

The Many Faces of Design



adaptive response
creative agency
immersive engagement

“Fuller defines design as the deliberate ordering of components. Thus distinguished from randomness, design implies the presence of intellect...”

Edmonson, 1986, p.288

**Elusive
terminology.**

“Social innovation is an initiative, product or process or program that profoundly changes the basic routines, resource and authority flows or beliefs of any social system. Successful social innovations have durability and broad impact. While social innovation has recognizable stages and phases, achieving durability and scale is a dynamic process that requires both emergence of opportunity and deliberate agency, and a connection between the two.”

Westley, 2008, p.1

A social innovation.

“...influencing perspective could influence practice that in turn could influence progress.”

E. Young in Westley, Patton, & Zimmerman, 2006, p.16

**A
multi-faceted
approach.**

“Managers promote **stability** while leaders press for **change**, and only organizations that embrace both sides of that contradiction can thrive in turbulent times.”

Kotter, J.P., 2001, p.85

MANAGING COMPLEXITY

planning
organizing
maintaining
problem solving
monitoring
controlling

MEDIATING CHANGE

envisioning
inspiring
aligning
interpreting human drives and needs

observation
intervention

de-

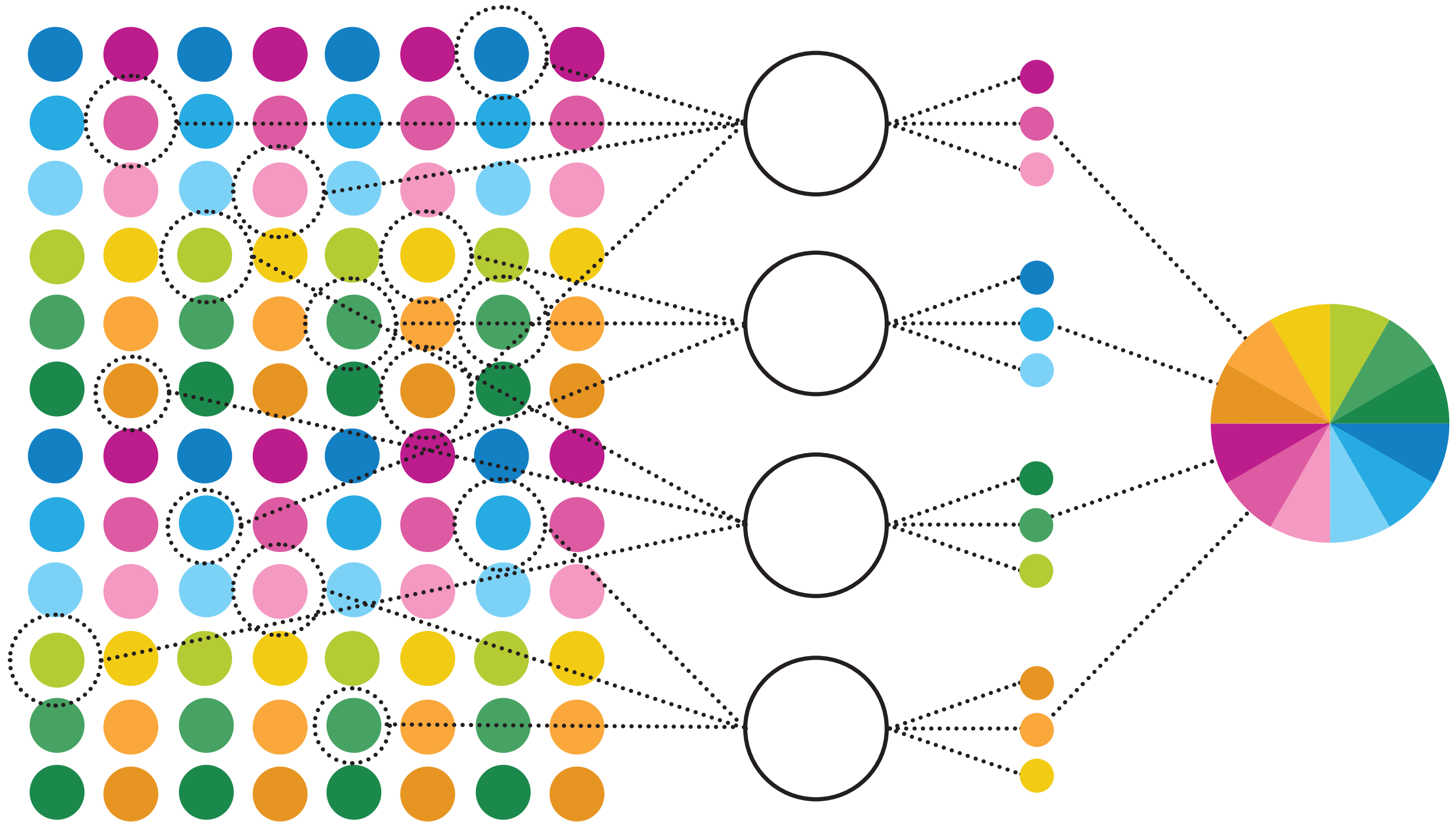
construction

EXPLORE

CLUSTER

EXPAND

INTEGRATE



BASIN LAYER I

perspective

BASIN LAYER II

practice

BASIN LAYER III

progress

SOCIAL INNOVATION ROLE

poet

DESIGN ACT

adaptive response

SOCIAL INNOVATION DOMAIN

beliefs

DESIGN FUNCTION

sensemaking

DESIGN PHASE

exploration

DESIGN OUTCOME

concept

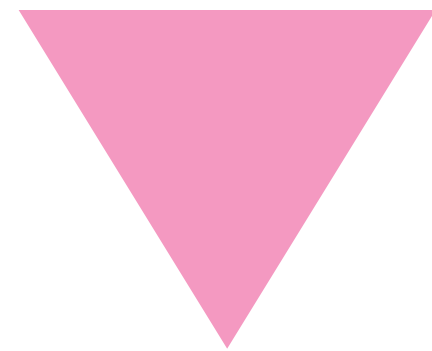
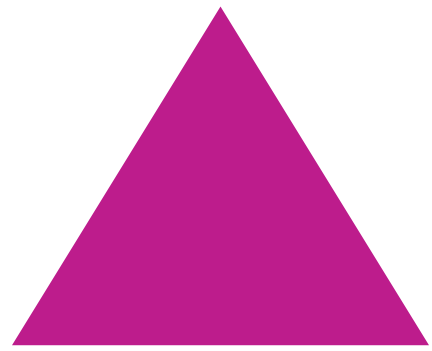
BASIN LAYER I

perspective

“Only human beings are able to discern such truths (science) and thereby participate in their own evolution (design)...humanity alone has access to the design laws of the Universe, and that has determined our unique evolutionary function...we are meant to solve problems...Our unique advantage is a faculty called ‘mind’, which can integrate disparate facts of experience.”

Edmonson, 1986, p.288

reflect on experience



respond through action

**We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.**

T.S. Eliot, Excerpted from Four Quartets

SOCIAL INNOVATION ROLE

designer

DESIGN ACT

creative agency

SOCIAL INNOVATION DOMAIN

routines

DESIGN FUNCTION

mediation

DESIGN PHASE

**synthesis &
iteration**

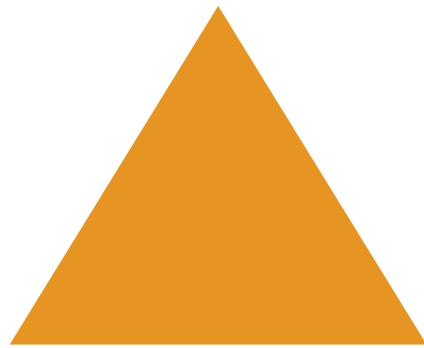
DESIGN OUTCOME

program

BASIN LAYER II

practice

process



structure

“Artifacts co-shape the use that is made of them, and thereby the relationship that arise between humans and their world...artifacts invite particular actions while discouraging others or even rendering them impossible...Because mediated actions make humans encounter the world in a particular way, the mediating artifact helps to determine how both the world (‘objectivity’) and those who act in it (‘subjectivity’) are present.”

Verbeek, 2005, p.171

SOCIAL INNOVATION ROLE

debater

DESIGN ACT

immersive engagement

SOCIAL INNOVATION DOMAIN

**resource &
authority flows**

DESIGN FUNCTION

systems integration

DESIGN PHASE

connection

DESIGN OUTCOME

implementation

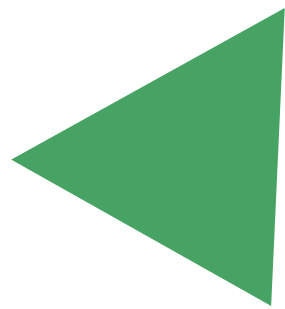
BASIN LAYER III

progress

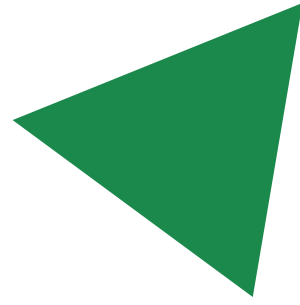
what is?



what could be?



what should be?



NICHE



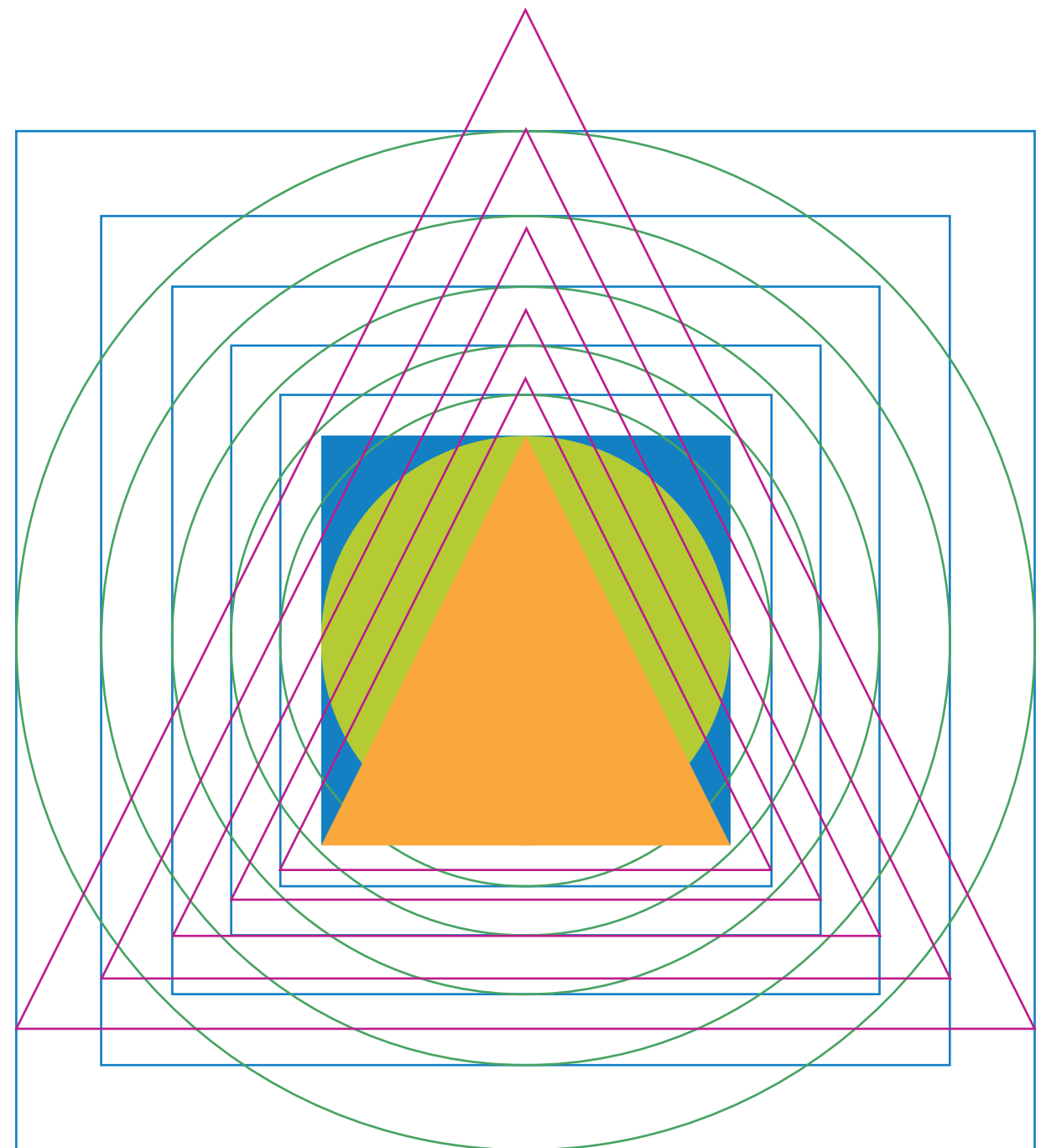
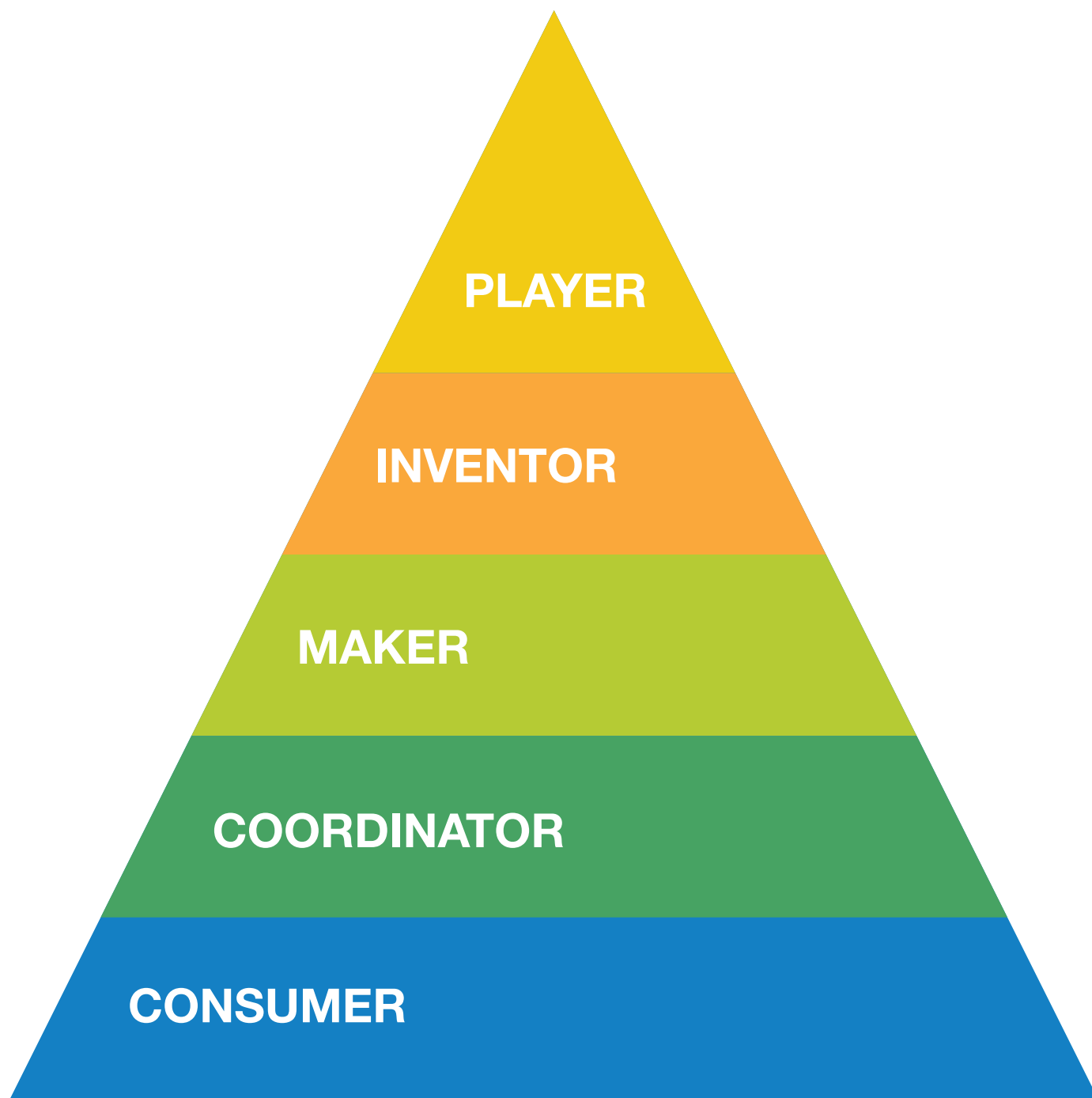
REGIME



LANDSCAPE



20000 30000 40000



One becomes **accountable** for one's presence in a system **through active engagement** with it— one's acts of intervention the means through which one shapes and sustains one's position in the system. In other words, one takes responsibility for one's existence by clearly defining related parameters and characteristics. In this light, 'designer' becomes analogous with 'creative human agent', these agents embedded elements of systems, and their acts of agency critical to the functioning of the whole.

BIBLIOGRAPHY

- Alexander, C. (1964). *Notes on the synthesis of form*. Cambridge, MA: Harvard University Press.
- Aaltonen, M. (2007). *The third lens: Multi-ontology sensemaking and strategic decision-making*. Burlington, VT: Ashgate.
- Arthur, B. (2009). *The nature of technology: What it is and how it evolves*. New York, NY: Free Press.
- Berger, W. (2009). *Glimmer: How design can transform your world*. Toronto, ON: Random House Canada.
- Botsman, R. & Rogers, R. (2010). *What's mine is yours: The rise of collaborative consumption*. New York, NY: Harper Business.
- Brand, S. (1999). *The clock of the long now: Time and responsibility, 1st Edition*. New York, NY: Basic Books.
- Brown T. (2012). From blueprint to genetic code: The merits of an evolutionary approach to design. *Rotman Magazine*, Spring, 17-21.
- Buchanan, R. (1992). Wicked Problems in Design Thinking. *Design Issues*, 8(2), 5-21.
- Chaisson, E.J. (2001). *Cosmic evolution: The rise of complexity in nature*. Cambridge, MA: Harvard University Press.
- Cross, N. (2007). *Designerly ways of knowing*. Basel, SW: Birkhäuser; London, UK: Springer.
- Diamond, J. (1995). The evolution of human inventiveness. In M.P. Murphy & L.A.J. O'Neil (Eds.), *What is life? The next fifty years: Speculations on the future of biology*. Cambridge: Cambridge University Press.
- Edmonson, A. (1986). *A fuller explanation: The synergetic geometry of R. Buckminster Fuller* [NetLibrary version]. Retrieved from <http://www.bfi.org/about-bucky/resources/books>
- Elliot, C. & Elliot, B. (1991). From the patient's point of view: Medical ethics and the moral imagination. *Journal of Medical Ethics*, 17, 173-178.
- Folke, C. (2006). *Resilience: The Emergence of a Perspective for Social-Ecological Systems Analyses*. *Global Environmental Change*, 16, 253-267.
- Funtowicz, S.O. & Ravetz, J.R. (1993). Science for the post-normal age. *Futures*, 25(7), 739-755.
- Gamble, J.A.A. (2008). *A developmental evaluation primer*. Montreal, QC: The J.W. McConnell Family Foundation.
- Geels, F.W. & Schot, J. (2007). *Typology of sociotechnical transition pathways*. *Research Policy*, 36, 399-417.
- Gunderson, L.H. & Holling, C.S. (2002). *Panarchy: Understanding transformations in human and natural systems*. Washington, D.C. Island Press.
- Institute without Boundaries. (n.d.). *Our tools*. Retrieved from <http://institutewithoutboundaries.ca/what-we-do/tools/>
- Johnson, S. (2010). *Where good ideas come from: The natural history of innovation*. New York, NY: Riverhead Books.
- Klanten, R., Bourquin, N., Tissot, T., & Ehmann, S. (Eds.). (2008). *Data flow: Visualizing information in graphic design*. Berlin, DE: Gestalten.
- Kolko, J. (2011). *Exposing the magic of design: A practitioner's guide to the methods and theory of synthesis (human technology interaction)*. New York, NY; Oxford, UK: Oxford University Press.
- Kolko, J. (2012). *Wicked problems: Problems worth solving* [Net Library Version]. Retrieved from <https://www.wickedproblems.com/read.php>
- Kotter, J.P. (2001). What leaders really do. *Harvard Business Review*, November, 85-96.
- Lappé, F.M. (2011). *EcoMind*. New York, NY: Nation Books.
- Martin, R.L. & Christensen, K. (2013). *Rotman on design: The best on design thinking from Rotman magazine*. Toronto, ON: Rotman UTP Publishing.
- Mau, B., Leonard, J., & the Institute without Boundaries. (2004). *Massive change*. New York, NY: Phaidon.
- Mau, B. (2010). Design and the Welfare of All Life. In L. Tilder, & B. Blostein, (Eds.), *Design Ecologies: Essays on the nature of design* (pp.10-25). New York, NY: Princeton Architectural Press.
- Midgley, G. (2000). *Systemic intervention: Philosophy, methodology, and practice*. New York, NY: Kluwer Academic/Plenum Publishers.
- Page, S.E. (2007). *The difference: How the power of diversity creates better groups, firms, schools, and societies*. Princeton, NJ: Princeton University Press.
- Papanek, V. (1971). *Design for the real world: Human ecology and social change*. New York, NY: Pantheon Books.
- Quilley, S. (2011) Open source economics: Looking for meaning in a throwaway world. *SiG@Waterloo, Innovation in Action Speaker Series*. Retrieved from <http://vimeo.com/25204944>
- Rittel, H.W. J. & Webber, M.M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4, 155-169.
- Varela, F.J. Thompson, E.T. & Rosch, E. *The embodied mind: cognitive science and human experience*. Cambridge, MA; London, UK: MIT Press.
- Verbeek, P. (2005). *What things do: philosophical reflections on technology, agency and design*. University Park, PA: Pennsylvania State University Press.
- Walker, B. & Salt, D. (2006). *Resilience thinking: Sustaining ecosystems and people in a changing world*. Washington, DC: Island Press.
- Westley, F., Patton, M.Q., & Zimmerman, B. (2006). [NetLibrary version]. *Getting to maybe: How the world is changed*. Retrieved from www.torontopubliclibrary.ca
- Westley, F. (2008). The social innovation dynamic. SiG@Waterloo. Retrieved from http://sig.uwaterloo.ca/sites/default/files/documents/TheSocialInnovationDynamic_001_0.pdf
- Westley, F., Olsson, P., Folke, C., Homer-Dixon, T., Vredenburg, H., Loorbach, D., Thompson, J., Nilsson, M., Lambin, E., Sendzimir, J., Banerjee, B., Galaz, V., & van der Leeuw, S. (2011). Tipping toward sustainability: Emerging pathways of transformation. *Ambio*, 40, 762-780.
- Westley, F. & McGowan, K. (2014). Design thinking, wicked problems, messy plans. In C. Reed & N.M Lister, *Projective ecologies* (pp.290). New York, NY: Actar Publishers.
- Zhang, T., Francesca, G. & Margolis, J.D. (2014). Does 'could' lead to good?: Toward a theory of moral insight. *Harvard Business School*. Retrieved from: <http://hbswk.hbs.edu/item/7472.html>