

# DEVELOPING A MASSIVE OPEN ONLINE COURSE BY CMAP-TOOL

JOLAN VELENCEI

Obuda University, Keleti Faculty of Business and Management, Budapest, Hungary  
E-mail: velencej.jolan@kgk.uni-obuda.hu

**Abstract**— This study explores how Concept Mapping helped to develop the content of a Massive Open Online Course. This course namely Decision Making is offered by Obuda University. The main objective of this course was to define the key concepts of decision making and helping contextualization of these concepts. A crucial aspect of developing this course was supporting the learning process by different types of materials, for example video lectures, texts and comic strips. Firstly some decision dilemmas were defined and an initial Cmap was created. Secondly some dramas was chosen to understand decision makers' catharsis and the initial Cmap was reconstructed. Thirdly some scenarios were prepared to comic strips. In every steps the reconstruction of Cmap helped to find the connections between the key concepts of decision making.

**Index Terms**— Cmap, Decision Making, Dilemmas, MOOC.

## I. DECISION MAKING: BEYOND DISCIPLINE

There is a strong separation of disciplines, which is accepted, but never became popular. The labels of Sciences and Humanities suggest that certain disciplines are contained within science, but others are left out. There are sciences (physics and chemistry for example) and then there is philosophy. From these, one can craft philosophies of science (the philosophy of physics, the philosophy of chemistry), but it is foolish to try and create a science of philosophy (the physics of philosophy, the chemistry of philosophy). There is knowledge (disciplines) that can be taught and learned. Decision-making is one of them. The sciences can be turned into disciplines, but this does not work the other way around. One cannot make decision making into decision science. At the heart of soft disciplines lies the definition of the conceptual framework and model. Here the recognition of problems and the tentative search for their solutions are not repeatable. It is simply not possible to conduct the same experiment under the same conditions. For decades now, in the Balkans and its area, on the peripheries of the mainstream, the authors have been working on making sure that decision making does not become the stepchild of operation research, nor that of social- or cognitive psychology, or even of neurobiology.

The study of decision-making is beyond its teething problems, when it was imagined that algorithms, that is rigid sequences of operations, would remove all doubt. Applied operation research sets applied research aside, and develops useful algorithms, which optimize well-structured operations. A lot of players have weighed in on decision-making courses. Business schools and Schools of Economics prefer using models and methods. Referring to Thomas Sedláček[1], just because we can describe how something operates does not mean we understand the connections. Just because a story is told dressed in the garbs of mathematics, it is not robbed of its mystery.

Business Schools have adopted the catchy phrases of operation researchers. Applied arithmetic is always "difficult" for mediocre people, and so it commands respect.

## II. DECISION DILEMMAS

To develop the content of Decision Making Massive Open Online Course I outlined sixteen decision dilemmas. Risky vs. Unimaginable (1), Original vs. Imitation (2), Measurable vs. Immeasurable (3), Replaceable vs. Irreplaceable (4), Responsibility vs. Intellectual Integrity (5), Products vs. Hints (6), Facts vs. Interpretation (7), Consumtariat vs. Netocracy (8), Hope vs. Possibility (9), Pre-filter vs. Post-filter (10), Cool vs. Retro (11), False Urgency vs. True Urgency (12), Global vs. Local (13), Masses vs. Tribes (14), Integrated vs. Differentiated (15) and Resource vs. Human being (16). These dilemmas can be examine from two dimensions. First dimension is the possible role of decision takers'. These roles are Chief Executive Officer (CEO), Chief Innovation Officer (CIO), Chief Knowledge Officer (CKO) and Chief Human Resources Officer (CHO). Second dimension is the domain of decisions: new paradigm, new context, new validating and new identity. The sixteen decision dilemmas in the mentioned two dimensions are showed in Table I.

Table I: Decision dilemmas in two dimensions

	CEO	CIO	CKO	CHO
<b>newparadigm</b>	(1)	(2)	(3)	(4)
<b>newcontext</b>	(5)	(6)	(7)	(8)
<b>newvalidating</b>	(9)	(10)	(11)	(12)
<b>newidentity</b>	(13)	(14)	(15)	(16)

Based on this model I started to draw a concept map according to Novak and Cañas [2] to help students find their own learning route [3]. Fig. 1 depicts the sixteens dilemmas connected from the four domains.

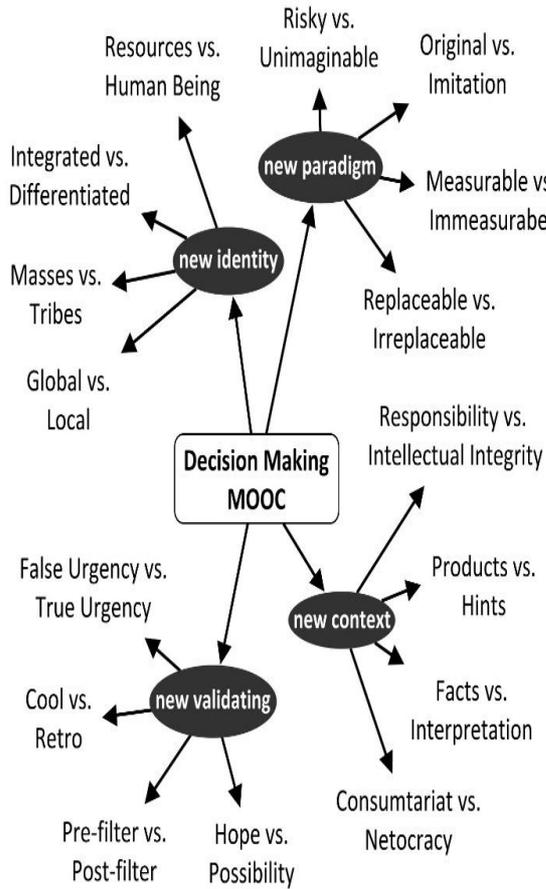


Figure 1: Sixteens dilemmas

**III. CONNECT DECISION DILEMMAS TO CONFLICTS OF DRAMAS**

Using dramas could help to depict decision situations as they over-emphasize the characters, making the conflict more obvious [4]. In the catharsis the decision makers realized: “this happened to me” or “this could have happened to me” or “this can happen to me tomorrow”. So I decided to use dramas as means for getting the decision makers think about the conflict situations they face. Any decision makers have experience with a few such conflict situations and recognize them at once. The others they have not come across yet but some other decision makers are nodding that these are the ones they faced – thus the trust is built. They may face any of the conflicts tomorrow. The dramas from William Shakespeare, Samuel Beckett, Henrik Ibsen, Molière and SlawomirMrožek are engaging with similar conflict situations than the sixteen decision dilemmas.

Risky vs. Unimaginable and Original vs. Imitation dilemmas are presented by Henrik Ibsen’s The Wild Duck. Measurable vs. Immeasurable and Replaceable vs. Irreplaceable dilemmas are presented by Henrik Ibsen’s An Enemy of the People. These four dilemmas illustrate the problem of creating new paradigm. This problem can be interpreted by William Shakespeare’s Othello. Fig. 2 depicts the connections dilemmas from

(1) to (4) with dramas.

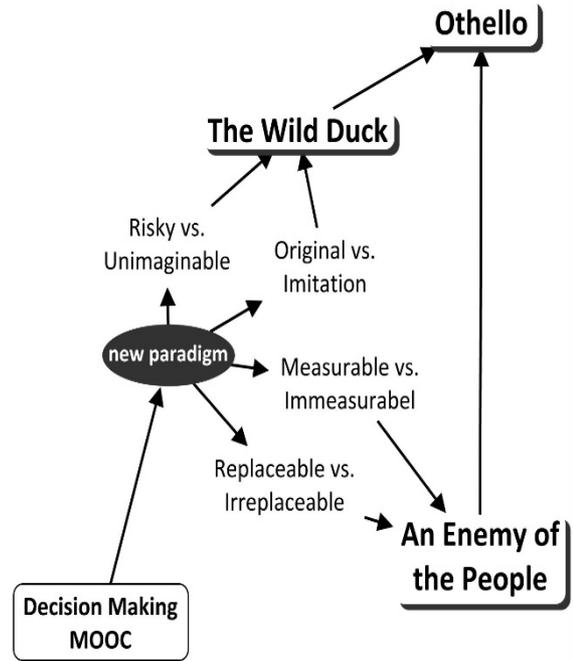


Figure 2: Dilemmas and dramas of new paradigm

Responsibility vs. Intellectual Integrity and Products vs. Hints dilemmas are presented by SlawomirMrožek’s The Police. Facts vs. Interpretation and Consumtariat vs. Netocracy dilemmas are presented by Samuel Beckett’s Waiting for Godot. These four dilemmas illustrate the problem of creating new context. This problem can be interpreted by William Shakespeare’s Romeo and Juliet. Fig. 3 depicts the connections dilemmas of new context with dramas.

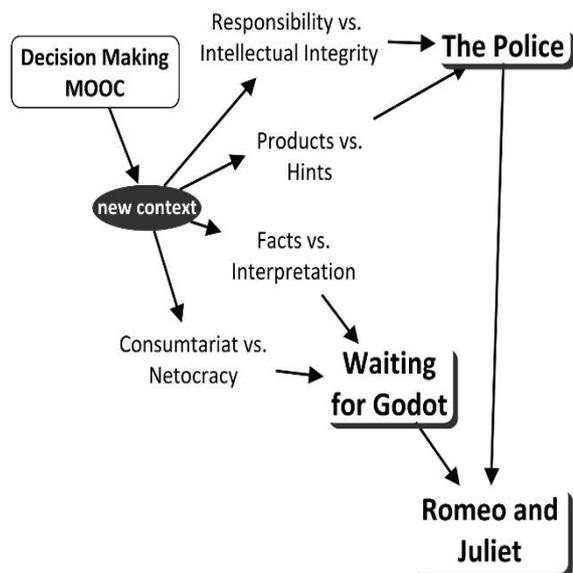


Figure 3: Dilemmas and dramas of new context

Hope vs. Possibility and Pre-filter vs. Post-filter dilemmas are presented by SlawomirMrožek’s The Emigrants. Cool vs. Retro and False Urgency vs. True Urgency dilemmas are presented by

SlawomirMrozek’s The Contract. These four dilemmas illustrate the problem of creating new validating. This problem can be interpreted by William Shakespeare’s Macbeth. Fig. 4 depicts the connections dilemmas of new validating with dramas.

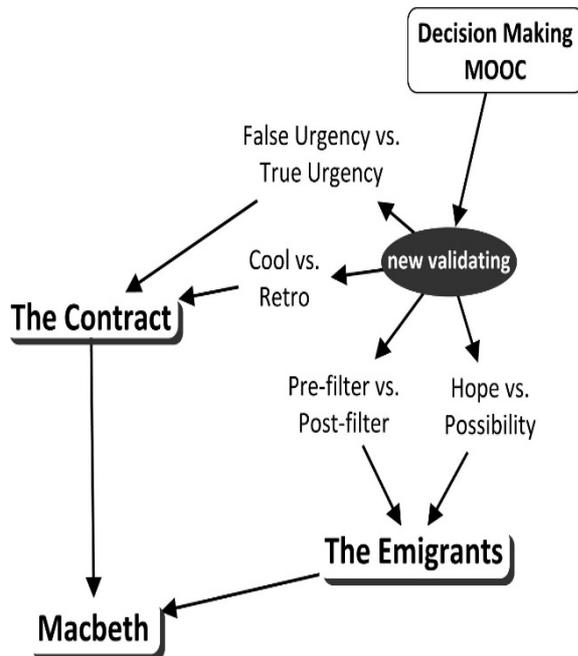
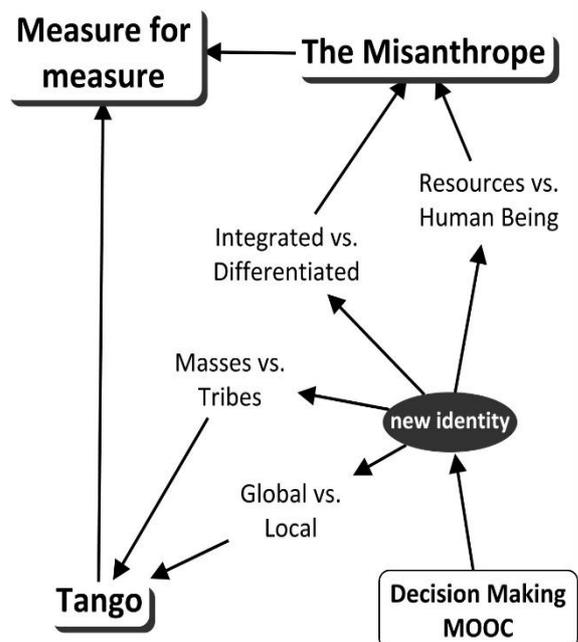


Figure 4: Dilemmas and dramas of new validating

Resource vs. Human Being and Integrated vs. Differentiated dilemmas are presented by Molière’s The Misanthrope. Masses vs. Tribes and Global vs. Local dilemmas are presented by SlawomirMrozek’s Tango. These four dilemmas illustrate the problem of creating new identity. This problem can be interpreted by William Shakespeare’s Measure for Measure. Fig. 5 depicts the connections dilemmas of new identity with dramas.



**Figure 5: Dilemmas of dramas of new identity**  
**IV. CONNECT DECISION DILEMMAS TO COMIC STRIPS**

Comic strips [5] are perfect for displaying a few minutes of moving image sequences, in which most of the gags simple physical humour. They summoned the little world of burlesque or slapstick, in which the main character is looking for a way out of absurd situations.

“What does laughter mean?” Henri Bergson [6] began his work on Laughter with this simple and general question. His intention is to analyze the things that make us laugh in order to find out how it is that they make us laugh. According to dilemmas I wrote scenarios and based on these scenarios a graphic designer drew strips. Fig. 6 depicts the main actors of the scenarios.



Figure 6: The main actors of Decision Making MOOC

**CONCLUSION**

Many have tried to describe the process of decision-making. No one has properly succeeded, so it is still up to humans to use the knowledge they need when they need it, then and there. One cannot make decisions based on the few steps described by decision algorithms. The thinking of a decision maker is an internal monologue whose building blocks are meaningful symbols. They are not comprised of data, nor do they operate according to the laws of mathematical logic. The thinking of decision makers cannot be codified and modelled [7]. There is no place for a tool that neglects or lacks the conviction and intention of a decision maker. So developing this course I focused decision-takers as human being whom decision making is an unending pathfinding quest. The conflicts of dramas and the comic strips could help to accept this unending pathfinding quest.

**REFERENCES**

- [1] Thomas Sedlacek, “Economics of Good and Evil: The Quest for Economic Meaning from Gilgamesh to Wall Street”, Oxford University Press, 2011.
- [2] Joseph D. Novak and Alberto J. Cañas, “Building on New Constructivist Ideas and Cmaptools to Create a New Model for education”, Proceedings of the First International Conference on Concept Mapping, Pamplona, Spain, 2004.
- [3] Jolán Velencei, J. (2014), “Age of Shallows: Humour Helps Pay Attention”, Proceedings of the 7th International Conference of Education, Research and Innovation, Sevilla, Spain, pp: 6208-6213, 2014.
- [4] ZoltánBaracscai, Viktor Dörfler, Mark Stierand, JasminaSzendrey and Jolán Velencei, “Dramatic Dilemmas:

- Drama-based Decision Support”, Proceedings of the Seventy-second Annual Meeting of the Academy of Management, Boston, USA, 2012.
- [5] Scott McCloud, “Understanding Comics: The Invisible Art”, William Morrow Paperbacks, 1994.
- [6] Henry Bergson, “Laughter: An Essay on the Meanings of the Comic”, Wildside Press LLC, 2008.
- [7] Daniel Kahneman, “Thinking, Fast and Slow”, Farrar, Straus and Giroux, 2011.

★ ★ ★