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Persuasion and Play: Crafting a Sustainable Culture

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Abstract
Designing for a sustainable future is not only a matter of craftsmanship in terms of delivering sustainable products and solutions. It also has a rhetorical side, implying that the consumer must be persuaded to choose the sustainable option. In this chapter, theories and examples of persuasiveness and rhetoric in design are related to notions of cultural sustainability. Recent debates on how play and game design may be employed as rhetorical tools are critically reviewed, and new perspectives are presented on how the playful and the persuasive combined form a particular kind of cultural sustainability.

The idea that design can fill a rhetorical function and be used in persuasion is not only intriguing but is also increasingly relevant. For example, as the UN reports on climate change have made progressively clear, a drastic cut in unsustainable energy use is our only option to avoid causing an irrevocable climatic catastrophe. In this, each one of us will have to make sacrifices. We can simply not go on living—that is, consuming—the way we are used to. As designer and sustainability strategist Leyla Acaroglu (2013) has convincingly demonstrated, clever design solutions can make some of our sacrifices less painful, correcting our behaviour in ways we are hardly able to notice. This way, design can contribute to making sustainable living less arduous. Another possibility for design to contribute is by making the sustainable option appear more attractive using strategies of persuasion to make us want to choose sustainability. For, one thing is certain: Positive change will not happen by itself and not unless we play along and want to help make it happen.

So, how can design be used rhetorically in this sense to persuade? The discourses within design research on persuasive design reveal a range of possible understandings of the term, from the idea that objects may be designed to convey complex arguments to the view that all design is persuasive *per se* (in that it necessarily, to some degree, influences how we see or interact with our surroundings) (Buchanan, 1985). In this chapter, theories and examples will be discussed in which a rhetorical, persuasive

function is articulated in design with the purpose of guiding people to make more sustainable choices. How are the designed artefacts and processes thought to work persuasively? What is their inherent rhetorical function?

The specific focus of the chapter is on how examples and theories of persuasiveness in design connect to concepts of cultural sustainability. As philosopher Rosi Braidotti argues, '[both] the scale and the consequences of climate change are so momentous as to defy representation. Humanities and more specifically cultural research are best suited to fill in this deficit of the social imaginary and help us think the unthinkable' (Braidotti 2013:160). The recently published report from *COST Action IS1007: Investigating Cultural Sustainability* titled 'Culture *in, for* and *as* sustainable development' emphasises the variety of ways in which culture impacts sustainable development. In one perspective, culture complements the conventional three pillars of sustainability (ecology, economy and sociality) as a fourth pillar in its own right (culture *in* sustainable development). Others regard the role of culture in this relationship as that of a mediator, influencing the way we perceive and approach the other three (culture *for* sustainable development). A more foundational view of the role of culture in sustainable development recommends that culture be approached as the very foundation on which a sustainable future must be based (culture *as* sustainable development) (Dessein et al, 2015, pp. 28–29).

A correspondingly broad spectrum of perspectives is reflected in the theoretical discourses on persuasive design that are discussed in this chapter. Interestingly, the first alternative, 'culture *in* sustainable development', where culture is approached as a more or less autonomous, individual pillar, is not as dominant in the design discourses as in other cultural fields. This might be due to the design professions' disposition towards the practically founded and applied in contrast to, for example, the cultural domain of art that historically has valued and strived towards a position of autonomy.

The second perspective, culture *for* sustainable development, is more representative of current trends in persuasive design. However, my main motivation in writing this chapter is to demonstrate how the third perspective, in which culture is regarded as the very foundation for sustainability, is reflected in the cultural phenomenon of play.

In his seminal work *The Ambiguity of Play* (2009), Brian Sutton-Smith concludes that the term that most fittingly describes play in its varied and multi-faceted forms is 'variability' (2009, p. 221). The perspectives from which play has been approached and its nature and possible functions analysed, discussed and theorised in and across a variety of academic disciplines are as numerous as they are heterogenic. In his study, Sutton-Smith unmasks some of the most popular conceptions of play as 'rhetorics of play' representing and promoting specific disciplinary narratives and perspectives. There is no general agreement across disciplines as to what play is or what its function may be, provided that there is a function. We tend to choose the rhetoric of play that best substantiates our argument, writes Sutton-Smith (2009, pp. 216–217). In order to prevent confusion, therefore, we should acknowledge the existing diversity and be explicit about the particular concept of play to which we subscribe.

In this case, and fundamental to my argument in this chapter, the defining characteristic of play is its structure of intrinsic motivation and reward. In this, I oppose perspectives from which play is seen primarily as a vehicle to achieve some other goal. These perspectives most often ignore what I perceive as the most important aspect of play—'the simple fact that it is enjoyable in itself' (Csikszentmihalyi, 2014 [1975], p. 136).

With their intrinsic motivational structure, play and games may undoubtedly appear to be apt tools for persuasion, at least at first glance. As we shall see, however, play and game design form a special case in this context and do not conform to the prevailing utilitarian aims of design. Quite the contrary, laying particular claims to autonomy in being free, disinterested and set apart from 'ordinary' time and space, play and games are phenomena that fundamentally resist being instrumentalised.

Central theories on the ontology of play have pointed to the opposition inherent in all play against having an aim and a purpose to fulfil that is external to play itself, arguing that when play is forced to serve an external purpose, the playful experience is corrupted (Huizinga, 1955 [1938]; Caillois, (1979 [1958]). As a consequence, play and games are not easily utilised as rhetorical tools. As I will argue in this chapter, their persuasive force is intimately connected to our experience of engagement, of being-in-play, which seems to rest upon their being performed for their own sake and

not for the sake of obtaining something else. The contested status of the popular marketing strategy of ‘gamification’ is due partly to this dilemma, as is the problem of using games as a motivational tool in, for example, education. On the positive side, as experienced by Tom Sawyer when contemplating how to escape the paint job his aunt had assigned to him, any boring task can be turned into play provided that we acquire the attitude of doing it *voluntarily* and not because it is demanded or expected of us (Twain, 1876, pp. 10-16).

The concept of persuasion is itself not straightforward or unambiguous. Its implied meanings span from violent threats to sweet seduction. In the context of this chapter, it is understood in terms of its rhetorical capacities, and while it may border on the manipulative it is never a matter of force.

Persuasive Design

Related to the area of product semantics, one understanding of persuasion in design concerns the ability of the designed product to communicate its intended function and area of use to the user. While basic and inherent, this rhetorical performance by artefacts may have wide-reaching implications in terms of scripting and determining the way we behave and interact with our surroundings. Thus already on this level design may have a decisive persuasive function, subtly influencing our lives and futures.

Arguing that persuasion in the field of design is not restricted to the communication of designer intent but is an integral part of how we relate to artefacts, design researcher Johan Redström approaches the rhetorical dimension of design from a slightly different angle. He suggests that designers take advantage of the implicit dialogue or negotiation that is always taking place between an object and its user and expose it in order to ask rhetorical questions about the object and its use (Redström, 2006, p. 117). To illustrate his argument, he offers two examples from his own practice, The Energy Curtain and The Erratic Radio, both demanding a sacrifice from the user in order to function properly. The Energy Curtain has a solar panel on its outside and fibre optics woven into the fabric on the inside that can light up the room in the evening, provided that the curtain has been left down to collect energy from the sun during the day. In other words, if the user wants light in the room in the evening,

she is not able to enjoy the sunlight lightening up the room during the day. The Erratic Radio is sensitive to energy consumption in its close vicinity and will be 'disturbed' when this reaches too high a level. Therefore, the user needs to be conscious about the other electric appliances in use in order to operate it. (Ibid. 119) The Energy Curtain and the Erratic Radio are examples of objects that persuade the user to act in a certain manner; to do so, they present her with a 'procedural argument' inspiring reflection (see below). In this, they are related to the movement or attitude within design activism identified in Anthony Dunne's *Hertzian Tales* (2008 [1999]) as *critical design* (frequently also referred to as *speculative, conceptual* or *discursive design* or as *design fiction*.) It could be argued that if the purpose of objects like these is to make the user think and reflect rather than to be of any actual use, they should not be considered as examples of persuasive design but rather to belong in the art domain. Dunne and Fiona Raby counter such an assumption in their *Critical Design FAQ*, asserting that

> [Critical design] is definitely not art. It might borrow heavily from art in terms of methods and approaches but that's it. We expect art to be shocking and extreme. Critical Design needs to be closer to the everyday, that's where its power to disturb comes from. (Dunne & Raby, 2007)

Similar techniques of estrangement and replacement of everyday situations and objects have of course also been widely employed in art contexts throughout the last hundred years within avant-garde art movements that specifically aimed to make art as a category obsolete, integrating it into the practices of everyday life (e.g. Bürger 1984 [1974]). If there is indeed a line to be drawn between art on the one hand and critical or speculative design on the other, it seems to rest on the view of art belonging to a separate, autonomous domain of life, a view to which few today would subscribe. However artificial the difference appears, it may function as a reminder of the important connection to everyday life implied in such critical design practices, grounded as they are in actual use and a fundamental relationship to users rather than audiences.

Persuasive Technology

Design with intent (DwI) is an area of persuasive design where design is openly intended to result in certain user behaviour (Lockton et al., 2008). It relates to the field of persuasive technology or *captology* (where 'capt' is an acronym for *computers as persuasive technology*), founded by the social scientist B. J. Fogg in 1998. Fogg defines persuasive technology as 'any interactive computer system designed to change people's attitudes or behaviors' (Fogg, 2002, p. 1) 'without using coercion or deception' (Fogg, 2002, p. 15). He admits, though, that the line between persuasion and coercion is not easily drawn and that there are examples of technological persuasion where the human actor is rather forced to behave in a certain manner in order to be allowed to participate in the interaction at all (Fogg, 2002, p. 21, note 2). In order not to confuse persuasion with coercion, it might be instructive to stress the rhetorical dimension of persuasion as the differentiating factor that distinguishes between the two. Like seduction, persuasion is a rhetorical mode. Coercion, however, is not.

Interactive media and technology have particular advantages over non-interactive media and technology when it comes to persuasion. One advantage is their capacity to continuously evaluate the overall situation, which allows them to adjust their persuasive strategies according to the input and responses of the person with whom they are interacting (Fogg, 2002, p. 6). In this, they have a certain rhetorical flexibility that non-interactive artefacts lack. The ubiquity of mobile media, such as smart phones, adds another advantage in terms of potential persuasive impact. Ubiquitous media provide the opportunity of timing one's messages so that the target can be addressed in the exact moment for persuasion to be successful, a feature that in studies of rhetoric is known as *kairos* (Fogg & Eckles, 2007). Thus, being constantly available to our smartphones makes us more vulnerable to their persuasion than to the persuasion of stationary desktop computers. Through web surfing, shopping and socialising online, we feed our smartphones with personal information. As it is increasingly commonplace to allow our phones to track our physical whereabouts through geo-location technology, this information travels with us as we move about in the physical world bringing our phones with us. Analysing and comparing these data, marketers may use them to target us when we are the most available or vulnerable to

persuasion, that is, when the opportunity exists for us to immediately act upon the information we receive.

In interacting with users, critical design and persuasive technology have the capacity to make procedural arguments. This is a term coined to capture the rhetorical structure and affordances of a genre that combines the flexible responsiveness of interactive technology with the cultural consciousness of critical design—*serious games*.

Persuasive Games and Procedural Rhetoric

In his 2007 study *Persuasive Games,* game designer and theorist Ian Bogost examines how persuasion takes place in serious games, that is, computer games that serve a purpose other than pure entertainment. Analysing examples of educational games, advertising games and games designed to support a political cause or campaign, he demonstrates the capacity of digital media to present persuasive arguments in the form of processes and recommends that we approach the technique as a particular type of rhetoric:

> I suggest the name *procedural rhetoric* for the practice of using processes persuasively, just as verbal rhetoric is the practice of using oratory persuasively and visual rhetoric is the practice of using images persuasively. (Bogost, 2008, p. 125)

According to the philosopher Kenneth Burke, the basic function of rhetoric is 'to form attitudes or to induce actions in other human agents' (Burke, 1969, p. 41). In Burke's theory, language and symbols are sites where identification processes may occur and where attitudes, concepts and beliefs may be negotiated (King, 2010, p. 9). In the procedural rhetoric of video games described by Bogost, the symbolic medium or 'site' for identification and negotiation is made up by game rules, computational procedures and processes.

> Video games represent processes in the material world – war, urban planning, sports, and so forth – and create new possibility spaces for exploring these topics. That representation is composed of the rules themselves. We encounter the meaning of games by exploring their possibility spaces. And we explore their possibility spaces through play. (Bogost, 2008, p. 121)

In a similar manner, when design researcher Redström, as previously described, introduced a new set of rules to a familiar situation, changing the way we interact with everyday artefacts such as a radio and a curtain, he prescribed them with new possibility spaces for the users to explore. The space was defined by a novel set of affordances and restrictions that the user had to determine to be able to meaningfully interact with the objects. Encountering a familiar artefact under such circumstances, we are forced to reconsider our familiar conception of it. This is a situation in which we are likely to allow the artefact to speak to us. Thus, a new possibility space may function as a facilitator for the object to have rhetorical impact.

In later years, interactive entertainment media, such as computer and video games, have presented us with a medley of new possibility spaces to explore through simulation. The propensity of game worlds to provide alternative possibility spaces for players to discover is a feature with interesting rhetorical potential. Instead of using verbal arguments and reasoning in trying to persuade people to a more sustainable lifestyle and explaining for them the consequences of over-spending the world's resources, game designers may place us within simulations of possible worlds where we experience these consequences as direct responses to our simulated actions in the world.

In the introduction to this chapter, I referred to Acaroglu's inspirational TED talk on how clever design solutions can facilitate sustainable choices in people's everyday lives. One of her main arguments is that the environmental impact of a product often hinges on a complex set of circumstances not always correctly reflected in the popular conceptions or in Acaroglu's terms, 'environmental folklore', dictating which products or behaviour are considered the most 'sustainable'. Evidently, in typical everyday interactions with household goods 'user decisions (or the lack of them) are responsible for a significant proportion of the products' environmental impact' (Lockton et al., 2010, p. 2). To make educated choices, we may have to replace the 'environmental folklore' with a more profound understanding of how our behaviour affects the environment.

The advantage of procedural rhetoric in this respect is its ability to handle complex questions using dynamic, interactive simulations to realistically represent choices, as

we may have to deal with them in the physical world. For example, in educational games such as *My Sustainable House* (2006), children may experiment hands-on with basic sustainable living and more advanced principles of sustainability by constructing their own sustainable houses and towns. Similar games exist aimed at professional building planners, providing a simulated work environment in which the knowledge and expertise of all professions involved in constructing a sustainable indoor environment are represented as parameters. Here, a variety of complex building strategies can be tried out and their consequences experienced, almost intuitively and completely free of risk (Bloom et al., 2015). Such simulated computer-generated environments constructed for learning purposes are one strand of the media phenomenon often referred to as *gamification.*

Gamification

Gamification is a contested concept in many respects. It is most widely known as a marketing strategy in which the consumer is awarded points or other symbolic rewards as a means to secure his or her loyalty to the marketed product. Examples are geo-location apps such as Foursquare and Facebook Places that reward their users with points every time they log in to specific venues. Similar strategies are also used outside of commercial marketing. Sometimes called gamification and other times promoted under different labels, these are strategies purporting to adopt the motivational structure of games and to use it in the service of goods such as health or education or to solve complex environmental problems. As game designer, theorist and enthusiast Jane McGonigal argues, cleverly designed game structures may be just what we need to 'fix' a broken reality and change what is wrong in our world (McGonigal, 2011).

As a marketing strategy, gamification has been criticised for misusing the very concept of 'game' when in reality, the reward structures it promotes are but a small and rather insignificant part of the motivational potential inherent in game structures and game design (Deterding, 2010; Robertson, 2010). In a brilliantly illuminating rhetorical analysis of why 'gamification' is such a deceitful concept, Bogost suggests we stop using it altogether and replace it with a term that better describes what it essentially is—*exploitationware* (2011b). Framed as exploitationware, gamification

emerges as an embarrassingly frank reminder that the impact of culture on development is not always sustainable (cf. Dessin, 2015, p. 52).

On the more sympathetic side, gamification may also be employed as a strategy to serve sustainable causes, for example, helping people to establish a more sustainable lifestyle. Designed to persuade people to act in accordance with principles of sustainability, games like these are seldom very sustainable *games*, though. As I will argue in the following, games and play are corrupted and stripped of their most characteristic trait when used as a means to obtain an external goal; they cease being playful and fun. In fact, games represent a particularly interesting and instructive case of cultural sustainability, as functional gameplay is by definition sustainable, producing what it consumes in the same interactive move.

Play and Intrinsic Motivation

Psychologist Mihaly Csikszentmihaly has famously described the autotelic, that is, the intrinsically motivating and rewarding structure of play as a state of 'flow' (2014 [1975]).

> Flow denotes the holistic sensation present when we act with total involvement. It is the kind of feeling after which one nostalgically says: "that was fun," or "that was enjoyable". It is the state in which action follows upon action according to an internal logic which seems to need no conscious intervention on our part. We experience it as a unified flowing from one moment to the next, in which we feel in control of our action, and in which there is little distinction between self and environment; between stimulus and response; or between past, present and future. (2014 [1975], pp. 136–137)

Flow is not restricted to play activities but can occur in any kind of activity with clear and non-contradictory rules 'where one can cope, at least theoretically, with all the demands for action' (2014 [1975], p. 143) The deep involvement that characterises flow relies on a set of circumstances that must be fulfilled, of which the most important is that the challenges posed in the situation are in balance with our skills to handle them. Importantly, this is a subjective *perception* of what the challenges and skills are (2014 [1975], p. 147). Thus the parameters defining the situation may be objectively or subjectively adjusted to enhance the chance of flow to occur, even by changing our attitude to the situation, as we saw in the example paraphrased in the

introduction to this chapter from *The Adventures of Tom Sawyer*. Closely related to the concept of flow, in *The Craftsman* (2008), sociologist Richard Sennett investigates craftsmanship as an attitude towards one's occupation that can be acquired by almost anyone through disciplined practice: 'the rhythm of routine in craftsmanship draws on childhood experience of play, and almost all children can play well' (2008, p. 268). For the craftsman, work is experienced as a 'self-motivated, sustained activity' that 'steadily adds value to his life' (2008, pp. 264–265). Connecting craftsmanship to self-governance, Sennett sees in the craftsman an extended capacity to take care of his world and environment. Finally, flow is recreational. In flow, whether it occurs in play or the kind of self-sustainable work situation implied in Sennett's concept of crafting, we are taken out of ourselves, temporarily forgetting our identities and problems (Sennett, 2008, p. 254; Csikszentmihalyi, 2014 [1975], p. 146).

In Bogost's theory of persuasive games, the player may learn to cope with environmental issues through the procedural rhetoric of video games. To Bogost, persuasion is a process that involves reason and dialogue. In his book, Bogost seems more concerned with how to secure rhetorical clarity and impact when designing persuasive games than with the qualitative experience of playing, however. Arguing that a meaningful coherence between message and game rules can only benefit the player's enjoyment of the game, the experienced scholar and game designer appears to ignore a rather significant aspect of what makes play and games into treasured experiences—that they are not founded in or bound by but represent a relief from reason. In an illuminating passage, Bogost asks if it would not be 'better' for a child to learn to discern through gameplay the manipulative techniques that make amusement parks appear magical compared to being manipulated by the same techniques to blindly desire every plush animal that is for sale in the park (Bogost, 2007b, p. 182). From the long-term perspective of an adult engaged in bringing up a responsible citizen, he might be right. A child, however, would likely consider the instant gratification of its desire to have a plush animal to be the better choice.

The conflict of interests between adult and child is one thing, mirroring the lopsided balance between 'useful' and 'fun' that often characterise serious games. The apparent prejudice against the manipulative as something to be avoided in the context

of persuasive games is another. Bogost criticises Fogg's captology for seeking to persuade

> without engaging users in a discourse about the behaviour itself or the logics that would recommend such actions or beliefs. […] Despite Fogg's suggestion that *captology* acronymizes "computers as persuasive technologies," the phrase itself conjures the sense of *capture*, of arrest and incarceration by an authority. A better name for Fogg's work would perhaps be *manipulative technology*. (2007b, pp. 61–62)

To experience play, however, do we not have to let go of control and allow ourselves the risk of being manipulated? Evidently, Bogost's ideal player is not one mindlessly indulging in gameplay, allowing himself to be played but one taking pleasure in discovering and learning about the world in which we live—how it functions or how it ought to function. Bogost's favourite examples of persuasive games are openly didactic games that have a clear and explicit agenda. Not being played for play's own sake, such games are vulnerable to the mechanism described in the introduction to this chapter—that when play is forced to serve an external purpose, the playful experience is corrupted. Such games seldom succeed in giving the player an exhilarating experience of being fully absorbed and totally devoted to the task at hand. However, this is nothing more than we usually expect of a good game.

The Well-Played Game: Play as a Model for Cultural Sustainability

Game designer and fun theorist Bernie DeKoven writes: 'When we are playing well, we are at our best. We are fully engaged, totally present, and at the same time, we are only playing' (DeKoven, 2002, p. 3). The double consciousness he describes is key to excellence in play. It is a matter of attitude rather than skills and explains why having an outside purpose may ruin the experience of play. Playing to obtain a goal external to play itself, we are no longer 'only playing'. We are no longer fully contained in play.

Yet, the attitude of play also implies that activities primarily performed to fulfil an external purpose, such as ordinary work tasks, can be framed and experienced to be motivating and rewarding in themselves, as described by Sennett in his treatise on crafting. Although the primary purpose of serious games may be educational, this

does not exclude the possibility of experiencing flow during play. However, in popular opinion, what defines the value of such games is their educational function rather than their potential to produce flow. By emphasising the autotelic structure of play, my point is that the inherently persuasive structure of intrinsic motivation and reward that games provide has a value of its own. Furthermore, it presents us with a model for sustainable living.

As I have attempted to show in this chapter, play and games perform a variety of functions in regards to cultural sustainability. In contrast to the openly didactic focus of Bogost's persuasive games, the ambition, function and meaning of critical design objects such as Redström's Energy Curtain and Erratic Radio is hardly to instruct users on how to cope with environmental issues. More ambiguously, they direct attention to the topic by engaging the users in play. Here, we experience play *in* sustainable development.

Taking up the utilitarian perspectives of persuasive technology and DwI, persuasive games and gamification are cultural forms that investigate how video games and elements from game design may be employed as media through which to promote, teach and facilitate sustainability in people's everyday lives. When promoting a lifestyle that is careful and conscious about not spending too much of the world's limited resources, this is play *for* sustainable development.

However, play itself is not a limited resource but is in principle infinitely renewable. As Dessein et al. describes the third role of culture in sustainable development, it may thus provide 'a new paradigm to the question of sustainable development' (2015, p. 31). Already in 1975, Csikszentmihalyi connected the intrinsic motivation of play to the question of sustainability. He wrote: 'As long as we continue to motivate people mainly through extrinsic rewards like money and status, we rely on zero-sum payoffs that result in inequalities as well as the depletion of scarce resources' (2014 [1975], p. 150).

Play *as* sustainable development invites us to acknowledge and appreciate its intrinsic value. Allowed to play out in its own right, it offers recreation and rejuvenation. The appreciation of intrinsic motivation and reward that the player and the craftsman have

in common is, fundamentally, an aesthetic of sustainment. Therefore, rather than forcing play to act in the service of an external goal we could repurpose its inherent recreational structure as a model for cultural sustainability. Spending nothing but itself, it has, in principle, the capacity to motivate and recreate indefinitely.

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