DESIGN SHAMANISM OR HOW TO EMBRACE IRRATIONALITY AND DESIGN FOR SYSTEMIC CHANGE

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ABSTRACT:

As the world is undergoing a shift into an emerging systemic and networked reality, design education too has to adapt its focus to meet this change. This paper outlines a possible way of doing this by introducing Design Shamanism and three key parameters for understanding and applying the Design Shamanic mindset. With no intention of producing a fully-fledged definition of Design Shamanism in a foundational design theoretical sense, the paper does offer a fruitful metaphor for reflection as well as practice. By understanding the emerging systemic reality and the transformation of end users into collectively intelligent co-designers, the Design Shaman can embrace irrationality and actively shape the future.

"Complex systems are shaped by all the people who use them, and in this new era of collaborative innovation, designers are having to evolve from being the individual authors of objects, or buildings, to being the facilitators of change among large groups of people."
(Thackara 2005)

"Traditionally, [shamanism] has been a method for problem-solving. While the specific nature of the problems may have changed over time, the need to solve problems has not."
(Harner 1999)

1. INTRODUCTION & HISTORICAL BACKGROUND:

1.1 MOTIVATION

With my MA studies in Art & Design at Royal Danish Academy of Fine Arts - School of Design coming to an end in the summer 2013, I have reached a natural point for reflection – not only in terms of future career but also considering the result of four and a half years of design studies in Copenhagen and abroad. With an emerging systemic reality1[1] unfolding globally, design education faces big challenges in how to respond. From my own educational experience, I've both encountered teaching that seems to widen the gap towards the systemic reality as well as teaching that has managed to anticipate the future with relevant tools. In the latter category, courses taught by the Danish social design/artist group Skæve Børn2[2] (English: Unadjusted Children) have been a clear highlight. Focusing on design methodology for social design, Skæve Børn introduced me to various creative tools such as Extreme Research, a way of immersing yourself in reality for extensive periods of time. With no space for doing the course full justice in this context, I will simply note that the process yielded interesting design solutions as well as great insights along the way. Acting as a personal eye opener, the course made me start reflecting on design methodology in a changing systemic reality.

This paper is very much a result of this (ongoing) process.

1.2 A STATE OF FLUX

Just like the design discipline itself, design education has always inhabited a flux state in-between various classical fields such as engineering, fine arts, science, ethnography and others. At the very heart of this we find two classic opposing design understandings that could be summarized as following: The black box 'irrational' stroke-of-genius designer (Donald Schön) fighting wicked problems3[3] (Rittel & Webber 1973) versus the 'rational' problem solving engineer-designer who always comes up with the empirically right solution (Herbert Simon).

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[1] Referring to Chapter 2: The Emerging Systemic Reality.
[2] Skæve Børn consists of social designers Martin Fagerlund & Thomas Pålsson. See the documentation of one of their recent projects here: https://vimeo.com/4963966
[3] Summarized as "The Romantic Account" by Fallman (2003) and with reference to Montuori & Purser (1995).

IDEO and other practitioners as well as design thinkers have helped bring design research, continuous prototyping and co-design into prominence and have thereby somewhat managed to bridge the gap towards ethnography and science in a meaningful way. However, the gap towards the creative irrationality strongly associated with the artistic field still remains somewhat open and unresolved (Fallman 2003). That said, design research has done much for demystifying and understanding the creative process in recent years[4], aided by insights from cognitive sciences and neuroscience.

Another aspect of the before-mentioned schism is the lone design genius vs. the agile team player. Design companies are faced with increasingly wicked design problems and are thus in need of a strong interdisciplinary team of designers to create solutions across different fields and formats. For this reason most design
companies these days will expect design graduates to be excellent team players. Combining the rational-irrational schism together with the need for collaboration across disciplines raises further questions and perspectives: Can the irrational design approach be incorporated into collaborative efforts? Can the team player be irrational? This is one of the questions that Design Shamanism seeks to answer.

Staying in our schism, it's worth devoting a few words to the term 'irrationality' in this context, as it's used quite differently across disciplines. In the scope of this paper, irrationality is about actively acknowledging the non-rational, non-linear part of design practice - that is: Intuition, creative leaps, serendipity, lateral thinking, modal shifts, opportunism etc. (Cross 2007). By using 'irrational' to cover all these well-documented yet non-linear creative methods, it's crucial not to dismiss them as some kind of mystical design magic. Contrary to the fields of cognitive science, math and others, irrationality here equals non-linear, proven design methods that historically oppose the rational engineer-designer understanding.

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[4] Bryan Lawson devoted an entire book for this explicit purpose: "How Designers Think: The Design Process Demystified" (Lawson, 1997). Another key contribution to dissecting and understanding the design process is "Designerly Ways of Knowing" by Nigel Cross (2006).

This paper sets out to fuse the design discipline's bridge towards ethnography and science with the bridge towards irrationality. For this purpose I will first look into the emerging systemic reality and then selective aspects of shamanism. Based on this I will introduce and outline the basics of Design Shamanism.

2. THE EMERGING SYSTEMIC REALITY

As a design student (and a design education) you have to ask yourself what you have to offer in a completely new systemic landscape of transformation and relation? What has young designers got to offer in a world where the average user soon is able to 3D print anything imaginable and crowd-sourced funding initiatives like kickstarter.com makes conventional business models as well as academic titles obsolete?5[5]

2.1 PERVASIVE COLLECTIVE INTELLIGENCE

The rise of new media in general and the Internet in particular has brought tremendous power from the privileged few to the masses. The result of the vast interaction and sharing of knowledge across the Internet has been named the massive brain, global brain or collective intelligence (the latter will be used throughout this paper).

With the concept of the collective intelligence and an increasingly intelligent and widely distributed Internet (ITU 2011) it's clear that designing today is designing for a new social order operating in a new, highly networked systemic reality. The power of collective intelligence pervades all fields. In business terms, Brand & Rocchi's identification of an emerging transformative paradigm precisely addresses the systemic nature of the future (Brand & Rocchi 2011). The increasing blur between the digital realm and the physical reality have made the collective intelligence more pervasive and powerful than ever in its ability to create real life change. Fuelled by global economic crisis, recent times has seen various manifestations of this in the shapes of Anonymous, Indignados, Occupy Movement, kickstarter.com,

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[5] With reference to Lawrence Zeegen, statistics from the UK shows how this is already happening to some extent. For instance only 41% of the designers working in the UK hold a degree level qualification (Zeegen 2011)

The New Aesthetic, the Arab Spring, the Obama Election campaign from 2008 and many others. What goes across all these different initiatives, companies and movements is the harnessing of collective intelligence for empowering human beings in pursuing real life change.

2.2 EMPOWERMENT

An important point is that collective intelligence is a tool and not a loaded phenomenon: Just like it can be utilized for empowerment such as arranging political demonstrations and crowdfunding great ideas, it can be exploited too in numerous ways, from crowdsourcing creative work and thereby devaluating the market, obtaining private data for shady marketing as well as good old hacking6[6]. With what seems like innumerous ways of utilizing and applying the collective intelligence, one thing seems for certain: As a tool, it has so far proved extremely powerful. A concept strongly linked to the collective intelligence and the

rise of the Internet is open source. Going from collective intelligence into the 'open source design movement' of Open Design, it's interesting to note how this movement is particularly successful in transcending the online/offline barrier and transforming the digital collective intelligence into real life change. Great examples are the recent dramatic increase in domestic 3-D printing as well as the many Fab Labs popping up across the world[7] offering an endless array of empowering tools (as well as great possibilities for hacking and rapid prototyping for designers). Perhaps the Global Village Construction Set is one of the most radical initiatives in terms of empowerment with its aim for "easy fabrication of the 50 different Industrial Machines that it takes to build a small, sustainable civilization with modern comforts"[8].

In the educational field, the Design Group's success with remote teaching at The Open University as well as the success of Coursera.org[9], a teaching platform offering free online courses from elite Western universities, are two

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[6] Looking at the concept of collective intelligence in terms of collective power, cyberwar and hactivism are perhaps the greatest contemporary examples of global utilization of innumerous servers in complex systems targeting 'enemy' servers.

[7] http://fab.cba.mit.edu/about/faq/ & http://www.ptonline.com/articles/3dprinters-lead-growth-of-rapid-prototyping

[8] Sales text from http://opensourceecology.org/

[9] Open University: http://www.open.ac.uk/ Coursera: https://www.coursera.org/

examples on how the educational field itself is exploring the new systemic reality.

However, the exploration here is primarily in terms of format - educational content for the systemic reality is a different discussion. While all sorts of different companies, organizations and movements are gradually adapting to the systemic reality it seems like design education is somewhat puzzled in terms of content: How do young designers train for this new systemic reality? Although a lot of the before-mentioned phenomenon have recently emerged, they come out of a historical and discursive context. Luckily the same applies to design education's possible response, as many design thinkers, companies, paradigms, understandings and toolsets have already anticipated this development. One needs only to think of John Thackara's classic metaphor of being inside the bubble and above it at the same time (Thackara 2005). Design Shamanism is born out of this discourse. However, in order to make sense of Design Shamanism, a basic introduction to shamanism is needed.

3. SELECTIVE ASPECTS OF SHAMANISM

Shamanism is a complex field with considerable amount of studies devoted to its many different aspects, with much still being debated to this day. For this reason it's important to note that this paper doesn't set out with the ambition to inform the ongoing humanistic studies on shamanism with a design theoretical perspective, but instead looks at some highly selective aspects of shamanistic studies to try and achieve vice versa. As a starting point, Åke Hultkrantz's definition of the shaman states "… (a) social figure who, with the help of assisting spirits reaches ecstasy for communicating with the supernatural world in the interests of his group members" (Hultkrantz 1973).

From this definition several well-established broader concepts around shamanism can be extracted. First of all it's worth noting that the shaman operates in a specific socio-cultural context – the universal term of 'shamanism' for covering very diverse cultural variations of rituals, beliefs, practice etc. have been criticized for this exact reason[10].

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[10] Notable critics include Alice Beck Kehoe and Mihály Hoppál.

Of Mircea Eliade's several definitions of shamanism, one famously states that it's "a technique of ecstasy" (Eliade 1972). The altered state of consciousness is considered crucial for the shaman's entrance into the spirit worlds. Through rituals and with the help of different aids, the shaman acts as mediator between the different worlds. Strongly embedded in the culture and the social order, the shamanic role includes functions such as receiving visions, healing, storytelling, fortune-telling, acting as psychopomp or other forms of divination (Hoppál 2005). In shifting between realities and performing the various functions, the ability for a spirit to leave the body for other realities is crucial.

A few closing notes on semantics and the implications of using 'shamanism' as a metaphorical component in Design Shamanism. First of all 'shamanism' is a term under much critique with other alternatives having been proposed[11]11. In this paper 'shamanism' is introduced as a useful metaphor, and so while acknowledging the academic debate, this paper is not taking part in that discussion. Secondly, I realize that 'Design Shamanism' and the 'Design Shaman' might provide two different sets of connotations, the first being more of a metaphorical abstraction and the latter referring to a certain privileged role in society. The Design Shaman is not to be read as a new design interpretation of 'classic shaman', with whatever implications that has in terms of social and economical status etc. As co-founder of Foundation for Shamanic Studies Sandra Harner states: "By viewing creativity through the experience of the shamanic journey, we begin to see that creativity is not a special domain limited to the gifted few, nor can it be reduced to a rote algorithm." In this respect and to avoid unnecessary confusion, I will use Design Shamanism and Design Shaman interchangeably in the sense that a Design Shaman simply is defined as a practitioner of Design Shamanism.

From this very brief introduction, we will take a look into certain aspects of shamanism and thereby expand the analogy of Design Shamanism.

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[11] Mihály Hoppál suggests the terms "Shamanhood" or "Shamanship", with reference to the difference in etymological connotations of -ism, -ship and –hood (religious belief system vs. discipline or function) (Fridman 2002).

4. DESIGN SHAMANISM

How does shamanism fit the emerging design role in the 21st Century? The first aspect to investigate is the traditional social role of the shaman. Design Shamanism is all about designing in the interest of a large group of people. Moreover it's about designing for social change. Just like collective intelligence is a neutral tool, so can change be both good and bad. Thackara raises the issue with his comment on how "our dilemma is that small design can have big effects" (Thackara 2005). Indeed, the Design Shaman carries a big responsibility in his/her explicit job of designing for the collective intelligence. The cultural codes in which the classic shaman operates are replaced by a complex, global system for the Design Shaman to navigate in.

In shamanism, Mikael Winkelmann emphasizes role-taking, stating that "… role-taking through symbolic communication enables one to treat one's own identity as an object" (Winkelmann 2000). For the Design Shaman, identities and roles are crucial as s/he understands that a wicked problem doesn't have a single objective "true" solution (Glasersfeld 1989). For this reason Design Shamanism embraces co-design methodology as a key toolset for exploring and solving a design problem. Being a Design Shaman is ultimately about empowering, both through the creative process and through an ultimately viable design solution.

For the shaman, entering an altered state of consciousness is essential. Going back to the role of irrationality in design thinking, I suggest the Design Shaman's active pursuit and utilization of non-linear, non-rational creative methods as a fruitful abstraction over entering this state. It's important to note that Design Shamanism by no means seeks any kind of scientific or spiritual truth from the alternate realities. Instead of searching for "the right answer"[12]12, the Design Shaman is occupied with obtaining creative insights that will produce a viable and satisfying design solution.

To turn these initial reflections on Design Shamanism into a coherent instrumental design theoretical mindset (Galle 2011) I suggest the following three key parameters:

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[12] Referring back to the rational engineer-designer understanding from Chapter 1.2

5. DESIGN SHAMANIC PARAMETERS

5.1 SYSTEMIC THINKING (THE KNOWLEDGE OF KNOWING)

Understanding the networked, systemic reality is highly important for the Design Shaman, as it serves as the framework for creating real life social change. Studies within cybernetics as well as the second order understanding advocated by Krippendorff in The Semantic Turn (2006) could both serve as useful resources in a Design Shamanic curriculum. Radical Constructivism further informs on the challenges and opportunities coming from the changing and highly complex reality. With the full implications of adopting a Radical Constructivist mindset in the field of design yet to be researched (and seen), it's crucial to study the knowledge of knowing in its own right and free it from specific disciplines (such as engineering) and agendas (such as sustainability)[13]. While proving valuable in both examples of application, the point is systemic thinking's built-in potential to span across disciplines, philosophies and fields for creating social change[14]. The knowledge of knowing is a language in it's own right. The Design Shaman is an expert in this language.

5.2 INTERVENTIONS (SOCIAL ACTION AND REACTION)

Design Shamanism's concern for creating real life change is ultimately about empowerment and the meaningful inclusion of the collective intelligence. Thackara was indeed right when announcing that the heyday of the celebrity solo designer had come to an end (Thackara 2005). The shamanic soul's ability to leave the body as well as possess other bodies seems like a fitting abstraction over the Design Shaman's empathetic qualities in engaging with reality and interacting with stakeholders. As a consequence of a Radical Constructivist understanding, co-design methods such as experience prototyping, cultural probing, design games etc. (Halse 2010) become key for getting as close as possible to understanding the wicked problem as well

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[13] The cyberneticist Gregory Bateson serves as a brilliant example of this principle himself, being an anthropologist, social scientist, linguist, visual anthropologist, semiotician as well as cyberneticist.

[14] By doing so it might even bridge the historical divide and help create the Third (Vesna 2001) / Fourth (Lehrer 2008) Culture.

as creating a satisfying solution. In the continuous intervention with the real life problem field, action and reaction form a continuum of meaning and change, where prototyping serves as a potentially endless activity for getting ever so closer to the perfect design solution (that per definition doesn't exist). Numerous viable solutions do however thrive in this space.

5.3 IRRATIONALITY (EMBRACING NON-LINEARITY AND NON-RATIONALITY)

It's worth repeating the earlier definition of irrationality as nonlinear, proven design methods that historically oppose the rational engineer-designer understanding. Out of the many different creative methods that fall into this category, I believe it's worth highlighting serendipity[15]. While being perhaps one of the hardest methods to fully embrace as a creative tool, history is full of lucky chance encounters, Penicillin and LSD being two of the more prominent examples[16]16. When Louis Pasteur in 1854 famously stated that: "In the fields of observation chance favors only the prepared mind"[17]17, he managed to turn the concept of "happy accidents" from fairytale phenomenon into a serious and desirable tool.

Taking a look at the step in the creative process commonly referred to as the incubation period, Harner makes a direct link to the shamanic altered state of consciousness: *"It is common that within the shamanic divination journey, the journeyer receives a revelation of quite unexpected content - an inspiration. Then, that inspiration must be put into practice and verified, thus completing the process with the creative act"* (Harner 1999). With strong associations to critical mass theory, Harner's observation expands Pasteur's statement into a Design Shamanic context. Leaving the romantic conception of the mystical genius insight for good (Fallman 2003) Design Shamanism is all about actively acknowledging and preparing for the *'shamanic divination journey'*. This is done exactly by applying the two beforementioned parameters; interventions based on systemic thinking.

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[15] Appearing in English language for the first time in a letter by Sir Horace Walpole to Horace Mann in 1754, the term is derived from the Persian fairytale *The Three Princes of Serendip* in which the three princes in question on their way makes pleasant "accidental discoveries" unrelated to their quest.
[16] Penicillin was discovered by Alexander Fleming in 1928 and LCD by Swiss scientist Albert Hoffmann in 1943.
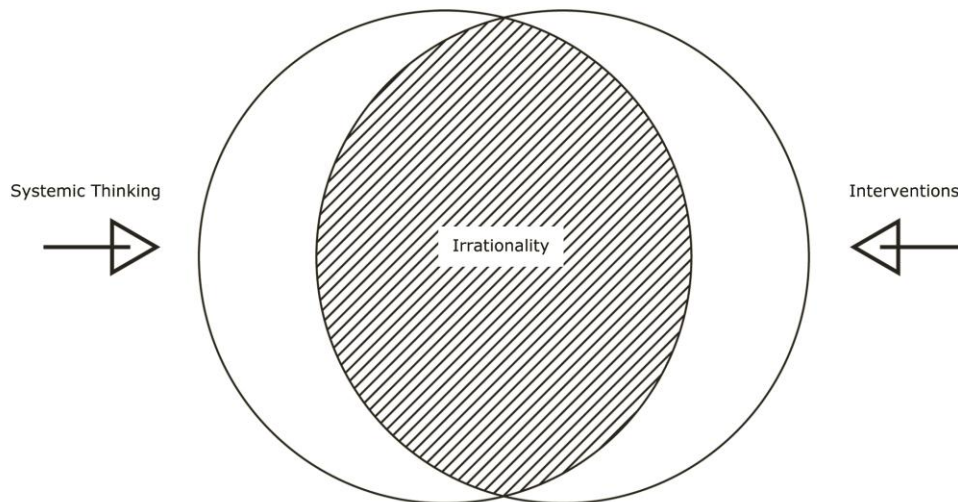[17] Originally from a lecture at University of Lille 7th December 1854.

Fig. 1: The relation between the three Design Shamanic parameters. Integrating systemic thinking and interventions determines the success of embracing irrationality. The act of integration is analogous to the ritualistic practice of the shaman's entrance to an altered state of consciousness.

6. CONCLUDING REMARKS

By understanding the emerging systemic reality as well as drawing from core aspects within shamanic practice, Design Shamanism outlines an instrumentalist design mindset for embracing irrationality and providing wicked problems with satisfying solutions. With the introduction of the three key parameters: Systemic thinking, Interventions an Irrationality, Design Shamanism sends the team-playing co-designer on an irrational *'divination journey'*. By explicitly utilizing the collective intelligence, Design Shamanism is ultimately about human empowerment and (co-) designing for real life change. With my own educational experience in mind, I see a strong potential for adopting and implementing Design Shamanism in curriculums as well as hands-on courses.

7. ACKNOWLEDGEMENT

REFERENCES

Bateson, G. (1972) Steps to an Ecology of Mind: Collected Essays in Anthropology, Psychiatry, Evolution, and Epistemology. Chicago: University Of Chicago Press.

Berman, M. (2007) The Nature of Shamanism and The Shamanic Story. Newcastle: Cambridge Scholars. Retrieved 08.10.2012 at: http://www.c-s-p.org/flyers/9781847183569-sample.pdf

Brand, R. & Rocchi, S. (2011) Rethinking value in a changing landscape. A model for reflection and business transformation. A Philips design paper. Amsterdam: Koninklijke Philips Electronics N.V. Retrieved 08.10.2012 at: http://servicedesign.laurea.fi/presentations2011/Philips%20-%20Paradigms.pdf

Brown, T. (2009) Building to think or the power of prototyping. In Change by Design, p. 87-108. New York: HarperCollinsPublishers.

Brown, T. (2009) Design Thinking. Retrieved 08.10.2012 at: http://www.unusualleading.com/wpcontent/uploads/2009/12/HBR-on-Design-Thinking.pdf

Buchanan, R. (1995) Wicked Problems in Design Thinking in The Idea of Design: A Design Issues Reader, V. Margolin and R. Buchanan, Editors. Cambridge: The MIT Press.

Buchenau, R. (1995) Experience Prototyping in DIS p. 424-433. New York: ACM.

http://coursera.org

Cross, N. (2007) Designerly Ways of Knowing. Basel etc.: Birkhäuser.

Eliade, M. (1972) Shamanism: Archaic Techniques of Ecstasy. Princeton: Princeton University Press.

http://fab.cba.mit.edu/about/faq/

Fallman, D. (2003) Design-oriented Human-Computer Interaction, Proceedings of CHI2003, Conference on Human Factors in Computing Systems, CHI Letters, Vol. 5, Issue No. 1 (Fort Lauderdale, Florida, April 5-10), New York, NY: ACM Press, pp. 225-232.

Fridman, E.J.N. (2002) Minutes of the General Assembly of the ISSR, Held at Viljandi Cultural College, Viljandi, Estonia, August 16, 2001. Published in Shaman, 10/1-2 (2002), 198-200.

Galle, P. (2011) Foundational and Instrumental Design Theory. Design Issues, 27(4), 81-94.

von Glasersfeld, E. (1989) An Exposition of Constructivism: Why Some Like it Radical. JRME Monographs, #224. Reston: NCTM. Retrieved 10.08.2012 at: http://www.oikos.org/constructivism.htm

Halse, J. (2010) Rehearsing the Future. Copenhagen: The Danish Design School Press.

Harner, S. (1999) Shamanism and Creativity. In Shamanism Annual - Shamanism, Fall / Winter, Vol. 2, No. 2. Mill Valley: Foundation for Shamanic Studies. Retrieved 08.10.12 at: http://www.shamanism.org/articles/article12.html

Hoppál, M. (2005) Sámánok Eurázsiában. Budapest: Akadémiai Kiadó.

Hultkrantz, Å. (1973) A Definition of Shamanism. In Temenos, Vol. 9. Helsinki: Finnish Society for the Study of Comparative Religion, 25–37.

International Telecommunication Union (2011) The World in 2011 - ICT Facts and Figures. Retrieved 08.10.12 at: http://www.itu.int/ITUD/ict/facts/2011/material/ICTFactsFigures2011.pdf

Kramer, M. R. & Porter, M. E. (2011) Creating Shared Value. How to reinvent capitalism – and unleash a wave of innovation and growth. Boston, Massachusetts: Harvard Business Publishing.

Krippendorff, K. (2006) The Semantic Turn; A New Foundation for Design. Boca Raton, London, New York: Taylor&Francis, CRC Press.

Lawson, Bryan (1997) How Designers Think: The Design Process Demystified, 3rd ed. Oxford, UK: Architectural Press.
Leete, A. & Firnhaber R. P. (2004) Shamanism in The Interdisciplinary Context. Boca Raton: BrownWalker Press.

Lehrer, J. (2008) The Future of Science… Is Art? In Seed Magazine online. Retrieved 08.10.2012 at: http://seedmagazine.com/content/article/the_future_of_science_is_art/

Miller, V. (2011) Understanding Digital Culture. London: Sage Publications Ltd.

Montuori, A. & Purser, R. E. (1995) Deconstructing the Lone Genius Myth: Towards A Contextual View of Creativity. In Journal Design Shamanism or How to Embrace Irrationality and Design for Systemic Change, p. 14 of Humanistic Psychology 1995; 35; 69. London: Sage Publications Ltd.

http://www.open.ac.uk/

http://opensourceecology.org/

http://www.ptonline.com/articles/3d-printers-lead-growth-ofrapid-prototyping

Rittel, H. and Webber, M. (1973) "Dilemmas in a General Theory of Planning". Policy Sciences, Vol. 4, pp 155-169. Elsevier Scientific Publishing Company, Inc: Amsterdam.

Schön, D. (1987) Educating the Reflective Practitioner. San Francisco: Jossey-Bass.

Simon, H.A. (1996) The Sciences of the Artificial, third edition. MIT Press, Cambridge, MA.

Skæve Børn (2011) Extreme Research, The Randomizer etc. Experimental design methods introduced as part of the interdisciplinary course: "Impossible Gardens" taught at The Royal Danish Academy of Fine Arts - School of Design in the period of 29.09.2011 - 4.11.2012.

Snow, C.P. (1998) The Two Cultures. Cambridge: Cambridge University Press.

Thackara, J. (2005) In The Bubble: Designing in a Complex World. Cambridge: MIT Press.

Vesna, V. (2001) Towards a Third Culture: Being In Between. Published in Leonardo Online. Vol. 34, number 2, p. 121-125. Cambridge: The MIT Press.

Winkelman, M. (2000) Shamanism: The Neural Ecology of Consciousness and Healing. Westport: Greenwood Publishing Group.

Zeegen, L. (2011) What Use is Design Education. Published in Iridescent (Icograda Journal of Design Research) Vol. 1. 2009-2011. Montreal: Iridescent.