green apple inside).

Overall, I am concerned about my ability to better connect my inner and outer worlds. I really want to rid myself from my past (illustrates this by removing the chains to it), and open up towards my customers (illustrates this by removing the barrier).

#### Insert Exhibit 1 here:

## Utility Group Two's Construction

After Group 1's presentation not much happened, but early on during Group 2's presentation people in the first group said 'wow', 'incredibly good', and 'that's fantastic,' causing proud smiles among the members of Group 2. At the end of their presentation all participants were either laughing or smiling cheerfully. Following the end, some broke out in an applause. Others grabbed pieces on the table and began to repeat the moves made by the presenter, like moving the pink brain and trying to connect it to the hard, green apple, or fiddling with the 'spinning wheels' of the political system. And, they did not seem to want to stop doing this. The members of Group One also prompted their colleagues in Group Two for more input, calling on them to explain parts of the story over and over again, even the most miniscule parts of their construction. They discussed what their stories revealed about their officially successful post-acquisition strategy, zooming in on the 'gaps' and 'bridges' presented in both models and how this related to 'integration' issues.

#### Illustration 2: BankCo

## Background

The country subsidiary of a global bank, here called BankCo, had contracted another business school to design and deliver an executive program for experienced middle executives. The overall purpose of the program was to develop functional managers into high potential general managers, and it unfolded during three weeklong modules over 18 months. I was invited to deliver a session during the second module that should help participants identify what they saw as important issues to deal with as (future) general managers. The program director and I agreed to focus on their customer relationships and, like in UtilityCo, my session came midweek and served similar purposes, namely to generate share understanding of their internal, organizational landscape and to serve as a break from the case-based pedagogy that dominated the program.

## The session unfolded

To achieve the objectives in this session I split the group into two smaller groups and followed the same three-phase approach of warm-up, action and debrief as I used for UtilityCo (and described in Roos 2006). Thus, using a wide range of hard and soft construction material the two groups of bankers eventually constructed together and hands-on model of their subsidiary organization and customer relationships. The objective was to take a "strategic look" at relevant relationships and how these could be improved.

As participants constructed and conversed with one another, a certain underlying tension in the organization surfaced, prominently featured in the

construction of both groups. In the following I will focus on one of the groups. Like in UtilityCo I applied drama techniques to reinforce the state of spontaneity and make the scene come alive and move forward. The narrative from one of the groups manifests the desired outcome:

'I am stretched between three corners: corporate vision, our long-term goals and our short-term goals. Big brother (corporate) is looking down on me, in fact, stressing me. Just below him lies the amorphous IT systems that he impose on me and which takes up so much of my attention. I feel chained by it (pushed a metal chain into the soft material used). Too close to my heart there is the political knife I use to cut off people I do not like. Sometimes a part of me uses this knife to backstab another part, which I cannot seem to control...(etc.)'

The story went on for quite some time and took into account virtually all parts of the construction. Their comments and body language suggested they felt emotionally relieved (insights followed by relief) to have talked about issues that were not usually part of such management meetings.

An important part of their narrative focused on three groups of customers, which cut across the existing and official segments and that they featured in different ways. Instead of accepting the existing definition of segments, they had spent much time constructing new, and to them, meaningful representations of particular groups of customers. Much time was spent on retired people who some of them thought are troublesome. Said one manager: 'They just complain about our service, threatening to take their account elsewhere...fine with me.' The feelings were mixed. Eventually they constructed a figure they jointly viewed these senior customers. It was a strange-looking character pushing a chart full with green stuff (money) and with a 'head' equipped with huge eyes staring at their organization. On top of the head they placed 'horns' that reminded the bank managers of certain

aggressiveness these people featured (see Exhibit 2). Unlike other customer groups the connection between the senior customers and the bank was extremely thin – only a narrow paper strip. Prominently featured next to this symbolic representation was a black cross, indicating that these people were close to death.

#### Insert Exhibit 2 here:

# Metaphorical BancCo Customer

When they took turns to act out how the senior customers might regard the bank the participants had to physically stand at their side of the table to share a story in first person. In this moment they "were" senior customers. Over the course of creating and telling dramatic stories the shared view of these particular customers changed. Suddenly one of the bank managers interrupted her story and exclaimed "I am not dead yet!," which led to a deep conversation about demography, health care, life expectancy, wealth management and the role of the bank in the community.

After a short while another participant reached for a candy bar from her bag, placed it near the back cross, and made the point that the senior customers had perhaps another 25 years to live and that both parties could benefit from a more mutually respectful relationship. Silence, then the others gradually offered affirmative statements and body language. The manager who previously was somewhat derogative towards senior customers had now changed his view and contributed actively in the discussion on how to apply the new insights.

During our debriefing participants testified how the session had impacted them. Comments pointed at increased authenticity ("I was more honest"), which is similar to what Quinn witnessed during his transformative session, but also included more precision ("I was forced to be more precise") and changed emotions ("I was terrified at first but when I let go it felt great). Specifically, in BankCo participants' simple, but powerful visualization of a new view of certain customers caused a long discussion about ethical considerations as responsible bankers.

## Reflections

So far I have described how clarity emerged from using their hands to construct their worlds from within and act it out in non-scripted, but facilitated ways. Said differently, I have described how participants in management education can engage their imagination more intensively and easily, reach and a reach a state of spontaneity during which they readily intuit and improvise. Imagination, intuition and improvisation favor peak performance and, thus, transformational management education experiences.

How do we recognize a peak performance when we see one? From the literature we have learnt how peak performance makes people loose their sense of time and space, and I have just argued how imagination, intuition and improvisation flow more freely than otherwise during peak performance. Although I am sure the reader can "feel" how participants used their imagination and at times reached a state of spontaneity during the two sessions described above, it is tricky to provide hard evidence of such internally driven processes. But, the hunger to continue and develop the

scenario further beyond traditional reasoning made them push ahead rather than ask for closure, which may be indicative. It may be equally difficult to observe the outcome of a transformation since any accommodation, perhaps with the exception of near-death experiences, take time to become observable in changed behavior. While acknowledging the methodological challenges involved, there are several indications of transformation, especially of attitudes and opinions.

In both sessions participants' gained clarity from designing a construction in real-time and worked together to materialize it in three dimensions. Individually and collaboratively they described the essence thereof in captivating and metaphorical language. Specifically, in terms of *imagination* all participants practiced the three metaphorical roles handyman, storyteller and architect, which suggest they engaged the cognitive, behavioral and material dimension of their imagination to describe, create and challenge the topic and issues at hand. The metaphors used in their constructions and stories manifested their imagination in use.

Recall how UtilityCo managers described their messy post-acquisition organization as a distinct "inner and outer world" and how BankCo portrayed customer relationships in terms of a thick line. Other UtilityCo metaphors include "a chain inside," "periscope," "holes and gaps," "fat cat," "green soft apple," "solid bridge," "shining bridge," spinning around," and "pink mushy brain." Additional BankCo metaphors include "three corners," "big brother," amorphous," "chained," "political knife," "cut off people," "backstab," and "horns."

Recall how participants seemed to gain new insights about important matters, for instance, the importance of a previously neglected customer segment of BankCo, and the perceived lack of integration in UtilityCo. UtilityCo Two's story captures several similar insights, e.g., the perceived inability to understand young people's attitudes, incompatibility with their technical knowledge, and the strong legacy of the past. In BankCo insights surfaced about the dominance of politicking and the derogative view of certain customers, as well as the sudden changed view about the latter. Hence, *intuition* paves the way for "aha" insights.

Improvisation is manifested in concrete actions at the spur of the moment. Examples in UtilityCo include suddenly removing the chains to the past, removing the fence to customers and moving the pink brain. Perhaps the most prominent example is when one of the BankCo managers exclaimed "I'm not dead yet!" while taking on the role of particular customers, followed by a colleague grabbing and placing a chocolate bar next to these customers, thereby, changing entirely the perceived value of the senior customers for the bank.

During these two sessions peoples' heighten (external) attention to the environment and (internal) self-awareness of thought and feelings enabled imagination, intuitions and improvisations. People reached the fleeting and creative state of spontaneity during which they intuited and improvised with ease.

The two narratives show how some participants changed their values, beliefs and/or assumptions. The immediate feedback of the respective sessions suggested impact in terms of:

- Honesty (e.g., "During my years with the company I have never seen such an honest description of our current state of affairs – nobody held back their critical views..."),
- Clarity (e.g., "When you see our complex business constructed like this problems and opportunities are almost obvious..."), and
- Creativity (e.g., "Ideas just flowed when we built our model together...").

The depth of this impact remains to be explored.

# **Concluding remarks**

This chapter was triggered by Quinn's recent account about transformative teaching (Anding 2005). His testimony about "light bulbs went on," "uneasiness disappeared," that participants "suddenly understood" and "could see what they could not see previously," that "lives had been changed," and that participants "were on fire," appears to have taken him by surprise. The illustrations in this chapter show similar effects. The literature on peak experiences as well as the concepts of imagination, spontaneity, intuition and improvisation have helped me frame what is happening in more concrete terms.

In my experience, executive education aiming to teach specific knowledge and skills do not necessarily need to be transformative. But, if the objective is to *share and develop experiences* and *cultivate wisdom* among groups of managers, however, learning has to become internally driven more than prescribed from outside the learner. The old teaching-by-instruction

model has already given some way to experiential, learning-by-doing models of management education and when these become transformative they move from what Quinn calls a normal reactive state to an extraordinary creative state. In this chapter, and elsewhere, I have proposed that simultaneously involving the hand, the heart and the mind in creating the condition for imagination, intuition and improvisation increases the chances to make management education experiences intentionally transformative.

To readers who want to try out some of these ideas in practice I offer the following simple guiding principles:

- 1. Context matters! As a passionate architect will say, physical surroundings are tremendously important for our mental state. In the same spirit the room, materials, and general environment can separate the "transformational" attribute from management education. Carefully design your mental and physical milieu to be safe and secure and, if possible, beautiful.
- 2. Warm-Up! Few people reach the creative state of spontaneity in the same way their car accelerates from 0 to 100 km/h, or in the same time. On the contrary, a "warm up" to open up for new ways of thinking and doing should be built into the design. Think cocktail party, not teaching session!
- Thinking from within is acting from within! Consider thinking/acting as
  two sides of the same coin, just like the famous mind/body or
  light/particle duality. Address and engage the entire participant, not just
  the mind-thinking-cognitive part.

4. Aim for small wins! Like the famous Dreyfus and Dreyfus (1986) model of gradual learning, despite a PhD (or perhaps because of?) most of us are novices in the fine art of creating the context for transformational, peak-like experiences and performance. Take one small step at the time and celebrate each small and grand success you enjoy. The rewards are terrific and can transform you too.

Bonne chance!

#### References

Anderson, F., 1926, "Intuition," The Journal of Philosophy, 23(14): 365-377.

Anding, J.M., 2005, "An interview with Robert E. Quinn – Entering the Fundamental State of Leadership: Reflections and the Path to Transformational Teaching," *Academy of Management Learning & Education*, 4(4): 487-495.

Bass, B.M. (1985). *Leadership and performance beyond expectations.* New York: Free press.

Bell, C. (1840). The Hand, Its Mechanisms and Vital Endowments, As Evincing Design: The Bridgewater Treatises on the Power, Wisdom, and Goodness of God as Manifested in the Creation, Treatise IV, New York: Harper and Brothers.

Breuer, J. and Freud, S. (1895, 1982), Studies on Hysteria. Basic Books

Bruner, J., (1986). *Actual Minds, Possible Worlds*, Cambridge, MA: Harvard University Press.

Burgi, P., and J. Roos, (2005). "Imagining", in Roos, J., (2006). *Thinking From Within: A Hands-On Strategy Practice*, Palgrave Macmillan, Basingstoke: 41-58.

Burns, J.M. (1978). Leadership. New York: Harper & Row.

Crossan, M., (1998). "Improvisation in Action, *Organization Science*, 9(5): 593-599.

Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. New York: Harper & Row.

Dayton, T. (2005). *The Living Stage : A Step-by-Step Guide to Psychodrama, Sociometry and Experential Group Therapy.* FL: Health Communications.

Deacon, T.W. (1997). The Symbolic Species: The Co-evolution of Language and the Brain. W.W. Norton, New York.

Dreyfus, H and Dreyfus, S.(1986). *Mind over Machine; The Power of Human Intuition and Expertise in the Era of the Computer.* Oxford: Basil Blackwell Ltd.

Garfield, C. (1987). "Peak performances in business," *Training and Development Journal*, **23**, 54-59.

Harel, I. and Papert, S. eds. (1991). *Constructionism* Norwood, NJ; Ablex Publishing.

House, R.R. (1977). "A Theory of Charismatic Leadership". In J.G. Hunt & L.L. Larson (eds). *Leadership: The Cutting Edge:* 189-207. Carbondale, IL: Southern Illinois University Press.

Inhelder, B. and J. Piaget, 1958, *The Growth of Logical Thinking from Childhood to Adolescence*, New York, Basic Books.

Isaack, T.S., (1978). "Intuition: An Ignored Dimension of Management," *The Academy of Management Review*, 3(4): 917-922.

Kearney, R. (1988). *The Wake of Imagination: Toward a Postmodern Culture,* Minneapolis: University of Minnesota Press

Kirkman, B.L. and Rosen, B. (1999). "Beyond Self-Management: Antecedents and Consequences of Team Empowerment," *Academy of Management Journal*, **42**(1), 58-75.

Lanier, L.S. and Privette, G. (1996). "Peak experiences: Lasting consequences and breadth of occurrences among realtors, artists, and a comparison group," **11**(4), 781-782.

Leavitt, H.J. (1996). "The old days, hot groups, and managers' lib'. *Administrative Science Quarterly,* **41,** 288-300.

Mainemelis, C. (2001). "When the muse takes it all: A model for the experience of timelessness in organizations'. *Academy of Management Review*, **26**, 548-565.

Malchiodi, C.A. (1998). *The Art Therapy Sourcebook*. Lincolnwood (IL): Lowell House.

Maslow, A. H. (1968). *Toward a psychology of being* (2<sup>nd</sup>. Ed). New York: Van Nostrand.

Marotto, M., Roos., J., and B. Victor (2007). "Collective Virtuosity in Organizations:

A Study of Peak Performance in an Orchestra," *Journal of Management Studies* (forthcoming).

Moreno, J.L., (1946). Psychodrama (Vol 1), Beacon, NY: Beacon House.

Moorman, C., and A.S. Miner, (1998). "Organizational Improvisation and Organizational Memory," *The Academy of Management Review*, 23(4): 698-723.

Penfield, W and Rasmussen, T. (1957). The Cerebral Cortex of Man; A Clinical Study of Localization of Function. New York; Macmillan.

Roos, J., (2006). *Thinking From Within: A Hands-On Strategy Practice*, Palgrave Macmillan, Basingstoke

Roos, M., and J. Roos, (2005). "Play is the Key", in Roos, J., (2006). *Thinking From Within: A Hands-On Strategy Practice*, Palgrave Macmillan, Basingstoke: 25-38.

Roos, J., and M. Roos, (2006). "On Spontaneity," Working Paper 72, *Imagination Lab Foundation*, Switzerland.

Roos, J., and B. Victor, (1999). "Towards a Model of Strategy Making as Serious Play," *European Management Journal*, 17(4): 348-355.

Sandelands, L.E. and Buckner, G.C. (1989). "Of art and work: Aesthetic experience and the psychology of work feelings'. *Research in Organizational Behaviour,* **11,** 105-131.

Stephens, F-J., and R.A. Posner, 1874/1991, Liberty, Equality, Fraternity: And Three Brief Essays, University of Chicago Press, Chicago.

Thomas, N. (1999). "Are theories of imagery theories of imagination? An *active perception* approach to conscious mental content," *Cognitive Science* 23 (2): 207-245.

Thornton, F. Privette, G. and Bundrick, C.M. (1999). "Peak performance of business leaders: An experience parallel to self-actualization theory," *Journal of Business and Psychoglogy*, **14**(2), 253-264.

Wilson, F. (1998). *The Hand: How Its Use Shapes the Brain*, Language, and Human Culture, Pantheon Books.

27(27)

Piaget framed learning as a development cycle starting when the child first is able to note his/her action and its effects. Through repeated actions and in different contexts, perhaps involving different objects, the child is gradually able to differentiate and integrate various elements and effects. This is what he called "reflective abstraction." The child is also able to identify the properties of objects by the way different kinds of action affect them, which he called "empirical abstraction." Over time and with lots of experimentation the child increases his/hers knowledge about what's going on, which forms a new and higher cognitive stage, and so on. This dual process of reflective and empirical abstraction enables child to construct new ways of dealing with objects, and new knowledge about objects as such. When they become more comfortable with objects, children start to use them to create still more complex objects and to carry out still more complex actions. This process repeats itself and help the child make sense of experience at still higher levels.

For instance, in his review of its philosophical roots, Anderson (1926: 377) concluded that "suddenness" lies at the heart comprehending intuition and that "there is no such thing as a faculty of intuition, different in nature from other intellectual processes". More recently, Maslow (1968) viewed intuition as a form of cognition along with concrete experience and aesthetic cognition, which characterize self-actualized individuals. Even more recently and in the organizational studies field Crossan (1998: 593) defined intuition as 'rapid processing of experienced information.' Others have argued that 'hunch,' 'guess' and 'feel' are synonymous with intuition (e.g., Isaack 1978).

Wersions of both examples are published in Roos (2006).