THINKING WITH YOUR HANDS

“I was actually surprised by how many different thoughts, ideas, emotions and feelings came to my mind when constructing”. This feedback from a Thai student nicely captures the benefits of “thinking with your hands”. But why think with our hands?

Authors such as Weick (2007), Mintzberg (2004) and others have suggested that business and management are not as logical and rational as business school courses seem to suggest; rather, they are complex, chaotic and somewhat unpredictable. Thus, traditional learning tools such as case studies, lectures and discussions may not prepare students sufficiently for the business world because, predominantly, they focus on cognitive and rational thinking. In this paper we present an approach to teaching management which complements traditional teaching practices; viz., a tool which helps students uncover their intuitive insights and gain access to the unconscious. We report on using the tool in Thai management classrooms and elaborate on expected and unexpected benefits we discovered, related to both intuitive learning as well as interactive learning.

Thinking with your hands - benefits of using analogically-based methods

“Making the invisible visible” - the title of Barry’s (1994) article concisely characterizes the contribution of analogically-based methods in management settings. Analogically-based methods, or projective techniques as they are also called, derive their name from the use of ‘physical analogues’
(e.g., drawings, collages, toy models, objects) which serve for projecting conscious and unconscious impressions, emotions and mental images. Barry (1994) proposed the use of ‘analogically mediated inquiry (AMI)’ to uncover unconscious organizational patterns. Participants first create an analogue of their internal view of the organization. The analogue then mediates the inquiry process, whereby the consultant helps the participant to elicit insights into the participants’ unconscious through guiding questions. Borrowed from the fields of depth psychology and art therapy, this method is considered valuable for two distinct reasons.

Firstly, its creative, playful, non-threatening approach is markedly different from normal work routines and allows for participants to express hidden meanings more freely. Secondly, participants are required to engage actively in the creative process. Barry specifically recommends the tactile modality “to get participants away from over-intellectualization” and argues that “a tactile, non-verbal approach might ‘derail’ participants’ normal routine long enough for new perspectives to be developed” (Barry, 1994, p.42).

Heracleous & Jacobs (2008) use a very similar approach but link it to a different theoretical angle. Their approach is based on ‘embodied realism’ (Lakoff & Johnson, 1999), a theoretical perspective which posits that “bodily experience both precedes and shapes conscious processes of thinking and interacting with the world” (Heracleous & Jacobs, 2008, p.50). By giving participants an opportunity to create individual constructions (metaphorical symbols), they gain access to pre-cognitive embodied experiences (emotions, intuition and bodily sensations). Analogically-based methods link manual and cognitive activities; in other words, hand and mind (Bürgi, Jacobs & Roos, 2005). The building and grouping of models gives participants an opportunity to ‘think with their hands’; they visualize their embodied, intuitive understanding of the organization and share their interpretation with others. This process of sharing one’s interpretation inspires discussions and further negotiation of meaning. The underlying thinking has been aptly expressed by Bürgi et al. (2005, p.89) “how can we know what we mean until we see what we build”? These and similar techniques have
been used successfully in corporate strategy consulting (Barry, 1994; Bürgi & Roos, 2003; Heracleous & Jacobs, 2008; Statler, Jacobs & Roos, 2008).

Apart from helping to access intuitive and unconscious individual perspectives, analogically-based techniques also provide opportunities to “enable politically contentious issues to arise and be decoded and debated, foster creative thinking, and facilitate organizational change by being occasions for collective sense-making where important issues can be surfaced and debated” (Jacobs & Heracleous, 2006, p.208).

**Why use analogically-based methods in Thai management classrooms?**

Based on our experience of teaching in Thailand, the use of embodied metaphors seemed a suitable/useful tool for following Weick’s (1995) advice to access students’ intuition and experience and to provide them with experiential learning opportunities. This intention was based on three observations.

In Thai culture, a strong focus on embodied feelings and emotions is evident in the language. Thai language uses a variety of metaphorical descriptions and, among those, body metaphors are prevalent. The expression ‘khao jai’ for example translates into English as to ‘understand’ but the literal translation is ‘enter the heart’. The Thai word for heart, jai, is used as a metonym for personhood, but heart can also refer to different modes of thinking, feeling and social relationships (Berendt & Tanita, 2011). Moore (2006) collected over 700 Thai expressions which include the word jai. The importance of metaphors in Thai language has been investigated in various publications – see Bamber, 1987; Juntanamalaga, 1992; Ukosakul, 2000; Singnoi, 2006; Berendt & Tanita, 2011. Based on the metaphorical structure of Thai language we predicted that working with ‘embodied metaphors’ would suit Thai students particularly.

Additionally, as Asians, Thais typically are inductive thinkers who value concrete experience and practical applications over theoretical analysis (Kase, Slocum & Zhavg, 2011). Building on this
observation, we expected that the use of inductive interventions such as collaboratively constructing physical analogues of mental images would be positively received by Thai students.

Finally, we considered the fun aspect of building physical models in the classroom. One important Thai value is ‘sanuk’ (the Thai word for fun). In Thai culture, having fun is an essential part of life. Therefore, introducing a learning activity that is ‘fun’ and beneficial at the same time almost certainly would be welcomed by Thai students.

INTRODUCING LEGO IN THAI MANAGEMENT CLASSROOMS

Our students, management students with work experience, were participants in a Master’s level Organizational Behavior (OB) course. As part of the course, students have to work in teams of five on a consultancy project with a local company. Typically, students choose the company of one of their team members and identify an OB related problem, such as high staff turnover, low staff motivation or cross-cultural miscommunication, which they then work on as consultants. The project includes identifying the problem through interviews with employees and managers in the company, analyzing the problem with the help of OB theory and recommending a solution to the company. As an additional step in the project, we decided to introduce a session with Lego construction tools as our choice of an analogically-based tool. After students had already worked on their projects for a few weeks and gained insights into the problems in the company through interviews, personal observations and/or questionnaires, we asked students to construct physical representations of their view of the problem(s) in their organization. With the help of construction toys, they were given the opportunity to visualize their mental images.
Different stages of the Lego exercise

The exercise consisted of several stages. In the first stage, students were asked individually to use Lego bricks to create their perceived image of the company. Partly this was intended as a warm-up exercise to make students familiar with the idea of using Lego to express their mental images. The timeframe for the first exercise was kept deliberately short in order to encourage participants to visualize their intuitive understanding of the organization without too much cognitive rationalization. Right after building their Lego model, students were asked to give a narrative interpretation of the physical metaphor they had built. In order to encourage further reflection, the instructor asked a number of questions about the metaphors used by the participants.

During the next stage, students were asked to build a model of their individual view of a perceived problem in their organization. Again, individuals narrated their interpretation of their own model with colleagues (story-telling) and answered questions related to the model (reflective conversation - encouraged by the instructor or by other group members).

In the third stage, group members combined individual models to form a combined view of the perceived problem. At this point the group spent some time building and discussing (framing) their consolidated understanding of the perceived problem.

In the fourth stage, the group used their consolidated understanding to build one final model representing a view of ‘how we wish the company to be’. In the subsequent reflective conversations, group members were asked to elaborate on how this ‘ideal situation’ could be achieved, thus developing input for possible solutions to the problem.

From the very beginning, the exercise generated a great deal of enthusiasm and students came up with a variety of metaphors.

In the first stage of the exercise (‘my company is like ...’), the metaphors used were predominantly favourable images of the companies involved. These included a giraffe (as a symbol for reaching higher, being ambitious), a tiger (as a symbol for power, always hunting for new talent,
see Figure 1), a bee (active, busy collecting new information) and a ladder (as a symbol for career advancement possibilities, but also representing the risk of falling down).

Insert Figure 1 here

In the second stage, participants were asked to focus on problems they perceived in their company and to represent the most significant cause of these problems. Again, the exercise consisted of two parts – first construction, followed by the narration of interpretation.

Students built metaphors such as a tree in different colours (green colour for the leaves on the lower branches, yellow colour for the middle and brown colour for the top) representing the effects of pressure on employees. The lowest level received the least pressure and leaves are therefore represented in a healthy green colour, middle management is under pressure and the leaves turn yellow and are at risk of falling from the tree, and top management receives the highest pressure with leaves turning brown and possibly ‘dying’ under too much pressure. The metaphor of ‘brown leaves’ was used in reference to drop-outs in the management team.

Another project group identified cultural and generational differences in a Japanese company in Thailand; the participant built a model of the Japanese flag on top of the Thai flag, to represent the Japanese domination of the Thai company (see Figure 2). The symbol of a rope hanging between two poles was used as a representation of the companies’ Thai employees who feel they are ‘hanging in the air’ between the Japanese and Thai cultures. Another participant in the same group built people with white hair (representing the older generation of Japanese managers) facing towards the organization and people with dark hair (indicating the younger generation of Thai employees ready to leave) facing away from the organization.

Insert Figure 2 here
In another group working in a Chinese company in Thailand, one student used the metaphor of a yellow fortress (see Figure 3). The participant’s narration elaborated on the rigid walls which represent the way of thinking of the Chinese top management and the fact that only Chinese get promoted for top management positions; also, Thai employees feel they are trapped inside the Chinese wall.

![Insert Figure 3 here](image)

In the fourth stage of the investigation, our participants used their consolidated understanding of the situation to develop possible solutions. As a group, they constructed a joint Lego model that included some of their earlier individual models and represented suggested solutions to the perceived problems (‘how we wish the company to be’); each group then elaborated on their suggestions for improvement and turned them into advice for the company. One group for example talked about ‘slowly breaking the yellow wall or making it more flexible’. When asked how to break the wall, they elaborated that the company would benefit from introducing ‘cultural empathy’ as one of its selection criteria for Chinese expatriate managers and provide them with cross-cultural training for their host country assignment.

The other group visualized their Lego solution by moving both the ‘white hair senior Japanese managers and the dark hair junior Thai employees’ to the centre facing each other. This model represented an increased interaction between the two sides in order to encourage mutual understanding. Concrete suggestions made included introducing a briefing session for new employees, organizing informal small talk opportunities between Thai staff and Japanese managers and adapting the company’s reward system.

**Student feedback**

In the final stage of the exercise, participants were asked to reflect on their learning experiences and provide feedback on how they perceived the exercise of building models as physical metaphors
and interpreting them in a facilitated reflection session. The reflection was done in the form of a short essay (2-3 pages) and the essay writing was guided with supporting questions such as ‘did you find the Lego exercise useful? If yes, why? If no, why not?’ The feedback received was very positive and highlighted some of the benefits of using this method. In the following paragraph, a number of identified benefits are listed and exemplified with quotes from students’ essays (authors’ bold type).

- A deeper level of participants’ intuitive understanding of a situation:

  *It helps to show some hidden problems and solutions which cannot be seen by using normal way like normal meeting and discussion. A lot of problems can be easily solved if they can be visualized.*

  *To answer a question in a short time can show people’s first thought that can reveal the real problem in people’s mind.*

- A deeper collective understanding created

  *The workshop has helped our team to further understand the problems and the original cause of the problems inside the organization.*

  *When you have something as an item in your hand which is not only a sentence or a short paragraph, it helps to be able to explain deeper and more complex thoughts when you describe what you did to the others.*

  *It’s a creative way not only to help us open our minds to the see problem from a different perspective but also enable us to see and listen to others’ ideas more carefully as it comes with their detailed explanation and rationale. Thus it created an opportunity for further discussion that finally led to a deeper understanding of the complicated situation and a better analysis of the problem, the root causes, and the most appropriate solution.*
Each participant in a group given an equal voice

This aspect was mentioned in several student essays and portrays an additional (unexpected) benefit of analogically-based methods. In a hierarchical culture such as the Thai culture, where students show respect to older or more experienced group members, this method gives every participant an equal chance to express their ideas and share their thoughts with others. Since the building of Lego objects often surfaces subconscious feelings/thoughts, the subsequent narration is less inhibited by rational thoughts which may be filtered through the societal lens of ‘what am I expected to say?’ filter, a typical concern among Asian students (Campbell & Li, 2008). Our students expressed this in the following statements:

*This workshop made everyone active. Every team member had equal chances to speak, ask, as well as listen to others.*

*The workshop also helped us to shake out team member’s understanding in the project, and provide them more opportunity to speak out the way they see the problem and provide recommendations to solve the problem as we go along.*

Introvert participants helped to express their ideas

*Using Lego can influence the group dynamics in one’s project group. In my case, one of our introvert members came up with the model of the Japan flag above the Thai flag to symbolize rigid hierarchy. The denotation in his piece of Lego art is very deep and I wish he could express such profound ideas in the future should I ever meet him again in my next semester’s class.*

Element of ‘fun/active engagement’ added to the classroom
When answering the questions using Lego, it is more like playing a game. It is more relaxing and fun for people to give answer which I believe that it can help to give better answer to compare with when people are stressed and serious.

It is a great mechanism to help design thinking processes in a way that it was perceived as a toy rather than a serious academic tool. Therefore, it makes everyone feel free and comfortable to apply their own imagination to the problem solving.

- Initial doubts were overcome:

If someone asked me, prior to our workshop, that I should use Lego bricks to help me understand the problem in an organization, I would have laughed and told him or her to get real. However, now I suggest you should add this Lego Workshop into every OB class.

**SUMMARY AND CONCLUSIONS**

Summarizing our insights into using an analogically-based method in Thai management classrooms, we can report that both students and instructors were enthusiastic about the outcome of the exercise. We repeated the exercise twice with different groups of students and each Lego session lasted about 3 hours. The Lego exercise was not graded but only served to help the students surface aspects of their OB project; i.e., identify ideas which were not previously visible. All students perceived the exercise to be useful and gave positive feedback as described above. The initial assumptions we made about the usefulness and positive reception of this tool in Thai classrooms were confirmed by the feedback from the students. In addition, we discovered further benefits such as giving junior or introverted group members an opportunity to be heard in hierarchical cultures such as Thailand.

From the final project presentations where students had to present their solutions to the company problem, it was observed by lecturers that the Lego exercise helped students to come up
with a wider variety of solutions compared to previous semesters where project groups did not use the Lego exercise. We also found that the average course evaluation for the OB courses that included the Lego exercise was better than the OB courses without Lego. We consider this an ongoing exercise where one can experiment with different types of analogically-based methods; e.g., using clay instead of Lego was suggested by some students. We look forward to receiving feedback from ANZAM conference participants on their experience with similar methods.
REFERENCES


FIGURES

Figure 1: Tiger - Power

Figure 2: Japanese flag on top of Thai flag

Figure 3: Yellow Fortress
ABSTRACT:
Authors such as Weick (2007), Mintzberg (2004) and others have suggested that business and management are not as logical and rational as business school courses seem to suggest; rather, they are complex, chaotic and unpredictable. Thus, traditional learning tools such as case studies, lectures and discussions may not prepare students sufficiently for the business world because, predominantly, they focus on cognitive and rational thinking. In this paper we present an approach to teaching management which complements traditional teaching practices; viz., a tool which helps students uncover their intuitive insights and gain access to the unconscious. We report on using the tool in Thai management classrooms and elaborate on expected and unexpected benefits we discovered.

Keywords: experiential learning, active learning, management education, creative ability