Critical Transition: Merging Approaches Toward Sustainability

Liene Jakobsone[(✉)] [iD]

Art Academy of Latvia, Riga, Latvia
`liene.jakobsone@lma.lv`

Abstract. This paper suggests that merging Critical Design and Transition Design approaches might mutually complement them and increase their efficiency in inducing change. The discourse departs from acknowledging the necessity for a large-scale transition towards sustainable lifestyles. It recognizes as problematic the current mainstream design approaches that are focussed on immediate problems and 'technological fixes' within the dominant socio-economic paradigm. The emerging Transition Design is a promising step towards tackling transition as a systems-level issue, and towards conception of entirely new lifestyles. Critical Design is already recognized as a useful tool within one stage of the Transition Design – the visioning. In this paper, however, the two design approaches are shown to have considerable similarities and hence their relationship could be expanded. Critical Design could productively contribute also to adopting a different mindset, proposing other values, and in facilitating research and participation.

Keywords: Critical Design · Transition Design · change · sustainability

1   Transition, Sustainability and Sustainment

We live in times of the "great transition" (Manzini, 2015b, p. 2). Western societies are beginning to realize that there is need for change in order to save the planet and maintain our well-being. In their 1972 project on the predicament of mankind, Club of Rome defined the most pressing issues of our time, warning that the resources of our planet pose limits to the economic growth we have been pursuing in the preceding decades (Meadows, et al. 1972). However, now 50 years later there is still no shared understanding of how to tackle this situation: solutions vary in the range from the traditional 'technological fixes' to regulations and standards, to social entrepreneurship and individual commitments to live more sustainably according to one's conception of sustainability. Manzini compares the scale and the character of this process with the changes that Europe underwent in the transition from the feudal civilization to industrial urban society (Manzini, 2015b, p. 2). There are changes on both local and global level, in culture, economics, politics and technologies, with different parallel regimes conflicting with each other in attempt to either support or oppose the transition.

Despite the rising societal awareness and even actual transformations on the ground, design professionals largely avoid considering design as an agent capable of contributing to this change and instead continue to support unrestrained consumerism (Fry, 2017, p. 99). There is no consensus on prerequisites of sustainability and respectively – on how to design sustainably. Even the most frequently quoted definition of sustainability – "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland and Khalid, 1987, p. 54) – contains several significant shortcomings. Firstly, it is still closely linked to economic growth, secondly, this definition of sustainability is anthropocentric and ignores the interdependence of all life forms, and thirdly, it does not take into account the extreme socio-economic inequalities (and the associated incomparable environmental damage caused) that remain unresolved already today, not to mention some abstract future generations. (Fry, 2009, p. 42).

Considering this ambiguity of definitions, Fry suggests entirely new naming associated with a new conception of sustainability. He also introduces the term 'defuturing', which is intended as a "conceptual tool needed to define the unsustainable and identify how it takes the future away" (Fry, 1999, p. IX). It describes the actual state of affairs, including the mainstream limited idea of sustainability. As an alternative to the "discredited rhetoric of Brundtland-style 'sustainability'" Fry suggests the term 'sustainment' and argues that it "will not occur of itself; it can only occur by design" (Fry, 2009, p. 45). Furthermore, the practice of design needs to undergo a significant change in its economic and cultural role in order to support the sustainment.

In relation to his aforementioned historical comparison Manzini identifies three main regimes that coexist at this moment: Regime1 with its mainstream 20th century economy of scale and a product-oriented well-being; Regime2 with its emerging winner-takes-all economy and an individualized service-oriented well-being; and the Regime3, in which limits of the planet are recognized in conceiving and realizing new kinds of ideas, practices and networks – small, open, connected, localized and resilient. This is where also a new design culture emerges (Manzini, 2015a, p. 58).

2   Design for Sustainment

With this intention – to seek ways in which design can contribute to systemic and definitive change towards sustainment, a new approach to designing was conceived in 2015 by a group of like-minded scholars at the School of Design, Carnegie Mellon University. This new approach, named Transition Design, acknowledges that we live in transitional times, and is based on the premise that there is "need for societal transitions to more sustainable futures and the belief that design has a key role to play in these transitions" (Irwin, Kossoff, and Tonkinwise, 2015, p. 4). It is seen as four interrelated and mutually reinforcing areas of knowledge, action and self-reflection: visions; theories of change; mindset and posture; and new ways of designing. Advocates of this new design approach believe that the whole society, including designers, needs to reconsider its expectations and assumptions, and set new goals accordingly in order to achieve the necessary change. They urge designers to revise their mindsets and adopt a new paradigm in design to discontinue the defuturing effect.

Another, more established design approach, called Critical Design, emerged in the 1990s at the Royal College of Art, London. Although not intentionally related to sustainment, it also aims at challenging narrow assumptions and preconceptions, and disrupting the status-quo. By use of design proposals that are fictional and provocative, in form of objects and their use scenarios (often depicted in photographs and videos) Critical designers attempt to raise awareness, expose bias and provoke discussions on the role products play in everyday life (Raby, 2008, p. 94).
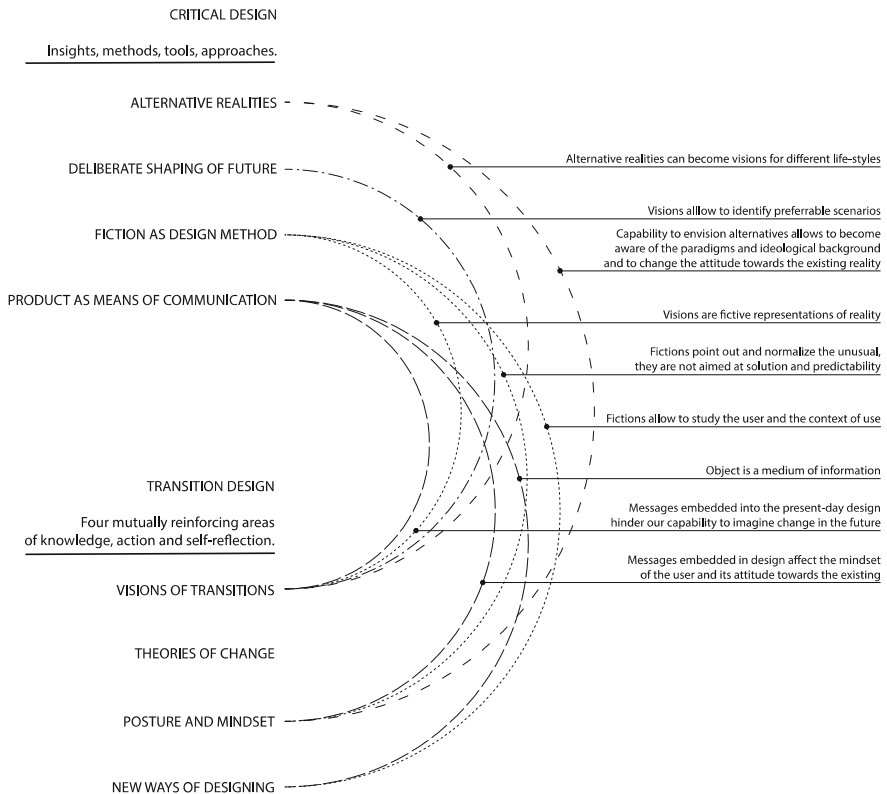
CRITICAL DESIGN

Insights, methods, tools, approaches.

ALTERNATIVE REALITIES

DELIBERATE SHAPING OF FUTURE

FICTION AS DESIGN METHOD

PRODUCT AS MEANS OF COMMUNICATION

TRANSITION DESIGN

Four mutually reinforcing areas
of knowledge, action and self-reflection.

VISIONS OF TRANSITIONS

THEORIES OF CHANGE

POSTURE AND MINDSET

NEW WAYS OF DESIGNING

Alternative realities can become visions for different life-styles

Visions allow to identify preferrable scenarios

Capability to envision alternatives allows to become aware of the paradigms and ideological background and to change the attitude towards the existing reality

Visions are fictive representations of reality

Fictions point out and normalize the unusual, they are not aimed at solution and predictability

Fictions allow to study the user and the context of use

Object is a medium of information

Messages embedded into the present-day design hinder our capability to imagine change in the future

Messages embedded in design affect the mindset of the user and its attitude towards the existing

Fig. 1. Points of overlap or continuity between the insights, methods tools and approaches of Critical Design and the four mutually reinforcing areas of knowledge, action and self-reflection of Transition Design. The left side of the scheme shows certain concepts and insights discussed in preceding body of literature on Critical Design and Transition Design, while the right side of the scheme is the contribution of the author, identifying the points of overlap or continuity.

However different they might seem, there strong overlaps between Critical Design's and Transition Design's objectives and methods. Both are deliberately aimed at challenging the capitalist mindset, conformist values, consumer culture and related phenomena, and are determined to tackle them as a disciplinary issue addressing also the design community. Becoming aware of these overlaps opens up new opportunities for further practical and academic research on the wider integration of the two design fields. This

paper identifies and discusses these similarities and proposes a synthesis of the two design approaches. The findings are represented visually in the Fig. 1 designed by the author of this research.

3 Learning for and Through Design

This proposition of this paper departs from the perspective of Critical Design, as the author's previous research has allowed to conclude that this design practice offers designers opportunities for learning and emancipation. That is also the motivation for suggesting integration of Critical Design into the Transition Design approach, as it could similarly contribute positively to the self-awareness of the practitioners of Transition Design.

Critical Design was largely conceived and developed in an educational safe space – open for experimentation and free from market constraints. Although in certain cases it has also found instrumental application within commercial context, Critical Design is still predominantly practiced as a specific form of exploration and cognition. Its products are recognized as providing new knowledge in themselves – "a kind of tacit knowledge creative professionals possess which cannot be separated from their perception, judgement, and skill" (Seago and Dunne, 1999, p. 16). Critical designers seek for new ways to expand design's innovative potential, even if it entails unorthodox methodologies, such as 'design-centred' approach (as opposed to 'user-centred'), "as a way to help potential users see possibilities beyond those they already know" (Dunne and Gaver, 1997, p. 362). Critical practices are being used to build intellectual basis for design, and to promote its theoretical development through and from within design practice (Mazé and Redström, 2009, p. 28). Critical Design has already been integrated into curricula and design research spaces assuming the role of a research method (Boserman, 2019, p. 125). These practices also allow for disciplinary criticality: on the individual level – in relation to the practitioner and their own effort to become self-aware or reflective (Mazé, 2009, p. 389), serving as "a professional ethical stance for designers" (Bardzell and Bardzell, 2013, p. 3298); on meta-level as a kind of "criticism from within" engaging in "ideological or intellectual" questions of design (Mazé, 2009, p. 391); and as a medium to express critique of other issues in society (Mazé, 2009, p. 395).

Critical Design approach gives designers the opportunity to consider our world through different paradigms. This capability to envision alternatives to the mainstream Western capitalist worldview is a crucial prerequisite also within the framework of Transition Design. However, that is not enough, – designers also need to become aware of the "historical forces that have created the context in which design has emerged as a particular kind of delimited practice" (Willis, 2015, p. 73). That implies understanding the principles of many other fields of Humanities, at the same time not seeing those as a kind of 'complimentary studies' or appropriating them instrumentally, but instead, finding new ways to connect them with design (Willis, 2015, p. 73). It is also necessary to comprehend the process that Willis has named the 'ontological designing' or the relation between people and their material environment. In this theory she points out that design is far more pervasive than it is generally recognised, and that we are influenced by the process of designing as well as by the product of our design, without even realizing that (Willis, 2006, p. 80).

To conclude, Critical Design practices can provide new insights to complement Transition Design approach, but knowledge from other fields of study is crucial to build awareness, facilitate self-reflection and adoption of new paradigms.

4   Similarities Between Critical Design and Transition Design

This incentive to propose merging two seemingly very diverse design approaches is grounded in the following conditions. Firstly, Transition Design framework already includes indications to Critical Design approaches as possible tools for 'Visioning' – one of the four areas of knowledge, action and self-reflection (Irwin, Kossoff, and Tonkinwise, 2015, p. 8). Scholars behind the Transition Design concept are convinced that uniting different parties under shared future lifestyle visions can be a much more powerful motive for change than the traditional design approaches, which would focus on forecasting possible technological solutions (Irwin and Kossoff, 2017, p. 10). These visions need to be made tangible by means of design in order to be appealing, and they also need to be based on signs in the present that look promising, instead of showing futuristic things 'never seen before' (Manzini and Jégou, 2003, p. 17). Another kind of visions that are suggested as potentially useful and stimulating are the ambiguous or even the clearly dystopian Critical Design proposals: they "can serve as measures against which to evaluate design moves" (Irwin, Kossoff, and Tonkinwise, 2015, p. 8); and as "cautionary tales warning us of what might lay ahead if we are not careful" (Dunne and Raby, 2013, p. 73). Critical Design also offers space for debate about how things might be fundamentally different. Critical artefacts help to suspend disbelief, as they are grounded in reality – in how people are and behave, – but they propose other values, which are communicated through these objects. This approach is accordingly called 'value fiction' (Dunne and Raby, 2001, p. 63), and it has been acknowledged as potentially useful in shaping policy planning, market economies and cultural imaginaries, by means of preferences, norms and ideals embedded in these scenarios. Design visions can render "previously textual analyses (such as policy scenarios) and abstract concepts (such as "sustainability") in forms available for empirical (i.e. bodily) experience and public deliberation" (Mazé, 2019, p. 24). It is hence possible to conclude that visioning is broadly recognized in design as a useful method or tool for public engagement, and that Critical Design visions can provide space for revising values, beliefs and preconceptions, which hinder transition to sustainment.

However, reducing Critical Design to merely a tool for vision generation is a narrow view, considering its other qualities, which present a considerable overlap with the Transition Design theory. Their identification is the second reason behind the incentive to merge Transition and Critical Design approaches. The aim of this paper is to highlight these similarities and to suggest that Critical Design might be seen as a method within a broader scope of design towards transition.

4.1   Alternative Values

As already introduced in the previous section, visions are not only about 'showing' and 'experiencing' how things might be in the future, – visions are always associated with

values and are made primarily to propagate those values. Furthermore, visioning is not something only Critical or Transition designers do. Traditional industries also widely implement visions, mostly in form of video scenarios promoting future products, which are imbued with corporate values and aimed at promoting consumerism, – "perfect worlds for perfect people interacting perfectly with perfect technologies" (Dunne and Raby, 2013, p. 28).

The objective of the Transition Design visions is to suggest alternative values and even alternative economies. Transition Design is proposed as further development of design approaches in a continuum where it follows Design for Service (which is based within business and dominant economic paradigm) and Design for Social Innovation (which aims for emerging paradigms and alternative economic models). Transition Design is supposed to implement speculative, long-term visions of sustainable lifestyles in order to fundamentally challenge existing paradigms, and to envision new ones (Irwin, 2015, p. 231). It is clear that technologies will not save the world, nor solve the pressing ecological and social issues, and hence it can be more productive to address our way of being in this world, our values and expectations, instead. But this is also one of the greatest challenges, as we all, including designers, are strongly conditioned by the dominant paradigm, to the point that we are not even aware of that. Our values are also shaped by our personal and collective histories, memories and experiences, and this context influences our understanding of reasonable and fair expectations.

This resonates strongly with the basic principles of Critical Design, which is aimed at challenging dominant ideologies: it acknowledges that all design is ideological unless the designer deliberately takes a critical stance towards the status quo. Critical Design therefore is aimed at providing critique of the dominant ideologies and exploring alternative social, cultural, technical or economic values (Dunne and Raby, 2001, p. 58). Furthermore, it is an emancipatory act, rather than an ideological one, because Critical designers "attempt to liberate themselves from all ideologies, as these impede seeing beyond what currently exists, in the conviction that this is the only possible, viable or right way to be" (Jakobsone, 2019, p. 566). Critical Design poses critique of design that enforces and works "'in service' to any imposed ideology" (Mazé and Redström, 2009, p. 30).

Critical Design is also aimed at exploring how could the purview of the discipline be extended and what could be addressed beyond the fiscal and technological drivers (Malpass, 2012, lpp. 226). Designers practice Critical Design as a means of developing a personal understanding (Malpass, 2012, p. 163), which means that it can be particularly useful as part of design curricula. The ideological awareness, along with its emphasized focus on futures have been recognized as some of the most valuable qualities of this practice, which would benefit considerably any kind of design approach if adopted as part of a critical mindset (Jakobsone, 2017, p. S4254). Critical Design proposals offer alternatives to the current way of being, thus allowing us to relativize the present reality and consequently to think more deliberately about our own existence and agency (Jakobsone, 2019, p. 566).

All this suggests that there is a clear overlap between the objectives of Transition Design and Critical Design, and that the latter can be proposed as a method or tool to be implemented in the framework of the former, both for learning to reconsider one's

own values and place in this world, and for creating compelling alternatives for public engagement.

4.2 Mindset and Posture

One of the four elements in the Transition Design framework is named 'Mindset and Posture'. It "calls for self-reflection and a new way of 'being' in the world" and acknowledges that "our individual and collective mindsets represent the beliefs, values, assumptions, and expectations that are formed by our individual experiences, cultural norms, religious/spiritual beliefs, and the socioeconomic and political paradigms to which we subscribe" (Irwin, 2015, p. 235). This excerpt shows strong similarities with what was discussed in the previous section of this paper, but also with Critical Design literature in general, which tackles extensively the same issues, and urges designers to adopt a critical mindset. One could even argue that this is one of the main objectives of Critical Design, – offering 'strangeness' to allow us to reconsider the 'normality', and to realize the relativity of what we assume to be absolute and universal.

The dominant mindset in conventional design is described as striving for predictability and control. It views chaos as problematic and attempts to 'fix' it by design solutions that are pre-conceived and implemented in a top-down manner. Ambiguity and uncertainty are also considered undesirable and seen as a problem to be addressed. In contrast, the new mindset or worldview of Transition Design is intended to remain open and willing to acknowledge that the perceived chaos might also be an essential characteristic of the system and contain 'seeds' for the solution. This new mindset also needs to embrace ambiguity and uncertainty as possible sources of new ideas and ways of acting (Irwin, 2015, p. 236).

A similar attitude is present also in Critical Design, which is defined as "a response to the fact that design views its users and consumers as obedient, largely uniform, and predictable whereas nearly every other area of culture acknowledges people as complicated, contradictory and even neurotic" (Raby, 2008, p. 95). Ambiguity in critical practices is considered to have advantages: it allows designers to engage users without constraining how they might respond and to enable them to find their own interpretations (Gaver, Beaver, and Benford, 2003, p. 233). Speculative projects by Dunne and Raby (such as 'Hertzian Tales' and 'Designs for Fragile Personalities in Anxious Times') or Noam Toran (such as 'Desire Management' and 'Object for Lonely Men'), just to name a few, also show interest in the complicated nature of people and challenge the stereotypical and narrow user profile adopted by the mainstream industries. In these iconic Critical Design projects designers have conceived fictional products that embody "understanding of the consumer/user as a complex existential being", and that accept "how people really are rather that how they are supposed to be" (Dunne and Raby, n.d.). These works also hint at the innate creativity, which allows people to find the weirdest solutions to satisfy their desires instead of conforming to the dominant paradigm.

Critical Design, since its conception, has largely been about attempting to assume a different point of view, to consider alternatives, to cease being judgemental and biased. It has tried to find a role for design that is less dependent on the technological development and capitalist market economy. Considering that, Critical Design's mindset and approach

is very similar to that of the Transition Design, and a designer who has exercised the former could relatively easily embark on the latter, contributing to the great transition.

4.3 Goals

Transition Design and Critical Design both have approaches that are fundamentally different from those of traditional design practices. Instead of studying the context in order to offer the best solution within the given situation, both are set to change the society's attitude to the current state of affairs. Transition Design challenges the mainstream understanding of development and well-being. By adopting a new mindset, it attempts to direct our expectations away from the satisfaction of consumerist desires, while also trying to 'save the planet', and to guide us towards more sustainable lifestyles. For the designers it means abandoning the solutionist approach that is based on searching for problems (real or imagined) and rather focus on complex overarching lifestyle visions that would tackle the root of unsustainability and defuturing. In comparison, Critical Design also challenges assumptions, norms and habits, and explores the complexity of human nature: our dreams, desires, fears and insecurities. Furthermore, this enlightenment remains its only 'functional' contribution as for the rest it is not aimed at providing solutions to practical problems.

Central to the Transition Design is the notion of 'wicked problems' – ill-defined societal problems that rely upon an elusive political judgement for solution (Rittel and Webber, 1973, p. 160). Although this concept has been known already since the 1970s, design and design education has not been particularly engaged in understanding these problems, nor the dynamics of change within complex systems in general (Irwin, 2015, p. 242). As a result, designers fail to grasp the extreme interconnectedness of smaller problems, which they approach as isolated cases, eventually causing much more serious problems elsewhere.

Wicked problems are characteristic to complex systems, such as societies or ecosystems, hence before tackling the problems, one should get familiar with systems in general. Meadows's study "Leverage Points: Places to Intervene in a System" (1999) provides a simplified and useful insight into how systems function and how can change in systems be induced. She identifies 12 elements of the system (the 'leverage points') where one can intervene and arranges them according to the effectiveness in changing the system. The top most effective points in this classification are 3) the goals of the system; 2) the mindset or paradigm out of which the system arises; and 1) the power to transcend paradigms (Meadows, 1999, p. 3). That means that when the goals of the system are set, all the other elements further down the list will be changed to achieve that goal (Meadows, 1999, p. 16). However, according to Rittel and Webber, the scholars behind the concept of wicked problems, setting goals can be one of the most challenging tasks of planning (Rittel and Webber, 1973, p. 157). Furthermore, also separate elements of the system have their own goals, and mostly these tend to be confused with the whole-system goals, as even people within the system often don't recognize what whole-system goals they are serving (Meadows, 1999, p. 16). In case of design, for example, one might be working on an innovative solution thinking that they are serving the society, without realizing that their products are simply a way of increasing stockholder wealth and market share – a goal of a larger scale system.

Setting goals is a crucial part of the process also within the Transition Design, especially since finding the cause (and consequently – a solution) of a wicked problem is difficult if not impossible, because every wicked problem can be considered to be a symptom of another problem (Rittel and Webber, 1973, p. 165). Furthermore, these problems involve whole societies, and different stakeholders often have conflicting agendas – solution to someone's problem causes a new problem to someone else. Therefore, participative design processes are necessary to find compromises and to develop visions that work for everyone (Irwin and Kossoff, 2017, p. 9–10), as participation in design implies that a solution is sought in collaboration between the designers and users (or those affected by the intervention). This approach is particularly efficient in realising shifts in organisational cultures, when the members of the organisation are also the "users" of the solutions thus developed (Dust and Jonsdatter, 2008, p. 291).

As discussed in the previous sections, visioning is an integral part of Critical Design, and the purpose of these visions is the provocation and the debate it initiates. In contrast, Transition Design aims at setting common goals for societies that are facing wicked problems and it implements visions in formulating these goals. It is thus possible to suggest that the two approaches might benefit from each other also in this higher goal setting endeavour.

Critical designers have tested and analysed tools and methods for creating plausible and engaging visions of alternative worlds for almost three decades now. These methods have been successfully implemented also in participatory design processes, in combination with role-playing, fore- and back-casting and other more traditional design methods, allowing designers to move beyond the typical approaches to sustainability, which tend to "privilege the current needs of proximate stakeholders within near-future proposals" (Mazé, 2019, p. 29). Specific to Critical Design is the use fictional things that are "not understood as ends in themselves but, rather, as a means to curate and stimulate reflection within and among stakeholders" (Mazé, 2019, p. 33). They are "materializations of questions that can only be answered collectively and from the heterogeneity of positions" (Boserman, 2019, p. 135). Fictional design products have also been adopted as tools for research and exploration of stakeholders and potential users, in which case designers confront them with skilfully crafted, realistic but somewhat strange products in order to engage in discussions and gain insight. These things, called cultural probes (Gaver, Dunne, and Pacenti, 1999), epistemic objects or diegetic prototypes, are "research objects that are sufficiently vague and indeterminate to allow discovery" (Boserman, 2019, p. 134).

It can hence be concluded that Critical Design approach could become an instrumental part of Transition Design during the participative engagement with stakeholders, whether it is to discuss possible futures or to investigate their values and beliefs. Both applications could add another critical dimension to the process of goal-finding.

5   Conclusions

Design in the midst of transition requires new approaches, tools and attitudes. Unfortunately, it can be observed that there is no global consensus on what sustainability means, nor is there a common understanding on how to tackle that from the design perspective.

However, signs of an emerging culture are appearing in different areas of design. These practices are aimed at changing the way we live and reshaping our expectations, instead of adapting the world to our perceived consumerist needs. Recently conceived Transition Design approach is one of these promising movements.

Critical Design – another alternative to the mainstream design – has been developing for almost three decades now. Although not directly associated with sustainability, it also seeks to challenge narrow assumptions and to query the role of industrial products in our life. Critical Design has a close connection to academia – it emerged in an academic context, it offers space for investigation and research, and it allows for a particular kind of professional and personal enlightenment.

Although seemingly different, these two design strands present meaningful overlaps. Transition Design framework proposes Critical Design as a tool for visioning; however, it is possible to identify some other similarities, too:

– This paper has exposed how both seek for alternative values and imagine other ways of living in this world. Both also aim at acknowledging the existing societal complexity and diversity without being judgemental and biased.
– Further, there are also similarities in the mindset and posture that Transition and Critical designers assume. They remain open to ambiguities and uncertainties of real-world situations, embrace 'strangeness', and move away from seeing people as obedient consumers.
– Focus on setting appropriate goals, instead of immediate problem solving (especially by use of technology) is at the core of Transition Design. According to the systems theory, this is also one of the most efficient ways to achieve fundamental change in a system. Critical Design, as already ascertained, can be an effective approach in visioning and fostering debate, which is a crucial part of goal finding process. It has also proved to be a useful tool in facilitating participative generative processes.

It is also possible to observe that some of the precedent or current design projects already demonstrate more or less outspoken signs of such integration. A clear intent at implementation of the speculative approach of Critical Design as a method to reflect on more sustainable futures is present in 'Static!' and 'Switch!' – two research programs carried out at the Interactive Institute of Sweden tackling the issues related to the energy consumption. Ramia Mazé, one of the researchers behind these programs, acknowledges, that "sustainable and critical design might seem to be at odds" (Mazé, 2008, p. 44) as the Critical Design practice has mostly "been confined to galleries and books, rarely moving outside the ideological modes of production in the art and the media" (Mazé, 2008, p. 47), while the sustainable design is practically trying to solve pressing global problems. At the same time Mazé notes that "sustainable and critical design intersect in contesting – rather than affirming or acquiescing to – mainstream or traditional notions of production and consumption" (Mazé, 2008, p. 44).

All the aforementioned allows to conclude that merging Transition Design and Critical Design approaches might increase their efficiency in promoting change. The changes needed to achieve sustainment (as opposed to the various arguable interpretations of sustainability currently in use) and to discontinue defuturing, are much more comprehensive and radical than those which are aimed for by the most conventional design approaches.

The first steps to be taken before starting to solve concrete specific problems by designing products or services, ought to be critically assessing the values, adopting an appropriate mindset, and setting the goals respectively. At a practical level, however, this doesn't mean that designers should only focus on systems-level solutions, as all the aforementioned is equally relevant in design projects of any scale. Critical Design is based on a premise that every design product affects the way we perceive our world and act in it, hence, every product that doesn't critically engage with the status-quo is a missed chance to change this world.

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