

Rules of Thumb: An Experiment in Contextual Transposition

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Abstract: This paper describes an experiment in ‘contextual transposition’, a mobile, inventive method developed from conversations between the authors during an interdisciplinary research ‘sprint’, where our interests in alternative mobilities and ‘designing’ socially just futures generated productive creative friction. The idea of ‘hitching a ride’ in automobility systems was mobilised and we embarked on a journey of ‘contextual transposition’. Could one hitchhike in other contexts? To explore this question, we designed an experiment. In this paper we describe it and discuss how we have used contextual transposition as a method for design research.

Keywords: mobilities, social futures, design, contextual transposition

1. Introduction

Our experiment in contextual transposition grew out of the 2015 *ProtoPublics 'Sprint' Workshop: Prototyping Design Orientated Cross Disciplinary Research*, run under the auspices of the UK Arts and Humanities Research Council. The purpose of that workshop was to foster cross-disciplinary collaboration and innovative project ideation through facilitated serendipity. All attendees had been chosen on the basis of their track record in creative research through public engagement, albeit covering an extremely broad range of topics. Conversations on empirical, intellectual and ethical motivations for their work brought the authors together and animated them to work with the frictions between their diverse perspectives, existing engagements with publics, and methodologies. This brought diverse knowledges together, exploring design theory and cultural history (Taylor), mobilities, disaster, interdisciplinary design and mobile methods (Büscher), gender, generational aspects to mobilities and mobile methods (Murray), network society, digital art and technology (Speed), architectural practice, design cognition, community led design practices and complexity research (Zamenopoulos). A strong shared commitment to public

engagement in defining and ‘designing’ socially just futures inspired a decision to ‘hitch up’ for a collaborative project.

Contextual transposition emerged as a mobile, inventive method capable of extending existing creative and participatory design methods in a way that more effectively respects and leverages the practices and knowledges of the ‘publics’ researchers engage with. It also highlights how ‘futures’ are ‘social futures’, dependent on future social practices. Unless futures are inclusive and ‘live-able’ they will not take hold. Thus a critical focus was on exploring new ways of including diverse communities and shaping live-able future practices. The aim of the experiment in contextual transposition discussed here was to explore the potential of transposing the structural imperatives and practices of ‘a’ specific practice: hitchhiking – to another cultural context in a way that supports greater social justice. Housing was chosen as a context, because it is different from transport and characterised by significant inequalities. The key research questions were: What are the structural and cultural imperatives of the practice of hitchhiking? To what extent is it possible to transpose hitchhiking knowledge, methods and practices into other contexts? Does such a transposition allow individuals or organisations to exploit existent system affordances in new and productive ways?

In the following, we discuss a short and intense research experiment, undertaken between June and August 2015. We begin by examining the creative, transgressive momentum of hitchhiking, which motivated our enquiry. We show how thinking about hitchhiking revealed a potential for ‘contextual transposition’ as a mobile, inventive method for the ‘design’ of social futures. Following an outline definition of the method, we describe our attempt at practicing it. A discussion of the potential of contextual transposition concludes the paper.

2. Gathering Motivations, Methods, Momentum

2.1 Transgressive Infrastructuring

Hitchhiking, whereby individuals intervene in mobility infrastructures to get where they want to go, emerged as a significant practice alongside the growth of automobility in the twentieth century. When hitchhiking was sufficiently common to constitute a recognised mode of transport (albeit a transgressive one) the queues of students, soldiers, drifters and delivery drivers who stood by road junctions with their thumbs in the air, though they may not have known it, were capitalising on the affordances of the infrastructure of the automobility system (cars, roads, laybys, laws, and cultural practices) (Urry, 2004). The practice is a transgressive one, albeit without the measures of extreme policing that are evident in the practices of ‘hitching’ on alternative infrastructure systems such as stowaways on ships and train hoppers on the railways (Walters 2008). Nevertheless hitching is policed and this is one of the risks to be negotiated as hitchers act to repurpose the system to suit their needs and capabilities by re-casting it a resource.

To the research team – which comprised an architect, designers, a design historian, social scientists, hitchhikers and ride-givers – it seemed that such a practice offered great potential for creative research and in(ter)vention. The potential for a rediscovery of hitchhiking to become part of more sustainable models of travel was an obvious focus for discussion, but the transgressive momentum of the practice was conceptually generative beyond the realm of transport and mobility practices. Could people hitch other systems like healthcare, housing, education? That is, could they transpose the ideas, philosophies and practices of hitchhiking to repurpose other systems in ways that allowed them to address their needs and capacities, to take them where they wanted to go? Hitchhiking became fascinating, both as an empirical field for study and as a methodology for research creation and future-making.

The project did not seek to reinvent or redesign hitchhiking. In the digital age there are already a number of platforms that exploit Internet connectivity to allow individuals to arrange lifts in cars (such as *BlaBlaCar* and *Liftshare*). Nor was the objective to simply use hitchhiking as a metaphor for social action that depends upon (inherently risky) negotiated reciprocity. Instead, the idea was to explore how – through understanding and transposing hitchhiking and its role in infrastructuring the automobility system – individuals and organisations might generatively intervene in the infrastructures that hold other systems together.

Infrastructures can be conceived of as the structures that allow for much of our social lives to unfold (Larkin 2008). But Dourish and Bell (2007: 417) show that infrastructure and everyday life are coextensive, in that infrastructure as a concept ‘encompasses not just technological but also the social and the cultural structures of experience’. This suggests that infrastructures become effective through practices of ‘infrastructuring’, a concept that highlights how infrastructures are not designed then used, but made in use, that some infrastructures enable more, some less ‘control’ and agency (Star and Ruhleder, 1996; Ehn 2008) and that they could be otherwise. Thus practices of intervention into infrastructures or, rather, infrastructuring, were identified as a rich territory for research and invention. The experiment aimed to map the structural dynamics, imperatives and practices of hitchhiking as a form of mobility system infrastructuring, and, to enable a process of ‘contextual transposition’.

2.2 Contextual Transposition

The intention was to elaborate a process whereby knowledge, strategies, tactics and the everyday activities that make hitching ‘a practice’ could be mobilised, and applied as a mechanism for developing knowledge and insights in other contexts. The intuition was that there was value in moving a practice into a different ‘register’ of infrastructuring, because this opens up important social issues for creative in(ter)vention and augments existing cultural, participatory and ‘infrastructuring’ design methods (e.g. Greenbaum and Kyng

1991, Casakin 2002, Randall, Harper and Rouncefield 2007, Ehn 2008, Blaikie 2009, Sanders and Stappers 2014).

Thought experiments explored how one might, for example, ‘hitch’ a better ride in healthcare, education or housing systems. Hitching practices within automobility systems include ‘knowing the territory’ of motorway, road networks, and service stations and ‘reading drivers’ to understand their constraints, but also their (potentially exploitative) expectations (see Section 4 below for more). Hitching practices are themselves ‘on the move’, with practices such as ‘slugging’, the act of informal car-pooling, being incorporated from other configurations of mobility such as public transport (BBC, 2006). These dynamic practices shape the automobility system from within by finding cracks and holds for alternative routes and means of travel. Contextual transposition of these practices might offer patients, students or tenants new forms of knowledge and control of their systems, and it brings practitioners, designers and social scientists together in an endeavour of defining and ‘designing’ ‘better’ social futures.

Of course, the history of design is full of transpositions and abstractions, to the extent that they can be claimed to be a fundamental design principle. ‘Cultural transposition’, defined as the projection or mapping of ideas and knowledge from one situation to another, can be associated with cognitive process such as associative (e.g. Koestler, 1964), analogical (e.g. Leclercq and Heylighen, 2002; Casakin and Goldschmidt, 1999) or metaphorical reasoning (e.g. Casakin, 2002). Indeed in psychology and design research all these practices have been widely studied as essential processes that underlie creative and design thinking (e.g. Gadwal and Linsey, 2010). In these studies, the emphasis is placed on the use of this type of reasoning as a tool for generating solutions to problems by preserving certain structural imperatives from one domain to another (Gentner and Markman, 1997; Gentner, 1983). The idea of contextual transposition in this study takes a slightly different perspective, however. Here the focus is on the potential for generating new insights or knowledge by overlaying two different domains together as opposed to attempting to generate solutions that adopt or adapt certain principles from one domain to another.

‘Contextual transposition’, as it is understood here, thus depends upon diverse traditions concerned with the relationship between social research, design and social, technical, and organizational innovation. These include participatory and collaborative design (Greenbaum and Kyng, 1991), ethnomethodology (Randall, Harper & Rouncefield, 2007), mobile and inventive methods (Büscher, Urry and Witchger, 2011; Fincham, McGuinness and Murray, 2010; Lury and Wakeford, 2012), generative, critical and speculative design research (Sanders and Stappers, 2014; Michael et al. 2015), research co-creation (Chapman & Sawchuk 2012) and engaged science and technology studies (STS) (Sismondo, 2008). The intention was not to conceptualize contextual transposition as a form of ‘contextual design’, which collects data about users’ intents and desires for design (Beyer and Holtzblatt, 1998). Rather the approach is collaborative and practice focused. It builds out from co-creation of qualitative social research, which generates rich descriptions of contextures of practice (in

this case hitchhiking). Theoretical and practice-based design approaches and collaborative design activities with practice experts (hitchhikers and housing cooperative members in our case) accompany qualitative research with the aim being to support practitioners in the transposition of practices from one context to another. Transposition thus involves the collaborative, situated 'design' of practices, especially practices of infrastructuring (Star and Ruhleder, 1997; Ehn, 2008). Such a methodology allows researcher and practitioner collectives to explore and 'design' social futures; social in the sense of being, in important respects, 'in' the social and material practices of infrastructuring that hold socio-technical systems like automobility, healthcare, education, housing together. Contextual Transposition is therefore a way of experimenting with defining and 'designing' social processes in 'better' ways by revealing unexpected openings that can be made use of.

2.3. In a Sprint

The timeframe of the project was less than three months, with everyone working on it alongside (and on top of) their normal everyday commitments. This created great momentum for intense, but circumscribed and speedy research. A small-scale ethnographic study of hitchhiking was set up. Concurrently, a historical and cultural literature review was conducted. Analysis of interviews and observations ran alongside design-oriented activities that reflected upon the material and attempted to develop support for an experimental transposition of insights.

The initial intention was to develop a 'hitching kit', a facilitating device that stakeholders could use to transpose hitching knowledge. The context of housing seemed useful because it is one where ownership of means and capacity for control is unevenly distributed (as it is in automobility systems) and creative ways of navigating the system might reveal opportunities for better social futures of dwelling. Moreover, members of the team already had access through other projects.

The hitchhiking kit was to be developed in conjunction with The Glass-House Community Led Design, based on the principles of generative design research (Sanders & Stappers, 2014) to support abductive reasoning (Blaikie, 2009). The final part of the project would be a workshop in which participants from housing co-ops would use the hitching kit as a tool for discussion of challenges, sharing of personal stories, and examination of issues of co-operative living that would hopefully reveal glitches and unexpected opportunities in the various systems such practices inhabit. Movement and 'invention' were to be integral to this workshop. The utilisation of mobile methods (Büscher, Urry and Witchger, 2011; Fincham, McGuinness and Murray, 2010) would enable embodied knowledge of (some aspects of) hitchhiking contexts, which was necessary to understanding its social practices, whilst moving in researching could also produce conversations and insights that would not be possible through static methods alone. Inventive methods (Lury and Wakeford, 2012) were needed to enable the creative leap of transposition in the interdisciplinary academic - practitioner collaboration.

3. Understanding Hitchhiking

Through purposive sampling, five people with experience of hitchhiking participated in the research. The data was then combined with mobile autoethnographies, which involved research team members hitching during the research. The study sought to understand why and *how* people did their hitchhiking. The material was transcribed and coded in an iterative manner, using a conceptual framework developed from literature review. It was thematically analysed and coded using QSR NVivo. This looked on the one hand for key aspects of hitchhiking as ‘a practice’ and on the other descriptions of how these aspects were realised *in practice*. These results were then interpreted by the team. Social research was augmented by wider cultural research, which included a study of historical material, narrative accounts in books, ‘how to’ literature, and short films posted on sites such as YouTube (of which there were many). In addition, designerly enquiries took place through drawing and prototyping .

3.1 A multi-faceted practice

This multi-layered enquiry produced a wealth of insights. The selective presentation of analytical forays below highlights aspects that seemed particularly promising for transposition. They mix descriptions of the practical accomplishment of hitchhiking with analysis of cultural dimensions and theory, with the aim of revealing the richness of hitchhiking practices and hitchhiking as *a* practice.

Getting somewhere, reading drivers’ intentions

“[I]t’s a sensible way of getting about”¹. People hitchhike to go to and from work, to go on holiday, or to get home after a night out, especially when other options are limited:

We could not find a taxi anywhere and I think we were both wearing ridiculous outfits as you do in your 20’s, you know, ... [Laughter] And we were walking along and I stuck my thumb out, I just said “I can’t stand this, I really can’t stand this, I’m going to die of hypothermia”, stuck my thumb out and we got a lift.

With an instrumental orientation, hitchhikers use the affordances of the automobility system. The linearity of the network of motorways and roads mean that drivers’ destinations can be guessed. Similarly, drivers can read hitchhikers’ intention to travel a reasonable distance on the road they are on, so someone who will turn at the next junction will not usually stop and may even signal that they will be turning off. This is reminiscent of Goffman’s (2009: 11) ‘intention display’, the nonverbal gestures that make the mobile practices of an individual ‘readable’ to others.

Reciprocities and obligations

When a hitchhiker enters a car, they can find themselves obliged to the driver:

¹ Unless indicated otherwise, all quotes in this section are from participants who contributed to our research through interviews and a workshop.

You're in hock to them, and I can think of one particular example where, you know, [I] sat with a lorry driver ... [laughs] trying to tell me how brilliant Roy Chubby Brown is and trying to get me into his sort of vaguely, well not vaguely, overtly racist world view and to laugh at these particular things and of course I want the lift, you know, I don't want to say, "Well actually I'm not a racist or whatever," and then [for him to] turf me out of the vehicle, so I found myself, "Well I take people as I find them," just coming out with these sort of platitudes....

The obligation to conform may be, as the participant suggests, instrumental, but also relates to territory; it is more difficult to challenge in someone else's. Similarly they may be expected to provide entertainment:

There was a lot of, you know, executives who did quite a bit of driving and were, you know, bored really, and I suppose, you know, that is a sort of reciprocal function of hitchhiking is that, you know, you get a lift but you provide entertainment, and conversation and help people pass a bit of time.

The gift of a lift is not free, and reciprocities are created and negotiated in the interaction.

Taking liberties, re-making inequalities

While reciprocity often works well, some drivers overstep their expectations: "you are vulnerable when you get into people's cars". That drivers would sometimes attempt to take sexual liberties was a common observation, doing things they would never do in a public situation. The 'ownership' of the space, the confinement of the car, the host/guest relationship, the side-by-sideness all play a role in producing an asymmetric, intimate situation that can be exploited. Imbalances of power, according to age and gender are significant here, but there is also asymmetry in the very act of asking for a lift. Hitchhikers lack autonomy in an automobility system defined by this very quality, they are dependent, excluded and seeking inclusion via the hitch. The power to stop and allow access to the automobility system sometimes seems to be understood to also grant other powers.

Making the world a better place

At the same time, many hitchhikers and ride givers explicitly contest the inequalities of the automobility system. There is a tendency for drivers who pick up hitchhikers to have hitched themselves (O'Regan, 2014; Chesters and Smith, 2001), and hitchhiking fosters reciprocal altruistic interaction "since it foregrounds informal (and frequently marginal) sets of social relations based on mutual aid, cooperation and trust" (Purkis 2013: 158). Purkis relates this to a broader reappraisal of the sociality of the gift. He argues that "the hitchhiker offers us a glimpse of another kind of modernity; of alternative structures and associations beyond those defined by political, economic and social hierarchies, mobile or otherwise" (Ibid). Demonstrating a reflective awareness of this imperative of altruism as a normative ambition, a number of interviewees highlighted ethical values as important:

The world would be a better place if more people hitchhiked, if more people shared cars, and you know, you could maybe chart the decline of hitchhiking with the rise of, you know, rampant individualism in our society.

But what exactly is it about hitchhiking that enacts 'better' worlds, and how is this done?

Hitchhiking affords a lived acting out of the idea that "there is goodness in most people". Stopping is an altruistic act of sharing scarce resources, while being side by side fosters intimate conversations and tolerance in that it allows a glimpse into someone's life, sometimes across a gulf of socio-economic, political, or cultural difference. Hitchhiking allows for "occasional encounters" with diverse others, which is a key driver of civility (Urry, 2004).

However, perhaps a more challenging question is how 'better' comes to be defined. It can be glimpsed, perhaps, in the definition of hitchhiking as "a sensible way of getting about, somebody is going there already, you may as well get in with them". Getting in on a journey is revealed as one way of making the world a better place by saving resources.

Managing Risk and Trusting

The 'How To...' guides to hitchhiking such as the iconic *Hitch Hiker's Guide to Europe* by Ken Walsh (1977) and *The Hitch Hiker's Manual: Britain* by Simon Calder (1979) offer a great deal of advice and practical suggestions as to how to mitigate the risks of hitching. By doing so they frame the way in which the practice was (and is) seen as an essentially risky activity. In more academic work, Chesters and Smith' (2001: 2), drawing from Giddens, suggest that there is a relationship of 'active trust' established when a stranger is accepted into the driver's space and an associated overcoming of anxiety, though this could be considered as an 'appearance' of trust (Goffman 2009) enacted in order to cope with the situation. Hitchhiking may thus be seen as on the one hand a way of counterbalancing fear in a 'risk society', (Beck, 1992); and on the other as a lens through which to assess how risk is manifest and navigated at the scale of the everyday (Tulloch and Lupton, 2003).

Embodied practice and spaces of power

Hitchhiking is an embodied practice, intimately involved with symbol, gesture and performance:

you also have to make a sign, I found one in one of my old journals, you know, saying "Arcachon si'l vous plait", always say please on the sign and always smile.

But the smiling performance transgresses spaces of power, too. Purkis (2013: 147) sees the hitchhiker as an anarchist theorist, proposing that such a figure "offers us a synthesis of theory and method; a traveller observing the landscapes of power through which they are moving, yet seeking alternatives to its hierarchies and formal economies through constant negotiation and exchange". One of the primary ways in which this creative transgression takes place is through navigation in a literal sense. The practice of hitching causes "ruptures

within the linearity of most vehicle journeys” (Laviolette 2014:16). And, Laviolette argues, it emplaces alternatives within the body and the territory: “the road-scape is embedded with the hitcher’s performance’ and ‘hitch-hikers are not separate from their surroundings” (Ibid) but active in their creation and reconfiguration.

Tactics: Know your territory and use your ingenuity

You need to know a little bit about the sort of motorway network.

Hitchhikers often intimately know the routes that are available to them. Many accept that there may be detours and can improvise alternative routes or even destinations. O’Regan (2013: 41) argues that the performance of hitching makes what he calls “motorscapes” a “fluid space, an assemblage of signified features evolving in function according to the activities they need to perform.” That is to say, space, meanings and uses are reconfigured as part of the journey. He states:

Objects, amenities, other bodies and infrastructure are positioned according to their ability to meet the requirements of the practice. Service stations become a place where hitchhikers can replenish their bodies, interact with drivers and sleep overnight, the maintenance of sprawling transportation networks becoming a place of movement relations and exchange with other hitchhikers, drivers and service station employees. (Ibid)

Laviolette (2014: 7) refers to Carlson’s 1972 “mini-ethnography” of female hitchers, which examined the plans women make as well as the risks and dangers they anticipate when hitch-hiking. Carlson observes that “the freedom to go where one pleased at any time was valued, but even more so when it is acquired by one’s own ingenuity” Thus, as O’Regan (2013: 45) observes, hitchhikers can be seen to be “utilising cracks as they work through space” and their skills in “exploiting ambivalence and ambiguity” can be seen as “fleeting victories”.

Getting in/Getting out

“How does one actually get in and out?” is, in its practical achievement, a complex question:

You don’t want to be at the top of the exit road because that’s dangerous for cars to stop there, you need to be at a place where they can stop safely but also where you’re not going to get picked up by the Police for standing on the motorway so there’s all of that sort of thing about positioning yourself.

Then, actually getting in involves conversational openings and discovery of the interaction order in this car, with this driver. There are also crucial questions about when *not* to get in, sometimes requiring split-second assessment of risk, practices of risk avoidance and of turning risky situations around. When travelling in pairs, communicative rituals help:

You’d just kind of look at each other and go, kind of nod the head a little bit or in one quick movement when they’re not looking just kind of go with your head, to say ‘no’.

Once in, knowing how to get out can be critical. Faced with a driver who was quietly “jerking off” as he was asking his female hitchhiker passenger “all sorts of questions”, one hitchhiker says: I pretended I hadn’t noticed because I was thinking “I’ve got to get out of this car”. “Staying calm” while “frozen with fear” and carrying little luggage (which was another recurrent theme) enabled her to use the affordances of a traffic jam to jump out and run off.

4. Gaming Transposition

Building on these observations, we sought to find ways in which users of other systems could be supported in knowing their territory, navigating landscapes of power and fashioning alternative routes. It quickly became apparent that rather than simply making a ‘tool’ that those involved in housing co-ops could use to transpose hitching practices, a more effective format would be a game. As Lloyd and van de Poel (2008) note, games can be very effective in providing a space in which practices such as negotiation, rhetoric, and strategy can be played out, at the same time that games can “illustrate the messiness and contingent nature of real-life processes” (2008: 436). Thus the hitching kit became an open-ended game, *‘Hitch’* that allowed participants to build a ‘road map’ of their system and to explore alternative ‘journeys’ by ‘hitching’ an existing infrastructure in new ways.

4.1 The Structure of *‘Hitch’*

The researchers developed a game of three phases: two preparatory activities, and a final phase for the generation and analysis of alternative journeys. In the first phase participants would be asked to identify and discuss the ‘challenges’ and opportunities that characterise their system (i.e. housing cooperatives). To facilitate discussion during the activity and multiply the range of creative pathways they would then be divided into two groups and asked to select one particular challenge or opportunity that they wanted to explore: A constructive response to this challenge or opportunity was to be their ‘destination’. The second phase was to set up the exploration: creating a hitchhiker’s sign with the desired destination and a road map to represent the existing network or infrastructure of resources and actors (Figure 1).

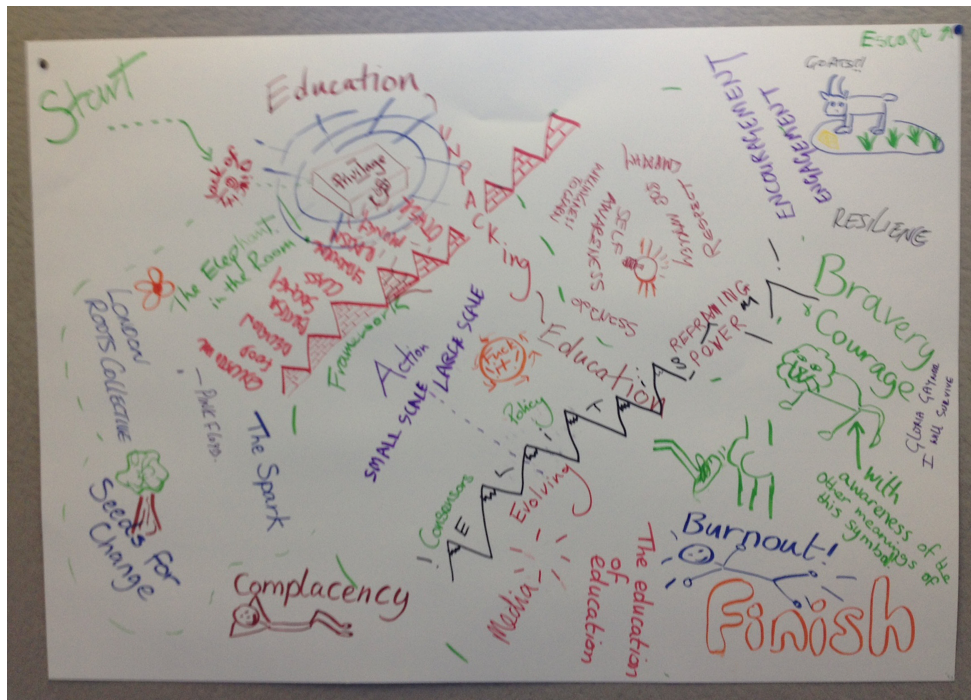


Figure 1: The ‘Diversity’ map created as a ‘landscape’ through which the team would ‘hitch’.

Phase Three was to centre on play, generating alternative journeys through the existing roadmap, including reflection upon ideas or responses to problems. The players would be asked to identify critical points in their roadmap and colour-code them. Then, using a 'chance wheel' they would move from the start position to the end point by passing through locations on the map as dictated by the wheel. With each 'move' the idea was that they would pick up a 'resilience card' that provided a description of hitching practices drawn from the ethnographic and cultural research (Figure 2). Each card bore a keyword from our analysis of hitchhiking, accompanied by a quote from the interviews. The cards would require the participants to reach their 'destination' and their roadmap 'through' hitchhiking practices, prompting transposition of lived 'infrastructuring' practices and enactment of the landscape, the actors, objects, and imperatives.

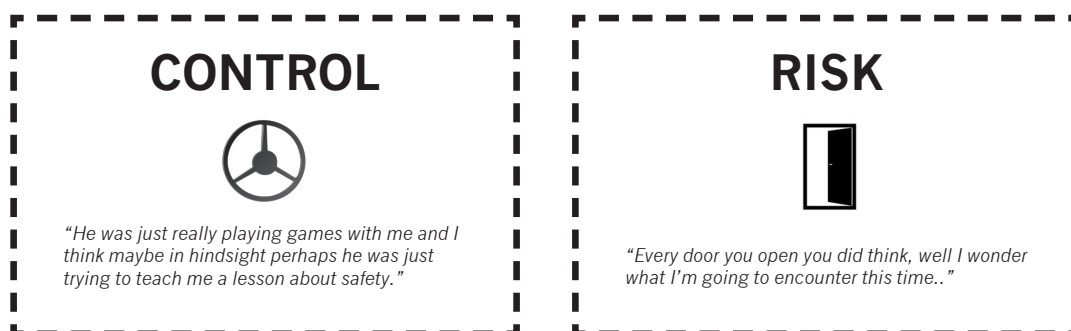


Figure 2: Hitch resilience cards

Participants would be asked to record their responses to each card as well as their routes on A4 paper. The aggregation of these A4 sheets was expected to generate a 'storyboard' of their journey from start to finish. Multiple journeys and therefore stories could be created.

4.2 Making and Playing Hitch

Participants were invited to a 1.5 day workshop based on their role as members of housing co-operatives or co-housing schemes. There were nine people from five different organisations: Brandrams Wharf, London Community, Sandford's, Rosa Bridge Housing Co-op and Sussex Co-Housing. The initial meeting point was at Gatwick Airport, where the group was picked up by coach to prepare the collaborative contextual transposition by engendering some of the practical experiences of hitching a ride (such as negotiations of getting in, host – guest reciprocity, and side-by-side conversations with strangers). The rendezvous point was chosen for practical and conceptual reasons because of its role as a transport hub. The next stop en route was a motorway service station, a pivotal node for the hitchhiker and a convenient pitstop for the 'transposers'. Here the group was introduced to the hitchhiking knowledge generated through the qualitative enquiries and the research team's interest in 'contextual transposition'.

Upon arrival at the University of Brighton, the participants began to make and play *Hitch*. It proved more difficult than anticipated to identify 'destinations', as end-points were not as clear-cut as expected in the game's development. Whilst one team relatively quickly came to 'diversity' as a desired end-point (having observed that cooperatives often tend to be white and middle-class), the other team eventually settled for 'Open to...' as a destination, looking for a way to be more open to new ideas that would challenge the 'entrenched views' they saw as inimical to the operation of a good co-op. Once the destinations had been established, however, both teams fell with gusto to the population of their 'road maps', with extensive discussion and debate as to the salient stations and structures to be included. Once the teams began to 'hitch' their way through these infrastructures, the game really took off, as participants were able to reflect upon the nature of their experiences in relation to the randomly generated 'hitching' transpositions suggested by the resilience cards. Indeed, what quickly became apparent was that too little time had been allocated for this period of game play, and the session was extended into the next day.

5. Discussion

Serendipity led us to hitchhiking and an interest in 'designing' social futures. The concept and method of contextual transposition was, in one sense, an improvised response to the challenge of interdisciplinary research collaboration. However, what started as improvised analytical affinity turned into a highly generative approach when we put our analytical methodological approaches together and joined forces with practitioners at the coalface of 'systemic' contemporary challenges.

The overall reaction to the experience, as captured during the workshop and in subsequent feedback questionnaires, was very positive. Though it was noted that the actual knowledge of hitchhiking itself was not necessarily particularly useful for co-operatives *per se*, the process of coming together through this had been valuable, that the ‘meshing’ of the two subjects in this manner had produced new and potentially useful insights.

Many of the participants suggested that the resilience cards were the most effective tools for reflection in the process. It was reported that the quotes drawn from the ethnographic research helped to open up conversation in a way that would probably have not been possible if they had simply been talking without such prompts. This observation may indicate the importance of grounding cultural transpositions into specific grounded instances (e.g. stories, pictures or objects) rather than solely using abstractions that are induced from a certain context (like ‘time’, ‘risk’ or ‘reciprocity’).

6. Conclusion

This research allowed a team drawn from a relatively diverse range of fields of knowledge and action to conspire in investigation and experimentation to see what value could be gained by taking the knowledge implicit in one practice and artificially situating it in another. Through a multidisciplinary research approach a ‘good enough’ knowledge of the structural and cultural imperatives of the practice of hitchhiking was developed and worked upon to render it useful in the development of a design intervention. From this the game *Hitch* was created and a scenario developed that would allow it to be tested as an agent of contextual transposition. In this way the researchers then set out to answer the question of whether such a transposition can allow individuals or organisations to exploit existent system affordances in new and productive ways.

That the ‘contextual transposition’ of the knowledge implicit in the practice of hitchhiking into the field of social living through co-operative housing could, at the very least, be seen to function to produce new insights into the nature of the latter was seen as significant. This is because it reveals the nature of contextual transposition as a process that is distinct from the use of analogies or metaphors in such interventions. Analogies and metaphors suggest a structural ‘homomorphism’ (the preservation of certain structural characteristics) between different domains or contexts (Gentner 1983). But the value identified by the research participants of transposing knowledge and practices from one context to another indicated a slightly different process: that the transposition from domain to domain was not acting as a mechanism for preserving useful structural characteristics, but rather was acting as a springboard for generating new or previously unobserved structures within a new context; thus this was an exercise in infrastructuring in itself. That the participants reacted to the specificity of the hitchhiking situation may also suggest that they engaged with the intrinsic aspects and imperatives of hitchhiking rather than a collection of abstract concepts such as reciprocity, risk or time. In this way this ‘sprint’ experiment thus suggests that further fruitful

study may be made of the way in which high-level abstract concepts may be interpreted and explored within specific contexts and then transposed into new domains as an inventive method for future making.

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6. References

- BBC. (2006) *Car-sharing more common abroad*, BBC News, 2 March 2006
<http://news.bbc.co.uk/go/pr/fr/-/1/hi/uk/4824614.stm> (Accessed 20 June 2015).
- Beck, U. (1992) *Risk Society: Towards a New Modernity*, Sage.
- Beyer, H. And Holtzblatt, K. (1998) *Contextual Design: Defining Customer-Centered Systems*, Academic Press.
- Blaikie, N. (2009) *Designing social research*, Polity Press.
- Büscher, M., Urry, J., Witchger, K. (2011) *Mobile Methods*, Routledge.
- Casakin, H. and Goldschmidt, G. (1999) Expertise and the use of visual analogy: Implications for design education. *Design Studies*, 20, pp 153–175.
- Casakin, H. (2002) Metaphors in Design Problem Solving: Implications for Creativity, *IJDesign*, 1, 2
- Calder, S. (1979) *The Hitchhiker's Manual: Britain*, Vacation-Work.
- Chapman, O. and Sawchuk, K. (2012) Research-Creation: Intervention, analysis and “family resemblances”. *Canadian Journal of Communication*, 37, 1, pp 5–26.
- Chesters, G and Smith, D. (2001) The Neglected Art of Hitch- hiking: Risk, Trust and Sustainability *Sociological Research Online*, 6, 3 <http://www.socresonline.org.uk/6/3/chesters.html> (Accessed 16 June 2015)
- Dourish, P. and Bell, G. (2007) The Infrastructure of Experience and the Experience of Infrastructure: Meaning and Structure in Everyday Encounters with Space. *Environment and Planning B: Planning and Design*, 34, 3, pp 414-430.
- Ehn, P. (2008) Participation in design things. In PDC '08 *Proceedings of the Tenth Anniversary Conference on Participatory Design 2008*, Indiana University, pp 92-101.
- Fincham, B., McGuinness, M. and Murray, L. (2010) *Mobile Methodologies*, Palgrave Macmillan.
- Furedi, F. (1997) *Culture of Fear: Risk-Taking and the Morality of Low Expectation*, Cassell.
- Gadwal, A. and Linsey, J. S. (2010) Exploring Multiple Solutions and Multiple Analogies to Support Innovative Design, *The International Conference on Design, Computing and Cognition (DCC'10)*.
- Gentner, D. (1983) Structure-mapping: A theoretical framework for analogy, *Cognitive Science*, 7, 2, pp 155–170.
- Gentner, D, and Markman, A. B. (1997) Structure mapping in analogy and similarity. *American Psychologist*, 52, pp 45-56.
- Goffman, E. (2009) *Relations in Public: Microstudies of the Public Order*, Transaction Publishers.

- Greenbaum, J. M., & Kyng, M. (1991) Design at work: cooperative design of computer systems, Routledge.
- Koestler, A. (1964). *The Act of Creation*, Penguin Books.
- Larkin, B (2008), *Signal and Noise: Media, Infrastructure, and Urban Culture in Nigeria*. Duke University Press.
- Laviolette, P. (2014) Why did the Anthropologist Cross the Road? Hitch-Hiking as a Stochastic Modality of Travel, *Ethnos: Journal of Anthropology*, pp 1-23.
- Leclercq, P. and Heylighen, A. (2002) '5.8 Analogies per Hour', in J Gero (ed), *Artificial Intelligence in Design '02*, Kluwer Academic Publishers, pp 285-303.
- Lloyd, P. and van de Poel, I. (2008) Designing Games to Teach Ethics, *Science and Engineering Ethics*, 14, 3, pp 433-447.
- Lury, C., & Wakeford, N. (2012) *Inventive Methods: The Happening of the Social*, Routledge.
- Michael, M., Costello, B., Mooney-Somers, J., Kerridge, I. (2015) Manifesto on Art, Design and Social Science: Method as Speculative Event. *Leonardo: Art Science and Technology*, 48, 2, pp 190-191.
- O'Regan, M. (2014) Others have the clock but we have time: alternative lifestyle mobilities and the resurgence of hitchhiking, Duncan, T. , Cohen, S. and Thulemark, M. *Lifestyle mobilities*, Ashgate.
- O'Regan, M. (2013) Independent Travel: Creative Tactics in the Margins, *e-Review of Tourism Research (eRTR)*, 10, 5/6.
- Purkis, (2013) The Hitchhiker as Theorist: Rethinking Sociology and Anthropology from an Anarchist Perspective, in Kinna, R. (ed) *The Continuum Companion to Anarchism*, Bloomsbury.
- Randall, D., Harper, R., & Rouncefield, M. (2007) *Fieldwork for Design: Theory and Practice*, Springer.
- Sanders, E. B.-N., & Stappers, P. J. (2014) Probes, toolkits and prototypes: three approaches to making in codesigning. *CoDesign*, 10, 1, pp 5–14.
- Sismondo, S. (2008). Science and Technology Studies and an Engaged Program. In E. J. Hackett, O. Amsterdamska, M. Lynch, & J. Wajcman (Eds.), *The Handbook of Science and Technology Studies*. Cambridge, Massachusetts: MIT Press, pp 13-31.
- Star, S. L. and Ruhleder, K. (1996) Steps toward an ecology of infrastructure: Design and access for large information spaces. *Information Systems Research*, Vol. 7, No. 1, 111–134.
- Tulloch, J. and Lupton, D. (2003) *Risk and everyday life*, London: Sage.
- Urry, J. (2004) The "System" of Automobility. *Theory, Culture & Society*, Vol 21, No. 4-5, 25–39.
- Walsh, K. (1977) *The Hitch Hiker's Guide to Europe*, London: Macmillan.
- Walters, W. (2008) Bordering the sea: shipping industries and the policing of stowaways, *Borderlands* Vol 7, No. 3, 1-25.

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