Design Future Literacy in the Anthropocene: A Matter of Awareness

Manuela Celi, PhD
Chiara Colombi, PhD

The paper provides a critical discussion on the urgent need of a proper future literacy in design education. Without proposing a univocal model, the authors describe a series of possible steps toward a critical way of embracing and tinkering futures in design education.

According to De Kerckhove (2017), Design is the "form" of the project: an essence in becoming, therefore, an entity not closed and not defined. Design is inherent in the human condition, incorporated into our physical and mental being. In his reasoning on Future, Augè (2012) distinguishes sciences from the "disciplines of action". He argues that the utopias of the Nineteenth Century, thought by human and for human, had the limit of translating ideas not into open hypotheses rather into models and guides which act as an instruction manual. Nevertheless, the progressive loss of the ability of questioning a situation we witnessed in the last decades a is not consistent with a human and social perspective that have always requiring observation as well as reflection. "Design presents itself as serving the human but its real ambition is to redesign the human" as Colomina and Wingley suggest in their provocative "Are we Human?" (2016). They define the human condition as an unstable category characterized by its diversity, its plasticity, and its ability to modify its own abilities.

The Anthropocene era and the post-human condition, shortly introduced by these references, actually represent the challenging context that highlights the need for open ways to face change, especially for practices, such design, that has a reflective dimension (Schon, 1972) and for a meta-project of education. In regard of education, the work of Amsler & Facer (2017) that claims for critical anticipation inside educational projects is also inspiring.

With learning at its heart, this model has many practical implications for seeking to advance conditions of autonomy, democracy, and social justice in a variety of contexts.

Design, with its pervasive nature, has been the center of attention of educators for decades and represents a central theme on which critical, scientific and economic attention is focused. Acquiring knowledge and capacity to deal with futures means to discover new ways of making sense of the emergent present (or the thick present) and taking advantage of the unknowable as it starts to become knowable. In the actual context, moreover for designers, novelty includes objects and processes emerging from our activities (Poli, Rossel, Miller, 2013).

In the contemporaneity, where also the role of universities is required to change to answer to the increasing complexity and turbulence that characterize society and organizations, design education is required to act on the role of design as mediator among disciplines to promote not only multidisciplinary relations and connections but also to empower a constellation of actors able to enforce open innovation. The openness of such innovation needs to rely on a critical reading of opportunities and challenges in order to design processes and models that empower new ethics and aesthetics of futures. Anticipation empowered by Design education become a speculative tool and not a predicting reading which anticipates a predetermined solution. A metadesign approach should be privileged to open up new "futurescapes" instead of claim inevitable development based on past or present hints.

At the basis of the research there are several ideas joining design and anticipation studies.

Design has a huge responsibility in shaping goods, planning products longevity or life cycle. Therefore, future literacy has to play a strategic role in the design practice (Celi, Morrison 2017). Moving to a more theoretical level, the design capacity of imagining, shaping, and communicating new values and perspective can provide an epistemological contribution in understanding anticipation and anticipatory practice, through a transdisciplinary approach (Celi & Colombi, 2017). On an educational level it is widely acknowledged that design has a pervasive dimension and specific cognitive properties (Cross, 1982; Downton 2000, Oxman, 1999). Some of those are directly connected to the capacity of anticipating (Zamenopilos & Alexiou, 2007). Designing artifacts are a unique way of providing insights and theories, but the needed educational renovation requires a connection with the recent Anticipation literature (Poli, Rossel, Miller, 2013).

Furthermore, the authors work in the belief that in planning educational activities and objectives, the role of design cannot be limited to teaching methodologies and theories and therefore teaching a professional practice. In fact, today more than ever, design should push itself into strategic and organizational fields of education, identifying methods to enable metacognitive abilities.

The paper is based on the critical readings and juxtaposition of literature from Future Studies, Disciplines of Anticipation, and Design as well as anticipatory cases in design. How can we crossbreed design with anticipatory knowledge? What does it mean to be anticipatory in the design field? How can we nurture design education in an anticipatory way? Considering these questions as the challenges we are confronted with, the paper will suggest some hypothesis of how different anticipatory paths (Miller, 2015) can produce new approaches into design education.

The author will read the design process through the three types of conscious anticipation proposed by Miller (2015: 514): preparation, planning and discovery. Addressing present and long-term issues, from climate change to advanced design questions, and the responsibilities connected to these situations, design involves especially the third type of conscious anticipation that is the most representative of the design practice but also the less codifiable. Designers-to-be need a proper anticipatory education that not only provides them with tools, strategies and methods but also provides metacognitive skills and the intellectual capital needed to design possible sustainable and positive future. Within this perspective, the authors will propose a road map for a design anticipatory renovation.

While research and scholars have been mainly focusing on the visionary capability of designed futures the role of design, the present paper will offer a range of cases in order to tackle a possible interpretative model to enhance the speculative and inventive nature of designed futures into design education.

Keywords
Anticipation
Design Education
Future
Metadesign
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