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# Updating Values. Perspectives on Design Education

Edited by Alessandra Bosco and Silvia Gasparotto

Proceedings of the International Symposium Updating Vaules – FutureDesignEd 2020 San Marino – January 16-17, 2020

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# An Entropy-Driven Scenario for Future Design Education



### **A New Paradigm**

In a *Domus* article published in 1998, John Thackara claimed that design would lead by entropy in the future, and he wondered how to avoid a similar dystopian scenario. As designers, we are aware of how wicked problems are really hard to face and how complexity has increased in these past decades: transdisciplinary skills are therefore increasingly required. Furthermore, we can only achieve incremental improvements to the situation, because a wicked problem typically has no definitive solution (Rittel, Webber 1973, in Erlhoff, 2008): a new mindset is therefore required, one that is capable of overcoming our traditional one (Morin, 2015), in order to face and manage the complexity. In this short paper, we propose a practice-oriented pilot project for design transdisciplinary education that overturns the Thackara proposal: we suggest assuming entropy as a new paradigm for design education.

1 https://www. baltanlaboratories. org/

### **Future Scenarios**

In order to face complexity, design education should assume entropy as paradigm, working on a transdisciplinary process to overcome the disciplinary barriers. In this framework, since the very beginning of their training, students, as future designers, should have to tackle uncertainty and disorientation. The pilot project we suggest should see provocation as its strategy, causing a kind of shock in the students. Starting from a challenge theme, students should be stimulated to imagine and build utopian or dystopian future scenarios through the Fictional-World Building method.

The whole course should stimulate in the students the motivational nature of the educational choice and develop and

strengthen possibility thinking. The teaching team should be multidisciplinary (a designer, an anthropologist, a neuroscientist, a physicist, an urban planner, and a philosopher), in order to take into account every aspect of the phenomena, thus overcoming only the designer's point of view. The idea is to make students face the implications, promises, and pitfalls of today's complexity from the very beginning of their training, to generate (following an initial phase of natural disorientation) a critical reflection on the urgency of design intervention, paying close attention to the responsibilities vis-à-vis the role of the designer (Drazin, in Gunn et al., 2013): meaning that, as designers, we have to pay attention to the consequences of our actions and always keep our responsibility in mind.

### **The Pilot Project Framework**

The pilot project approach will be reflective-interpretative and practice-oriented (Saikaly, 2003, p. 6), based on the balance between scientific rigour and design practice (fig. 1). The strategy should take place through the construction of an exploratory case-study in a chosen university, which will become the research analysis unit. The design practice method will be the Fictional-World Building method: other methods (e.g. hard science methods) could be selected and adopted depending on the individual case studies and challenges selected.

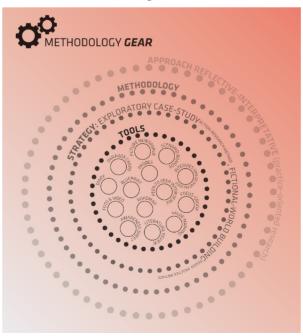


Figure 1.

The methodology
of the pilot-project
Source: Valentina
Frosini

# Phase 1 - UNDERSTAND (month 1)

Proposed tools: future newspaper, paradox cards (fig. 2), interviews, scenario boards. Starting from a selected challenge, students must build a utopian or dystopian future scenario, taking into account the different points of view of the other disciplines involved (e.g. anthropology, neuroscience, physics, urban planning, philosophy). The multidisciplinary team of professors will provide students, at the beginning of the process, with individual disciplinary interpretations of the challenge theme, through lectures, think tanks, and tools related to their specific discipline. This will allow students to recompose the complexity of the scenario from multiple points of view, and to provide lateral thinking with those elements capable of feeding the imaginative power of the mind. At the end of this first part, the entire teaching staff will be engaged in the drafting of a report to be shared with the students later.

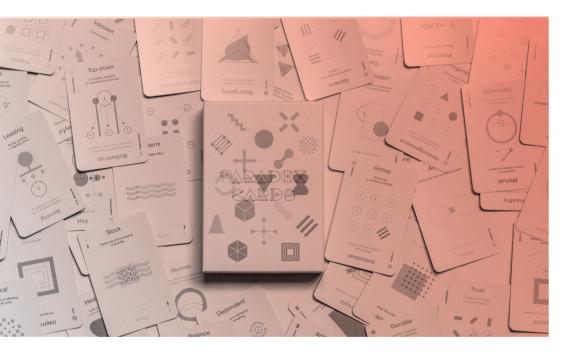


Figure 2.
The paradox cards. Source: https://namahn.com/tools/paradox-cards/

# Phase 2 - REFLECT (month 2)

Proposed tools: focused/open interviews, peer-to-peer interviews, diary, photo/video material, focus group.

The following month will be dedicated to a wide exploration of what the selected challenge stimulated in every student. This reflection phase will be fundamental to making students aware of what they have acquired (Cardano, 2001): a focus group, held by the multidisciplinary team of professors, will gather the individual reflections from the conversations. A report will be written at the end of the focus group and shared with the students in order to compare both points of view: the students' and the teachers'.

# Phase 3 - DEFINE (months 3 and 4)

Proposed tools: probes, paradox cards, blueprint, roadmap. Starting from the future scenario they built (utopian or dystopian) during the first phase, students should imagine solutions to either foster (utopian scenario) or avoid (dystopian) the future they imagined, thanks to the suggested tools. At the end of this phase, every future scenario must have at least one suggested solution, validated by the professors.

# Phase 4 - DISSEMINATE (month 5)

Proposed tools: value mapping, awareness sheet, literature review, desk research.

Students and professors should share the experience with a community of citizens in order to check and clarify the suggested solution. Finally, students and professors will work together to release a handbook that underlines every aspect of the learning process, taking into account the different points of view (students, professors, citizens).

### **Conclusions**

The pilot project aims to create a new educational context in which the transdisciplinary approach is concretely practiced, in order to face complexity. It is increasingly necessary to acquire the innovative courage already theorized by Maldonado (1970), in order to reform the educational offer of the designer and allow him/her to act appropriately and consciously. It is also expected that the final handbook should become an

2 http://makingsense.eu/about/ open-ended tool, capable of driving the improvement of this first pilot project (fig. 3). As an exploratory case-study, indeed, the project will be the prelude to new research projects that will figure out new and best frameworks. As forerunners of future scenarios, students, together with their teachers, are able to build new and open-ended educational projects.

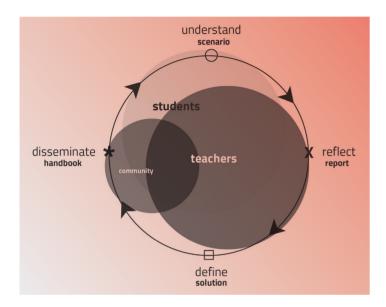


Figure 3. The improving education framework. Source: Valentina Frosini

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