

# Panarchy as adaptation paradigm in the anthropocene

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Panarchy is the paradigm of transition and change. Panarchy is the paradigm where small actions can have major effects for better or worse. It is to expect the unexpected. Panarchy holds the promise of positively changing the Anthropocene. By being prepared we can anticipate upon unexpected emerging phenomena which can be used as leverage for creating change.

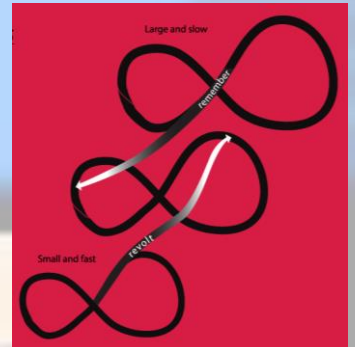
**A crisis becomes a disaster only when we respond to it with preformed judgments, that is, with prejudices (Hannah Arendt)**

True change is by transformative learning which transforms our sets of assumptions and expectations, our frames of reference (mindsets, habits of mind and meaning perspectives) Art&Design, artists, designers and philosophers are, by their very nature, capable of changing our frames of reference and thereby create opportunities for true change and adaptation.

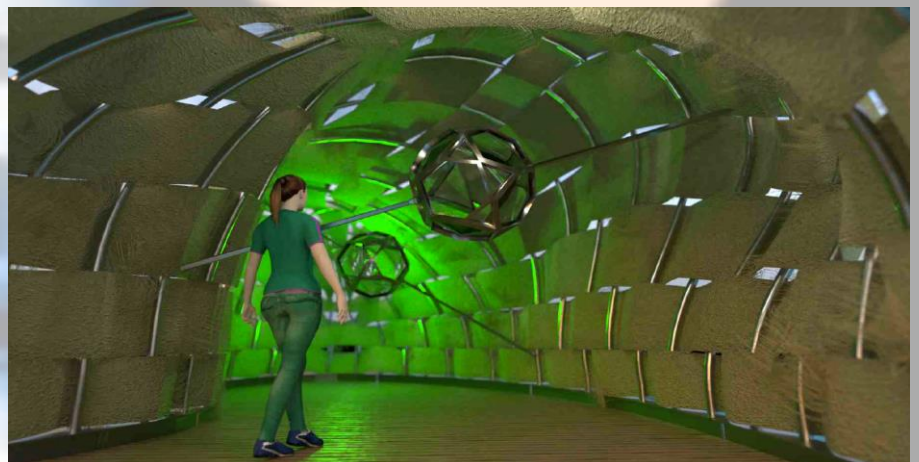


Floating climate adaptive building made from plastic waste and renewable hemp construction material, meant for changing mindsets of visitors. This Design addresses the issues of rising sea levels, changing urban climate by using biobased materials with climate remediative properties and recycling waste plastics into useful applications. Design by Minerva Art Academy B. Verheijden, M. Bosscher & KP Lindeman

Panarchy is defined as parallel and nested interactions of multiple complex adaptive dynamic systems on different time and spatial scales, originating from ecosystems theory (cf *Holling and Gudmundson*)



Complex adaptive systems are characterized by front loop phases of growth and conservation and back loop phases of creative destruction and reorganisation. Adaptation is by instrumental learning in the front loop and transformative or communicative learning in the back loop. (cf *Habermas and Mezirow*)



**Transformative or communicative learning is for preparing ourselves and our children for the task of renewing the world we live in. (free after Hannah Arendt 1954)**



Background design is by Jip de Beer "panarchy feedback loops"