

Seeing the Invisible: Revisiting the Value of Critical Tools in Design Research for Social Change

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Abstract

The idea that designers can affect society is not new, but social change is increasingly becoming a central purpose of our practice. This chapter discusses how to be an effective cultural intermediary by using our skills strategically to have a positive impact on society.

Designers are within what Pierre Bourdieu classified as cultural intermediaries, due to our central role in cultural reproduction. We constantly influence people's views, beliefs, and behaviors by shaping the aesthetic, functional and perceived value of products, services, and systems. These activities are intrinsic to our practice, and most designers are not aware of the power we hold to influence and shape society. Critical tools can play an important role in design research for social change, helping to see the invisible forces that dominate human interaction, including the connection between our worldviews, design decisions and their potential impact and consequences in society. A case study illustrates how critical tools are used to generate new insights about the sociocultural contexts in which design research takes place, revealing the values, ideologies, assumptions, power relations that are entangled within design activity. By developing a more nuanced understanding of the power of meanings and how we can use them strategically, we can amplify our impact towards cultural transformation and flourishing.

Introduction

We live in an era of great social and environmental challenges. In developed societies, the scale to which our lifestyles need to change to be sustainable is radical – carbon emissions, for example, must be reduced by an estimated 90% (Monbiot 2007). Although great strides have been made towards this goal in recent decades, technological innovation can only take us thus far, and there is pressing need to accelerate societal transition from engrained cultures of social and ecological exploitation to cultures of sustainability, social justice, and flourishing.

Designers are at the forefront of cultural innovation, creating the products, services and spaces that shape our society. As design can influence people's preferences towards certain cultural practices, ideals and values, designers are considered within what Bourdieu calls the 'cultural intermediary' social class of 'taste creators' (Bourdieu 2010; Julier 2014). We play an active part in influencing cultural values, behaviors, and norms through the things we design, i.e., by deciding how the outputs of design look and feel, how one is meant to access, use, experience and talk about them, their monetary and symbolic value. Through our design activity, we form inclinations towards notions of what is desirable, legitimate and worthy, and what and who is not (Maguire and Matthews 2012). For this reason, by virtue of our practice, we have the power to influence societal change.

But as the saying goes, with great power comes great responsibility. On the one hand, socially engaged designers can enrich people's lives, for example, by providing accessibility features in furniture pieces so everyone can enjoy them or creating sustainable products and services that stimulate our imagination and satisfy our wants/desires. On the other hand, design aspirations for social change can have invisible effects

such as the consolidation of consumption habits, the perpetuation of social inequalities or exclusion, or unintentionally creating new social and environmental problems (Avelino 2021). While we respond to needs and desires of individuals, we also need to consider the systemic consequences and impact our outputs might bear on society as a whole. Thus, it is important to critically reflect on what and whose purposes we serve via our design activity, and what social, economic and political systems we support, or disrupt through our work.

As designers increasingly engage in practices 'beyond the studio', i.e., working with communities and grassroots social contexts, social movements and activism, greater opportunities arise for disrupting unhelpful status quo norms that maintain unsustainable and exploitative systems in place. Our role in supporting cultural transition is now more relevant and urgent than ever.

In the following sections, I discuss the role of designers as cultural intermediaries, how this role manifests through design activity, and the opportunities that adopting critical tools pose for empowering design research and practice to serve cultural transformation.

The Role: Designer's Influence as Cultural Intermediaries

As design can influence people's preferences and orient people towards certain ideals, values and cultural practices, designers constantly contribute to sociocultural change. I now turn to discuss the mechanisms by which this is realized through our design activity, i.e., framing and representation of values.

As discussed, designers are considered within the 'cultural intermediaries' professions (Negus 2002) due to the influential role we play between production and consumption. Through advertising, display, packaging, branding, architecture, product design and other design outputs, 'commodity goods' such as garments, cars, phones, holiday experiences are given meanings through visual and verbal narratives. We conjure certain cultural associations – i.e., cultural codes – to create 'symbolic value' in our design outputs (Barthes 1967). We collect and interpret contextual information, and then choose certain cultural associations (images, colors, materials, shapes, words) to construct the features and meanings of our output. The choices we make communicate tacit understandings, predisposing people to respond, behave or think in certain ways, influenced by how the artefact is 'framed' (Lakoff and Johnson 2003).

To connect this observation on design framing to influence and social change, a recent psychological study examined the effect of value framing on how climate change messaging was received by liberal and conservative Americans (Wolsko, Ariceaga, and Seiden 2016). The study found that conservative Americans shifted substantially towards supporting environmentalism when the issue of climate change was presented within their binding moral frame. By framing environmental protection as a matter of obeying authority, defending the purity of nature, and demonstrating patriotism to the United States, researchers were able to persuade a group that might otherwise have rejected environmental policies outright.

Well-established agreed conventions (codes) create a sense of familiarity and closeness. Certain frames are constantly reproduced (used again and again) by cultural intermediaries including designers and marketers, because established conventions work well: they make decision-making easier, and the offer more appealing. On the other hand, design has historically leveraged the introduction of radically new and unfamiliar technologies such as smartphones, for example, which implied a big shift in cultural meanings and practices, totally redefining our understanding of what a phone is, and how it is used today in comparison to the 1980s, for example.

In other words, meanings are not fixed entities; culture is always at flux, with technological, environmental, and sociocultural changes constantly disrupting the extant codes and conventions. Designers, and other cultural intermediaries play a central role in these cultural disruptions and

reconfigurations, shaping public perceptions. We hold power to consolidate status quo arrangements by reproducing certain frames, but we can also activate or accelerate the adoption of new values, beliefs and practices (Fuad-Luke 2009).

Since design activity is never neutral or value-free, it is crucial that we become fully aware of our power to influence certain outcomes, and skilled at revealing the connections between the frames we create, choose, or use, and the ideologies that lie behind them. Here, I define ideologies as a set of moral ideas that guides behavior and justifies existing social inequalities. They comprise social, cognitive and discursive components, which mentally represent the basic social characteristics of a group, such as their identity, tasks, goals, norms, values and resources (van Dijk 2006). Ideologies generate 'in' and 'out' positions, just like club memberships – e.g., there are people who align with veganism while others do not. Design signposts people towards these positions via representation, creating a sense of collective identity, cohesion and belonging for some, to the exclusion of others.

According to Bourdieu (2002, 142), *“the power to impose and to inculcate a vision of divisions, that is, the power to make visible and explicit social divisions that are implicit, is political power par excellence.”* For this reason, framing – i.e., the manipulation of cultural meanings – which is intrinsic and inseparable from the design activity itself, is political (Prendeville, Syperek, and Santamaria 2022).

There is a strong tendency to avoid discussing positionalities in design, although it is obvious that our activity is not neutral – it affects and is affected by culture (du Gay et al. 2013). Therefore, anticipating the meanings we create as designers is not just a superficial matter of semantics or styling, but a matter of professional ethics and responsible practice. Furthermore, acknowledging our role as cultural intermediaries poses enormous potential for disrupting unhelpful meanings and influence public opinion by reproducing values that are desirable at individual and social level, i.e., to support cultures of sustainability and social justice. But we are required also to shift how we conceptualize design, giving less prominence to our preoccupation with 'designing for certain uses', and paying more attention to the cognitive processes that are stimulated by design.

The Tools: Working with Cultural Meanings

Zingale and Domingues (2015, 1) argue that *“an artefact must not only be considered for the values and meanings it expresses through its form and structure, but – above all – for everything it determines in the mind of the user-agent”*. In a way, we can picture design outputs as cognitive interfaces (Kazmierczak 2003) containing 'triggers' (cultural codes) that can induce certain ways of thinking of and acting in the world. Competent users know that objects are constructed or designed to be understood in particular ways, especially in media-savvy cultures, and can decode the meanings.

To understand how these codes or triggers work, let us consider an example: many eco-friendly and sustainable brands have adopted the color green, as this color represents nature. Consequently, the color and the term 'green' have become symbols for eco-friendly, i.e., an electric car can be easily referred to as a 'green car', and we would all understand that it runs on an environmentally friendly engine. In other words, in our culture, it has been socially agreed that 'green' stands for 'environmentally friendly', a shortcut (or code) that stands for more complex meanings. In this way, representations of cultural codes are used as a sort of subtle tacit language to communicate meanings and value between producers and consumers.

However, historically, designers have not had adequate tools to manage 'symbolic assets' (Santamaria 2020). Selection of codes and meaning construction is conducted in an intuitive, rather than a methodical manner, which poses a missed opportunity to work more strategically with meaning. Here is where semiotics and cultural studies, as critical disciplines, can provide useful conceptualizations and methods for collecting, articulating, and organizing meanings.

Semiotics is traditionally defined as the study of signs, but a more contemporary view describes it as the study of the representations that enable human cognition, i.e., meaning making. Laura Oswald (2020, 1) defines contemporary semiotics as “*a hybrid of communication science and anthropology*” that allows the study of deep cultural codes that structure communication and social behavior.

In semiotics, cultural codes are understood as conventions and practices familiar to members of a society and acquired through socialization, i.e., the process of learning the norms, customs, values, aesthetic tastes, and worldviews of one’s environment. Our social reality is made up of cultural codes, which mark class differentiation, and reflect personal and collective identity, values, attitudes, beliefs, assumptions and practices (Nöth 1990). It is, therefore, useful to identify how cultural codes are represented in visual and material terms. For example, in a Western context, an established aesthetic code for female is ‘pink’, and male is ‘blue’; and drivers know they should stop at an intersection when the traffic light is red.

The field of Cultural Studies uses semiotic analysis methods to uncover cultural codes, thus making explicit how values and ideologies are constructed and represented (Julier 2014). In the late 1960s, semiotics became a major approach within cultural studies with the work of Roland Barthes, who recognized its value for understanding the meanings of images, gestures, musical sounds, objects, and the complex associations between them (Barthes, 1967). Specifically, semiotics in cultural studies focuses on the study of the meaning of cultural expressions and codes, not in isolation from one another, but as part of ‘sign systems’ that are socially constituted and treated as social practices. In other words, the interest is not in semantics (*what* signs mean), but in the processes and mechanisms for constructing meanings, their political dimension and their relationship to what we come to believe as reality (Denzin and Lincoln 2003). Semiotic analysis, therefore, is suitable to uncover relationships between visual and verbal representation and the ideologies behind them, i.e., describing how inequalities in the distribution of power, wealth and goods are maintained in capitalist societies (Hodge and Kress 1988). The adoption of contemporary – or *social* – semiotics in Britain is largely due to the work of sociologist Stuart Hall, who has had a broad influence on design research and theory since the 1980s (Julier 2014).

Stuart Hall conceptualized the production and interpretation of cultural artefacts as two marked and distinct ‘moments’ in a circular process of communication: ‘encoding’ and ‘decoding’ (Hall 2001). In the context of semiotics, ‘encoding’ refers to the processes by which producing agents – i.e., cultural intermediaries like designers – create the meanings of artefacts by appropriating codes from the cultural context. ‘Decoding’ involves not only the recognition and comprehension of what a text ‘says’ but also the interpretation of its relation to power, and the identification of the cultural codes being used to make it acceptable, credible, desirable in the eyes of the target group.

Approaching design as a form of meaning construction or ‘assemblage’ opens up new possibilities for our practice, into the design of new meanings and strategic societal influence. But it also requires us to master new skills and tools: mapping aesthetic and semiotic codes, identifying the influence of different cognitive frames, and the perceptions and predispositions these might provoke.

As argued in the previous section, framing practices in design need to be better supported in this task. Taking inspiration on Hall’s ‘encoding–decoding’ model of communication, I developed *Con[text]*, a design semiotics model for identifying how cultural code mapping can be conceived during design processes (Santamaria 2020). The approach consists of a series of methods that are grouped in two phases:

Phase 1 – Decoding involves sociocultural research aimed at understanding people and their contexts. It entails mapping and organizing cultural codes and identifying the values signified.

Phase 2 – Encoding is about strategic framing. In other words, selecting the most effective cultural codes identified in Phase 1 and anticipating the behavioral responses they are likely to evoke.

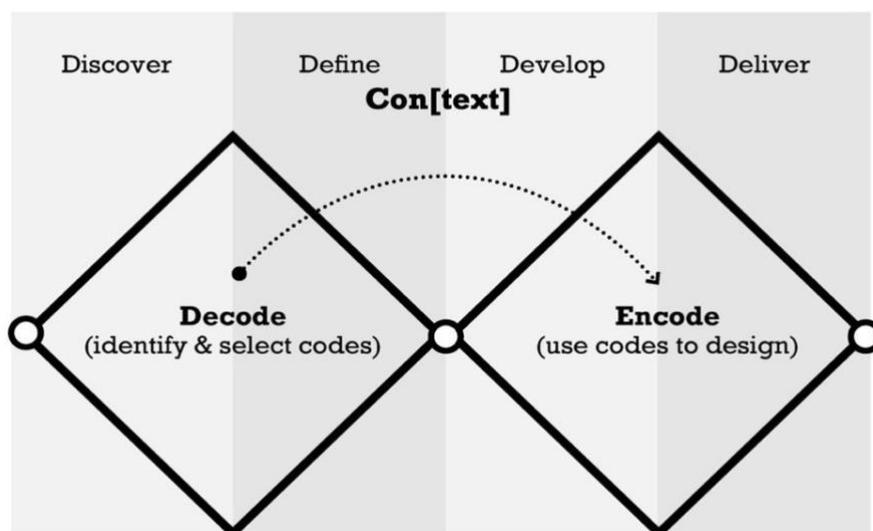


Figure 1 - Cultural context research in the design process (Santamaria 2020).

Con[text] is essentially a meta-framework that can be adopted as a lens to consider design's cultural mediation and meaning management in design processes. In Figure 1, it is situated within the popular double-diamond Design Thinking process (Design Council 2005) where *decoding* would encompass the first diamond (discover-define) and *encoding* the second one (develop-deliver).

In the following sections, I illustrate how semiotic analysis can be used to 'decode contexts' (Phase 1 of the model), i.e., to map meanings and cultural codes as part of design research.

Mapping Meanings in Design Research: A Case Study

In the case study that follows, the aim was to identify the most effective design framing strategy for promoting sustainability values to mainstream audiences. As part of the design research process, code mapping and semiotic analysis were used to uncover the underlying values and ideologies represented by different frames, and to anticipate how each frame may affect people's predispositions and attitudes towards sustainability.

We approached the cultural research with these objectives: (1) to map a trajectory of the sustainability concept in culture (its past, present and emerging cultural associations) to understand how the concept evolved and how it has been represented; (2) to establish the positions and ideologies in tension within the discourse; and (3) to identify which discursive frames held the most appeal in terms of legitimizing sustainable consumption values.

Methodology

As a first step, data was gathered from publicly available mass media texts (limiting the search within the English language). The reason was that mass media are created for a broad audience, therefore reflecting meanings, and holding appeal for mainstream consumers. Social and cultural norms are often discursively created within popular media where expressions of normative consumption, dilemmas, and opposing discourses abound (du Gay *et al.* 2013). Moreover, examining press coverage and commercial representations of the concept of sustainability over time allows us to observe shifts in the popular ecological discourse.

Three scoping searches were conducted to gather semiotic resources. Archival (e.g., newspapers, magazines, and billboards) and online material was searched first, using the keywords 'sustainable', 'eco', 'green', 'environmental', 'environmentally-friendly', 'resource-efficient', 'organic', 'fair-trade' and 'ethical'. The

second search (online only) added the word 'design' to each keyword listed above (e.g., 'sustainable+design') to broaden the scope. This search led to a range of specialist websites on sustainable design and business which featured advertisements framed around 'social innovation'. Advertisers included the British Council, Hitachi, Unilever, and IBM, as well as consulting firms like Accenture. Finding these ads prompted a third search under the key phrases 'social innovation,' 'smart solutions' and 'smart living'.

From the large amount of data retrieved, a sample of resources representative of the most commonly occurring codes (e.g., 'green globe icon', 'craft paper, wood, cork textures', 'term: smart') was selected for analysis. The selected data set consisted of book and magazine covers (12), online magazine, blogs, and news articles (12); print (14), online (7) and street advertising (3); transcripts of promotional videos and advertising (3); newspaper articles (5), and multinational brands sustainability reports (3).

Analysis

Two modes of analysis were employed: sustainability representations were first analyzed diachronically using an RDE (Residual, Dominant, Emergent) categorization (Bryson 2008) to establish the changes in their meanings and corresponding cultural ideologies and associations. Secondly, a Semiotic Square (Greimas and Fontanille 1993) was used to clarify the tensions present in the sustainable consumption dilemma.

Residual, Dominant, and Emergent Frames

The data set was first openly coded and thematically classified under a dominant, residual, and emergent categorization (Figure 2). Dominant – perspectives that are embodied in the majority of society or by the ruling and most powerful class/es. Residual – those beliefs and practices that are derived from an earlier stage of that society, often very long ago, and which may in fact reflect a very different social formation (e.g., different political or religious beliefs) than that of the present. Emergent – beliefs and practices that are being developed out of a new set of social interactions, as societies change. Neither residual nor emergent forms simply exist within or alongside the dominant culture. They operate in a process of continual tension, and can be incorporated into or exist in opposition to this culture.

This analysis was useful for understanding how the meaning of sustainability has varied over time (i.e., diachronically), but more importantly to identify the role that resistant and oppositional identities and ideologies play within the dominant culture, and how effectively they might shift or disrupt it.

- Around for some time, dated
- Out of step with cultural context
- Potential to revive residual meanings
- Heavily played codes in popular culture
- The mood of today
- Current norms
- New ways of thinking and styles of communication
- Not always consciously identified by users
- First clues and expressions of future norms

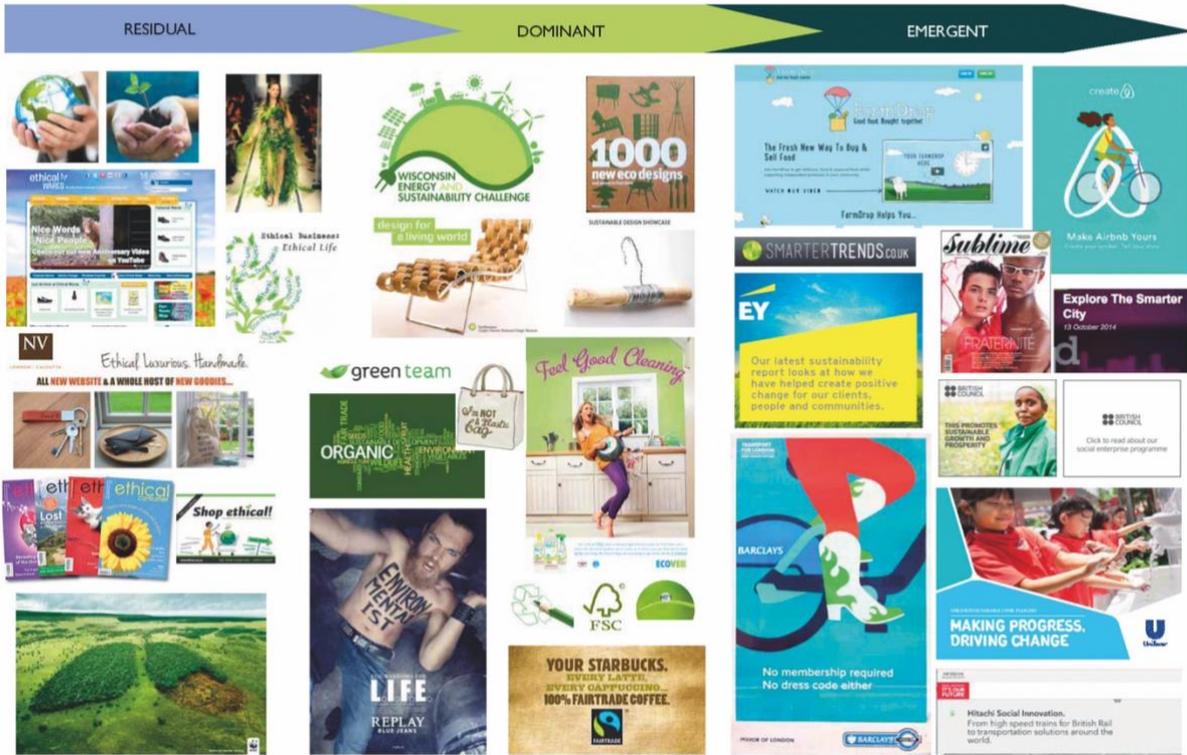


Figure 2 – Sample of dominant, residual, and emergent categorization of semiotic resources.



Figure 3 – RDE analysis of sustainability representations

Two important issues related to discourse framing were found: first, that as the concept of sustainability is popularized, there are considerable changes in the ideologies framed. Mapping the trajectory of the sustainability concept in culture (its past, present, and emerging cultural associations) allowed us to identify three ‘eras’ marked by important cultural shifts in the sustainability discourse: the *ecology* era, the *sustainability* era, and the *innovation* era (Figure 3). This transformation of the meaning of sustainability over time reveals how the concept of sustainability has moved from ‘marginality’ (a concern of few) towards ‘popularity’ (being widely accepted and understood by many). Table 1 summarizes the values and ideologies promoted in each era, and the aesthetic codes and representations used to legitimize them.

Table 1 – Classification of codes

	CULTURAL MOMENT	VALUES	IDEOLOGY	CODES
R E S I D U A L	ECOLOGY ERA 1962–2005 <i>The rise of the environmental movement</i>	Intrinsic value of nature and living beings Harmony, peace, oneness with nature	Hard-core environmentalism Activism and social movements: ethical consumption, boycotts, campaigning	Green, nature, trees, animals Depletion and destruction scenarios
D O M I N A N T	SUSTAINABILITY ERA 2006–2010 <i>Sustainability is commodified with a ‘green version’ of everything</i>	Responsible citizenship Individual accountability	Everyone needs to do their bit ... while we continue business as usual	All shades of green, and some blue Rustic browns and natural shades Rough, eclectic, and quirky
E M E R G E N T	INNOVATION ERA 2011 – present <i>A departure from the environmental and the corporate. A shift towards people, creativity and community</i>	Togetherness, creativity, community Purposefulness in betterment Resourcefulness	People-powered systemic change, and innovation	Multi-ethnic and colorful ‘Flat’ icons and illustration Fluid lines, deeper greens, browns, black

While the initial ecology era adopted ‘social movement’ and ‘radicalization’ frames highlighting losses to people and the environment, in the most recent era ‘ingenuity’ and ‘innovation’ frames, highlighting progressive views or gains, are increasingly being adopted. This suggests that articulating the benefits of sustainability, especially those related to wellbeing discourses and values (i.e., quality of life), may help pave the way for wider engagement with sustainability initiatives. Digital technologies and social innovation have already proven to be successful in popularizing more meaningful – and sustainable – modes of production and consumption. In the innovation era, sustainability gains favorability through its association with wellbeing discourses, without an explicit connection to environmentalism.

Semiotic Square Analysis: Dilemmas and Positions

It was found that the concept of sustainability poses an unexpected conflict of interests between the ‘planet’ and ‘people’. To further uncover these contradicting positions and ideologies within the sustainability discourse, these polarities (global–local, planet–people) were mapped using the Greimas (1993) Semiotic Square, a tool used for the analysis of meanings, based on the opposition of concepts such as feminine–masculine or beautiful–ugly. Results from this analysis prompted considerations of how each different framing position might be influencing people’s perceptions, beliefs and engagement with sustainability practices and values.

At this stage in our analysis, two overarching themes emerged: *planet* (environmental concern and protection) and *people* (improving quality of life). These seem to stand in opposition in terms of who benefits (the environment versus people) which, in turn, correlates with existing ideological tensions: global versus local and corporatism versus cooperatism (Hazlitt 2012) for example. The *global* is the site of the institutionalized and the corporative, of the socio-economic effects of globalization and the sphere of the mainstream media. It exists in opposition to the ‘local’: the site of the individual’s lived experience, habits, aspirations, and social and material circumstances. Table 2 offers a sample of the texts that inform this categorization.

Table 2 – Sample of the process of coding and categorization of semiotic resources.

CHARACTERIZATION	THEMES	CODES	PROPOSITION
PLANET (NATURAL WORLD)	Climate change, deforestation biodiversity loss, extinction, pollution, resource depletion	Natural world Damage Violence Shock tactics Surrealism	There is only one planet, and we need to take care of it for the sake of future generations
GLOBAL (SOCIO-ECONOMIC SYSTEM)	Consumerism Policy Science High-end green Cleantechs Eco-luxury	Smooth lines, Polished and shiny surfaces, Close-up photography Speed, light Urban Exceptional Silent	A sustainable future is achievable via large scale systemic change and technological innovation
PEOPLE (INDIVIDUALS WITHIN COMMUNITIES)	Organic Wellbeing Community Creativity Localization High + low tech Interdependence Sharing Technology-enabled democratization & diversification Entrepreneurship	Naivety and ingenuity Rustic Minimal Home-made Amateur Urban + rural 2D Graphic Practical	We all benefit from each other. There could be a more personalized and meaningful way of relating while covering needs.

<p>LOCAL (THE INDIVIDUAL)</p>	<p>Commodification Low-end green consumerism Eco, fair trade, ethical and green consumption</p>	<p>Green, browns, natural materials, nature, home, quotidian Family Suburban Every day</p>	<p>To do your bit makes you a responsible citizen. Feel good by doing the right thing.</p>
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From the mapping of the four initial key semantic concepts in the semiotic square (planet, people, global, local), four further positions were generated: *environmentalism*, *technophilia*, *altruism* and *ingenuity* (the outer diamond in Figure 4), which attempt to reconcile cultural contradictions and dilemmas. By analyzing representations of these four concepts, we can begin to elucidate the ideologies and meanings they support, as well as the perceptions and attitudes towards sustainability that each frame might generate.

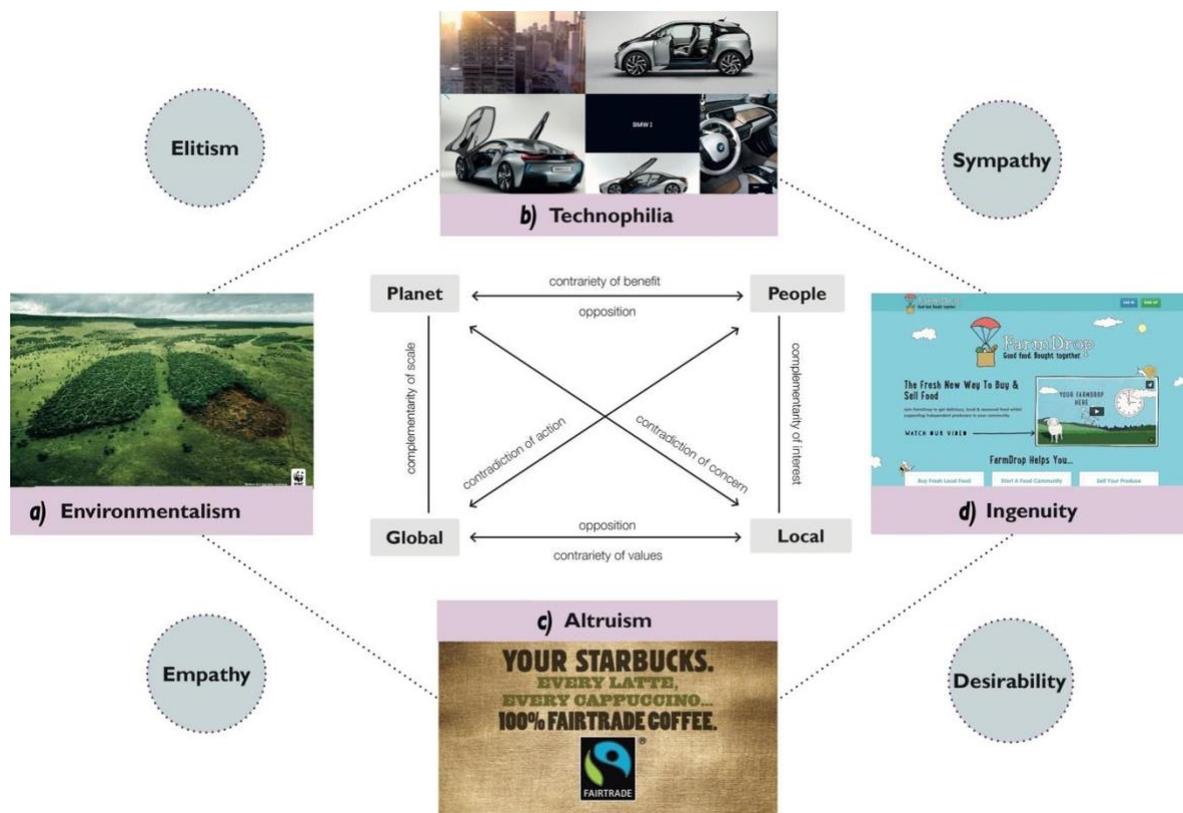


Figure 4 – Semiotic Square mapping of conceptual binary oppositions, ideological positions and resulting ‘framing effects’ or predispositions

Environmentalism – The tension between the planet (protection) and the global (economic over-exploitation) generates *radical* attitudes of engagement with sustainability (Figure 3a). Provocative, incisive, and antagonistic, these positions and attitudes are not likely to disappear, but to gain favor as the dominant class sees its position threatened by increasing awareness of social injustice and inequality. Although environmentalism ideology possesses the capacity to overturn the dominant culture of consumption, its success depends on their ability to reach a critical mass. This is a great challenge, since much of mainstream society perceives living according to the ideological principles of environmentalism as ‘impractical’, due to the high level of commitment and sacrifices required.

Technophilia – Design leverages the introduction of expensive ‘cleantechs’ by representing them as luxurious and desirable. Cleantech is a blanket term referring to a wide variety of environmentally friendly technologies. Figure 3b exemplifies how high-end technological innovation (e.g., solar panels, electric cars, and expensive home retrofitting) seems to be mediating the tension within the planet–people polarity. But high-tech representations generate an *elitist* attitude, where only the few who can afford such luxuries are considered to be ‘living the future today’. Until these commodities become affordable and accessible, mainstream society is excluded from participating in this movement.

Altruism – Within the global–local tension there is a deep opposition of values. On the one hand, people are constantly being bombarded with seductive advertising that encourages self-indulgence in the ‘here and now’. On the other hand, they are also deluged by unpersuasive messages urging them to reduce consumption ‘for the sake of future generations.’ Those in positions of power attempt to shift responsibility to the individual by invoking the idea of ethical consumption. By ‘privatizing’ the environmental debt and commodifying participation and action through consumerist values, these elites generate a *sympathetic* attitude (Figure 3c). Self-righteous and self-serving, an ideology of altruism serves to pacify the conscience of the powerful and the middle-classes alike. This framing is highly ideological as it does not correspond to a material reality: without a shift in values there is no substantive change in behavior.

Ingenuity – Most people are driven by a desire to improve the quality of their lives. They are motivated less by greed and more by the imperative to satisfy intrinsic human needs: subsistence, protection, leisure, participation, affection, individuality, acceptance (Max-Neef, Elizalde, and Hopenhayn 1989). These are defined as local concerns, as they correspond to the lived experience of individuals and their circumstances. The representations that reconcile the people–local tension emphasize quality of life and interdependency, provoking a *predisposition for integration and empowerment* (Figure 3d). It proposes to solve simple, everyday problems and make improvements to our lives and our surroundings by being resourceful, creative, and cooperative. The frame of ingenuity taps into people’s desires for engagement through emotional proximity and familiarity, thus generating trust, openness, acceptance and, potentially, popularity among the wider population.

The tensions between the global (planet) and the local (people) analyzed here help us to see contradictions and dilemmas. For example, when sustainability is equated to environmental protection, it is bound to remain niche because it is considered a global issue, i.e., a complex problem, caused by many actors and outside of any individual’s control. Although the values of environmentalism resonate with people and inform their views on social justice to a certain extent, evidence shows that in practice, the imperative to ‘protect the planet’ does not always translate in behavior change as the average western individual goes about his or her daily routine. Messages such as ‘protect our planet’ use emotionality to imbue the global with local meaning, but they have little impact on behavior because they are not grounded on lived experience. This has been called the value-behaviour gap (McKenzie-Mohr 2013). It is likely that the concern for the environmental degradation would not translate into significant behavioral changes until it is perceived as a local/personal problem.

To illustrate how issues framed as global or local might affect perception and behaviors, let us consider two examples: whilst I can ‘eat organic’ and judge for myself whether there is a difference in the taste of organic versus regular produce, I cannot ‘experience’ the effect of my household recycling. Conversely, while I cannot experience first-hand the effect that reducing my electricity consumption has on climate change, I can see that my efforts have cut my bill by a third. The further removed environmental degradation is from personal experience, the more reliant we become on the ‘global’ discourses to mediate meaning for us, and this affects how we might prioritize change. In this way, media messages, products, services, and policies framed around the ‘global’ frame may well be rendering us incapable of implementing more radical lifestyle changes because there is no direct correlation between this discourse and our ‘local’ values and priorities (e.g., to improve our lived experience or subjective wellbeing).

In addition, environmentalism ideology mobilizes minorities of either resistant groups, or the morally compliant rather than the mainstream. While niche groups find social differentiation and a sense of

identity within environmentalism's moral values (i.e., believing they are supporting a 'good cause' or 'being good'), these niches can be easily dismissed by dominant actors, being casted as radical and utopian. For example, *The Guardian* reports: "*Sustainability played a role at London fashion week – just don't call it 'eco'*" (Pattinson 2014). Therefore, by aligning sustainability to the ideology of environmentalism, we might be keeping it in the fringes and preventing mainstream societal change.

However, an interest in wellbeing has been steadily on the rise, reflected in people's pursuit of healthier and more fulfilling lifestyles. A greater impact on the public might therefore be achieved by environmental campaigners through the framing of sustainable innovations and practices around the proposition that they will bring personal benefits that 'enhance our quality of life.' This may well be more effective than framing the concept of sustainability around the need for environmental protection.

The 'local' framing of many social innovations serves as a fine example of how to create a more holistic approach to sustainability: one which incorporates and unifies the values of environmentalism with those of personal and social wellbeing. This approach challenges consumerist values concerning what it means 'to live well'. While centered on people's wellbeing, a holistic framing of sustainability does not prioritize the individual at the expense of the environment. Instead, it considers personal wellbeing as the basis of the wider community and its environment's wellbeing. At the same time, this 'local' frame legitimizes and reinforces values that support societal and environmental flourishing (Ehrenfeld 2019).

The four discursive frames identified in this analysis reveal the ideologies (i.e., values, beliefs, and positions) that are being adopted, and considers each frame's potential to generate adherence to behavioral changes that will benefit the environment. The results of the research suggest that while frames that present sustainability as a 'planet' issue (i.e., a global concern) might appeal to individuals with strong environmental values, discursive frames focused on 'people' (i.e., local concerns which enhance one's personal or social wellbeing) may be more effective in engaging wider audiences.

The findings demonstrate the effect of 'framing biases', as explained by prospect theory (Tversky and Kahneman 1981), which shows that a probabilistic loss is preferred to a definite loss. In other words, if sustainability is framed as a loss, i.e., with ideas of cutting down, environmental degradation, sacrifices. It is a less attractive option than when it is framed as a positive 'gain' – e.g., as fashionable, innovative, smart, new ways of doing and consuming.

This form of analysis reveals dynamic systems of signification. As Floch (1988, 251) explains, "*mapping conceptual boundaries can elucidate the conditions within which meaning is produced and interpreted*". Thus, this semiotic analysis of sustainability representations helped to uncover how the dilemmas, cultural contradictions and tensions posed by the urgent socioeconomic paradigm shift towards sustainability are, at present, being reconciled through design representation, and how these representations frame different ideological positions.

Conclusions

In this chapter, I explored how designers can strategically contribute to social change, providing support for a cultural paradigm transition that, while already emerging, it needs strengthening and accelerating. Focusing on *cultural* rather than *technical* means of societal transformation, we explored the role of designers as cultural intermediaries and the opportunities this role poses for legitimizing the emerging expressions of a new socioeconomic paradigm.

Special attention is drawn to the actual processes and methods that designers use, by virtue of their practice, to construct meanings and to attribute symbolic value to material objects. Mapping the sociocultural codes as part of our design activity is paramount, considering the influence, predispositions, and consequences

that design framing brings to bear upon people and cultural contexts. In doing so, designers influence the adoption of new beliefs and related behavioral changes. I illustrated how Cultural Studies can inform design research with critical tools and methods to understand how two apparently disparate aspects interlink: the micro (i.e., the individual and subjective aspects of value perception) and the macro (i.e., the larger established, sociocultural) discourses of societal transformation. This is not an easy task, and I do not claim to provide a definitive answer to such a complex undertaking. Instead, my aim is to consider how methodologies and epistemologies of design can be updated, building on sociology and the cognitive sciences, which provide a large body of knowledge to elucidate the effects and consequences that representation and perception play in human decision-making.

As designers use cultural codes, it is important to identify both the designer's own value system as much as the contextual cultural values, to be more transparent about what ideologies are being advanced or reinforced through our design activity. A more self-aware and methodical approach to design framing enables designers and other stakeholders to make decisions centered on people and context, thereby keeping personal preferences, agendas, and biases in check.

While designers are not solely responsible for the framing of cultural perceptions, our position as cultural intermediaries afford us privileges and responsibilities in legitimizing the values and cultural practices that underpin humanity's flourishing. As such, we should play a leading role, strategically framing meanings in ways that mobilize and enable the largest sectors of society towards change, while challenging dominant oppressive cultural values and views.

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