

CUMULUS CONFERENCE PROCEEDINGS BENGALURU 2017

LETTERS
TO THE
FUTURE

CUMULUS
CONFERENCE
PROCEEDINGS
SERIES
PART 2 E.O.
IN THE FORM
02/2017

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EDITOR-IN CHIEF

Cumulus President Luisa Collina

EDITORS

Ayisha Abraham, Pooja Sagar and Tapasya Thapa

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CURATORIAL NOTE

A letter is a vehicle for a person's mind; of thoughts, and ideas of things that are not yet, but can be. The ideas are not limited by the size of the paper nor by the color of the ink. They are free to soar off the pages and spark a new flame in the reader's imagination. With 'Letters to the Future'; Cumulus-Srishti 2017, we were inspired to tap into this spirit of can-do and possibility. We invited the world to write us letters of Imagination, Abundance, Resurgence, the Impossible and Ambition. And we discovered that the world is filled with wonderful letter-writers. The dominant narrative today steers us towards an incessant contemplation of wicked problems and global disasters. This is accompanied by a sense of emergency and loss of control. Every time we switch on the news, listen to the radio, surf the internet or tweet, we are confronted by problems that loom over our comparatively small abilities to solve them. The world threatens to collapse into chaos at every turn.

We wanted to turn this narrative around. What would happen if we looked at these problems through the lens of empathetic strength and positivity? The world is going to change, we cannot control that. What we can control is the nature of our response. Will our response arise from fear and apprehension or will it arise from a sense of abundance and optimism?

The cornered response is different from the visionary response. In the letters we received we have so many visionary responses.

Too often, the emotional and the intuitive are ignored as though they have no place in the human experience of solving problems. The sense of joy and hope that fills our body and gives weight to ideas is the reason why we do what we do.

Letters to the Future is a resurgence... of positive change through design and artistic practice, of winning over apprehension and bringing the seemingly impossible into action.

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Walks conducted by: Centre for Public History, Kabir Project, Blank Noise, Art in Transit, Poetry workshop

Sanjay Barnela: “The Colour of My Home”

Shabari Rao: “BodyMine”: A solo performance

The Unconference working group

Organizers of “Occupy Academia: Dismantling the Journal”

Organizers of Media Shack

Kena Design - Kumkum Nadig and Prachi Prabhu

Paper reviewing committee

Moderators

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The Srishti Community

JN Tata Auditorium, Indian Institute of Science

Mallya Aditi International School

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THE LETTERS

The letters presented in the Conference are diverse and far reaching in their scope and postulations. From letters that encompass philosophical performance lectures on cultural politics through anarchism to letters that simulate the classroom and museum space to project design thinking and designs of and for the future, from letters that look at the city space via films, installations and artistic expressions to revisit and rethink ideas of identity, minority politics and migration policies to letters that recall personal experiences of art, activism, memory and cultural aesthetics, these letters provide a much needed whimsy to the often constrained and curtailed academic papers presented at conferences.

With such a variety of letters, from academic papers to concept notes about art projects, installations and films, the editors made a decision to render the e-book, using minimalist layout. This layout decision facilitates core understanding of what each letter aims to probe and how this probing contributes to understandings of the future via processes, tools, creative/artistic expressions and critical design thinking.

The letters were read and divided into four broad sections, with a connecting theme for each section. These sections are:

- > **SECTION #1 > THE FUTURES OF**
- > **SECTION #2 > THE FUTURES BETWEEN**
- > **SECTION #3 > THE FUTURES FROM**
- > **SECTION #4 > THE FUTURES WITHIN**

SECTION #1 > THE FUTURES OF

This section brings together letters that speculate futures of practices in art and design. The tone of this section focuses primarily on letters that address designing tools and interventions in deliberations of the future.

SECTION #2 > THE FUTURES BETWEEN

This section contains letters that locate practices below the surface and liminal spaces, in order to identify the role of ambition leading towards abundance.

SECTION #3 > THE FUTURES FROM

The letters in this section address apprehensions of the past, especially in the context of the current in-between spaces we occupy, be it physical, political or economic.

SECTION #4 > THE FUTURES WITHIN

How do institutional spaces like the classroom and the museum pave way for the future? This section includes letters that bring together experiences in designing curriculum that facilitates notions about the future and the tools and methods/processes that can facilitate such thinking beyond the scope of such institutions.

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PREFACE

This book began as a collection of conference papers from the Cumulus Design Conference held in November 2017, Bangalore, hosted by Srishti Institute of Art, Design and Technology, Bangalore, India. In keeping with the theme of the conference, Letters to Future- a speculative prompt that called for the articulation of the design thinking relevant for the future, this book presents the ambitions, aspirations, and apprehensions for the futures of our communities, cultures, the planet, and its resources.

Imagining possible outcomes for future problems is a complex task which requires not only a clever application of design tools but also an acute perception of the existing threats. To sigh and shake off the doom that shrouds the foresight of the future is a daunting task. We appreciate the designers for peering precariously over the edge of the precipice and making a salubrious return. Many of the papers in this book show a curiosity for the causes of the threats arising from the practices in the past, making the designer's propositions for the future more accountable. They also seem to take a turn towards what John Thakara calls "Remembering the Earth", an indication that visions of the violent, dystopian futures indeed will lead to positive and substantive changes in the future.

This book unpacks the Futures by locating the lines of flight within the futures, connecting the multiplicities, juxtaposing design approaches from across the globe, showcasing diegetic prototypes and interrupting design with the affects that art provides. An attempt has also been made to deliberate a transition from the normative to the performative in order to puncture the current fabric of a well-functioning design process. Drawings and enactments bring design into the space of full-bodied experiences. The book places emphasis on the unification of disparate voices into a collective cry for change, charging towards the future calling for a radical re-design, reframing, re-configuration of our perceptions, habits, social relations, reality etc; actions repeatedly surfacing in the papers presented here.

The ideas in this book show how art, science, technology, and design can co-exist in the speculations of the future. It provides insights into how design teaching and learning can open up spaces for reflection. Meanwhile, some of them raise critical questions about the transactions amongst partnerships and collaborations, embracing the extremes and the margins.

We hope that this book raises the curiosity of designers envisioning the futures, provide ample stimulations, contexts, and connections to nurture sustainable, ethical and ameliorative approaches in their own practice.



THE FUTURE IS
NOT WHAT IT USED TO BE.

**The Future is already here
– it's just not very widely
distributed yet.**

William Gibson

SECTION #1

THE FUTURES OF

Institution
K3, Malmö University

Country
Sweden

Keywords:
transfer of authority;
students as partners;
designing the future

1. DESIGN EDUCATION, DESIGN THE FUTURE

Author: Christel Brost

Transfer of Authority, Students as Partners: Methods to improve curriculum design in Higher Education

Abstract: This paper will explore the value and educational significance of the transfer of authority that takes place when you engage Students as Partners in curriculum design. I will draw from my experience as a program director, trying to motivate faculty in creating a culture of quality; and after that, as part of the Center for Teaching and Learning at Malmo University; and last but not least, as a teacher and course coordinator. The core of the study is the transfer of authority that takes place when undergraduate students, in a design program, are trusted to re-design the curriculum. The factor of Time, or the fact that this takes place over time, not just in one course but throughout their education, creates a rhythm and there is a ritual aspect to consider.

In this paper, I will therefore draw from the conceptual framework of “Rhythm and Ritual” (Richard Sennett 2012), as well as from “Designs for Learning” (Selander, 2008a, b, c. Selander and Kress, 2010).

The fact that we, the faculty, fell short, according to the students, opened up the Students as Partners approach. In our Bachelors program, this is an early attempt to overcome the rigid attitude among faculty towards re-design of courses and welcome the eager enthusiasm we find in our students, when it comes to putting in time and effort to analyze what has taken place in a course and how a re-design could improve their learning. This paper will therefore point out the way we failed as faculty and the way our students have helped us improve, thereby hoping to not only present a direction towards success, but also identify failure.

The benefits I have identified may be regarded as inspiration, and the candour by which I openly display our failure, an attempt to open up for discussion.

1.1 > INTRODUCTION: HOSTILITY AND THE REHEARSAL OF CO-OPERATION

Frustrated and confused over the fact that all my best intentions had zero impact on the group of teachers I was trying to work with as a program director, I started to research what had been done by others and what paths I could find and where they would lead. A lot of comfort came from Gibbs. In 2013, he wrote in the International Journal for Academic Development:

“There has been an increasing recognition of the limits on the extent to which individual teachers can change or improve in effective ways if their colleagues and other courses do not, and on the difficulty of innovation and permanent change where the local culture and values are hostile to such change, or even hostile to taking teaching seriously”.

Finding comfort in the fact that research shows that there is hostility, the hostility is not a figment of my imagination. During the years that I have acted as program director, I have often wondered how it is possible that educational development, or an ongoing attempt to develop and improve our program, could provoke so much anger and irritation. At the same time, to simply stop and let everything be was not an option.

I looked a little further and turned to sociologist Richard Sennett. In his book *Together*, Sennett talks about the decline of cooperation. He then goes on to talk about the necessity of cooperation being “an earned experience rather than just thoughtless sharing” (Sennett 2012), the reason being that in life “we prize what we have struggled to achieve” (Sennett 2012).

In doing so, I would like to juxtapose Sennett’s writings to the concept of “Designs for Learning” (Selander and Kress, 2010). Designs for learning highlights the material and temporal conditions for learning as well as the learning activity itself. The use of modes and media in processes of interpretation and identity construction is here central for the understanding of learning activities. I find this very useful since I fear that we as teachers, in HE (Higher Education), fail to recognize learning activities when they do not fit our preconceived ideas. As pointed out by Selander and Kress (2010), learning is seen as an activity where signs in different media (information) are elaborated, and where the forming of new signs in new media (reconfiguration and re-contextualisation) takes place.

Not being able to interest my colleges and therefore failing in my duty as a program director, I turned to the students. As luck would have it, during this time, we were invited to the Change Institute under the direction of Mick Healy and I attended the workshop with two of my students in May 2016. This became the beginning of the transformation, and it is the first results of that transformation that this paper is describing.

In this paper, I refer to partnership as it was presented to me at the Change Institute, a process of engagement rather than a product. It is a way of doing things rather than an outcome in itself. Partnership in learning and teaching may take many forms, and increasingly students are engaged in areas from which, traditionally, they have been excluded (Healy, Flint and Harrington, 2014).

1.2 > BACKGROUND: MALMO UNIVERSITY AND STUDENTS AS CHANGE AGENTS

In Sweden, HE (higher education) is funded by the Government. Universities are autonomous, but answers to the Government when it comes to quality. In order to issue a degree, you need to prove that you deliver an education equivalent to the level in question - Bachelor level in our case. The burden of proof lies on the educational program that is being evaluated.

Malmö University is a young university with five multidisciplinary faculties and a heterogenic student population. The university strives to make a difference in society and to prepare students to become change agents. The confidence I have in my students and the transformation that takes place when you transfer authority lays the foundation in my earlier writings *Students as Agents of Change* (Brost 2015).

The university has extensive collaboration with outside partners and strong focus on developing for student active, challenge-based learning. Even so, the students are not considered as partners within the university in the same way as they are outside of the university, in spite of what is written in The Strategy 2020, which claims that Malmö University students shall be actively encouraged to participate in the university's developmental efforts. I have made some earlier attempts to actively encourage my students to take charge, *Walk this Way* (Brost, 2016).

The displacement of design education into HE and the rules and regulations that that entails is the core of many of the problems our faculty have in our daily practice, mostly since they are seldom addressed. When our students complain, these rules and regulations are held as a shield to defend our selves with rather than focusing on what the students are really saying.

1.3 > THEORETICAL FRAMEWORK: THE DESIGNS FOR LEARNING

The concepts of 'education' and 'learning' are strongly linked to institutional practices. In the Selander and Kress (2010) model, the rules and regulations are addressed, such as budget, hours and number of assessments. These are the very circumstances that we have to practice in and accept rather than ignore or fight, the reason being our students. They too have to live by and accept the fact that they actually have applied to a bachelor program in HE.

According to Selander and Kress (2010), the *Designs for learning* model ask of the teacher to be the designer of the curriculum. The teacher has the authority to ask how she or he can use material resources and the structures of power in a specific environment. Therefore, it is the perspective of Selander and Kress (2010) that will create the backdrop to my discussion in this paper. The model that Selander and Kress (2010) put forward in *Designs for learning* is the model that the students are introduced to in order to evaluate the course they have just taken part in and then take the consequence of their own comments in order to re-design the course to better support their learning. *Designs for learning* is a useful tool since hostility often is expressed in terms of "there are not enough hours" "we have too many students, too little time" "we work in a very rigid system, no flexibility". Before writing this paper, I sat down with the teachers who have resisted me for years (18th of January, 2017), told them

that I was writing about my struggle and the energy I have found in working with students as partners. I asked them about their reflections in retrospect. Three of them were present and knowing that I was going to use their comments, the answer was “we are touched by what you are trying to do, but there simply is not enough hours. Malmö university is not concerned with these issues as the system is too rigid”.

Selander and Kress do not shy away from the fact that in a formal educational setting we have purpose and defined curricula, institutional norms. Learning is process, and they describe the process as characterized by the transforming and forming of signs. The expectations that are embedded are learning outcomes.

The model is in two parts and the primary transformation unit describes the first cycle. The teacher creates the staging of what is going to take place. The teacher has a purpose and an aim with this staging and controls the resources. The teacher is familiar with the institutional rules and regulations, and understands how to navigate within these rules and regulations. In the first cycle, interest and motivation are created. It is the teacher’s job to create understanding for what is going to take place.

The secondary transformation unit, the second cycle, starts with the students presenting their work. If the goals, as well as the expectations of the process and the product, are clearly defined, both students and teachers will have a powerful tool for reflection and evaluation. Students are expected to present their understanding and reflect on both the process and their understanding. During the whole sequence, teachers make interventions and have the possibility to reflect on the signs and indications of learning that take place.

In his writings on cooperation, Sennett refers to a ritual aspect of cooperation, that it takes effort and time. I have found rhythm and ritual to be useful tools when working with students in complex projects, where they take on real life challenges in collaboration with clients and try to come up with solutions through design on said problems. In creating courses to support this step-by-step exploration, I have come to believe that rhythm and ritual lies in the structure you as a teacher create and that rehearsal is embedded in that structure (Brost, 2015). In rehearsal and repetition, an arena is created to negotiate the transition from HE to industry. What if we turn to our own practice as teachers and apply Sennett’s concept of rhythm and ritual on course design?

In my work with *Students as Agents of Change*, I have come to realize that through the process, the students become more comfortable with change, and become less hesitant in terms of taking action. They do not await instructions; instead they start to create instructions of their own. Curriculum becomes in these courses a negotiated curriculum. If there was only a way the make teachers in to change agents, I thought, but then slowly realized that I was thinking about this the wrong way. There was no reason, to create change agents in our faculty, when they already existed in my students!

1.4 > METHOD: STUDENTS AS PARTNERS

In the spring of 2016, we were introduced to the method of working with Students as Partners. In my introduction, I referred the intentions of Malmö University and the fact that the first group that went to the Change Institute was the Pro Vice Chancellor, Head of Center for Teaching and Learning, me and two of my students which would act as a signal that this was of interest on all levels.

During our week in Hamilton, Canada, at the Change Institute, we were introduced to the concept that “partnership represents a sophisticated and effective approach to student engagement for two connected reasons. First, it foreground qualities that put reciprocal learning at the heart of the relationship, such as trust, risk, difference, empowerment, inter-dependence and agency, allowing us to go beyond a consumerist relationship, and its critique, in meaningful and relevant ways. And second, partnership is different to other more traditional relationships of power in HE, which means that it is often experienced as an unfamiliar way of working, learning and thinking. Through this difference, partnership raises awareness of the implicit assumptions about each other, and about the nature of learning and teaching, which would otherwise remain below the surface. In becoming more aware of one’s assumptions and attitudes, and how they influence learning and teaching relationships, greater choice is afforded about how to act and relate to one another and the type of learning environments and spaces they are created. In sum, a partnership approach is valuable because it enables a more authentic engagement with the very nature of learning itself, understood as an experimental process of reflection and transformation, in relation to oneself and others. Hence, we speak of *engagement through partnership*” (Healy, Flint and Harrington 2014)

“The research suggests that where partnerships are focused on educationally meaningful activities, the benefits are multiple for all parties. Never the less, many remain to be convinced. Some questions whether students have the expertise, knowledge and experience to be fully engaged in partnership in learning and teaching” (Cook Sather, Bovill and Felten 2014).

The work that we had done since the May 16 workshop in Canada, in our program board, in evaluation and re-design of course plans is effective, engaging and fruitful. The students want to get involved and are prepared to commit. We are in the very early stages but even during this first year it has been important to establish a structure and before we do the work, they are given lectures on Sennett and Selander and Kress. By using the Selander and Kress model, they are introduced behind the scenes and presented what takes place before a course is given. I considered this as a transfer of authority. In that transfer, you establish responsibility and trust.

1.5 > RESULT: TRANSFER OF AUTHORITY AS POWER TOOLS

I started this paper by wondering what would happen if I tried to create a junction between Sennett and Selander and Kress. Over the years, I have put a lot of work into finding ideas

and models to inspire the teachers that I have been working with. Sometimes being very pragmatic and trying to talk to their sense of comfort, life could be so much easier if courses where planned in a constructive way and they themselves knew what they were going to assess and by which criteria when they entered the classroom.

By the transfer of authority created, working with Students as Partners, we are out of the loop and on our way. I am comfortable with the sociological approach to education and the idea of reconstruction, remediation and reconfiguration as described by Sennett (2012). He is concerned with the skill of cooperation. In his writings, he also stresses rhythm and ritual as important factors in collaboration. My interpretation is that rhythm and ritual can create structure in a learning situation. But it can also, when working with students as partners, mean that there is a structure created with the students on how to evaluate and then take the consequences of the evaluation when a re-design of the course is made with Students as Partners.

We are fortunate to have ambitious students, ambitious in the sense that they are very committed to their education. The students are not critical of the content of the courses. By this I mean the assignments or projects that they do. What they point out as being problems are the introductions, what Selander and Kress (2010) call the “staging of the transformational cycles”. Very seldom do the students feel that it is clear why they are asked to do something. Apparently, we do not succeed in communicating this to the students. They are thrown into something; they might enjoy it, but they ask us, and themselves, ‘what was I supposed to learn by this?’

The second problem is the feedback: too little, too late and too general. Students are critical about how feedback is delivered. Students point out that it is too general and not something they feel that they can build on.

The third problem is assessment and grading, described by the students as ‘we do something; we get our grade when the course is over, no explanation, no motivation or reasoning’. This means that there is no reflection, which is a big part of the model’s second transformational cycle, and in turn no clear motivation for the grading that will help them to aim for something. There is no transparency in terms of criteria and the students leave the courses not really knowing where they stand.

The Selander and Kress (2010) model contains two full circles. If we skip the introduction, the staging of what we think we are teaching in a course, we in fact slice the first circle in half, hereby leaving the students without the why. We then look at what they do and assess, again slicing the second circle in half. Feedback, and the needed reflection on that feedback, never takes place. The student gets the grade and the course is over. The answer to our problems came in the approach Students as Partners. We are still in the early stages but during the last year that we spent with Students as Partners, we have been able to address these issues. What was earlier met with hesitation and hostility from teachers, mainly out of fear of an increased workload, is now starting to become a dialog with students. The dialog is already

resulting in a re-design of courses, done in collaboration with the students. We are also entering the very early stages of a re-design of the entire program.

Most importantly, the students are now educated in the staging of a course and thereby invited behind the scenes, so to speak. With that knowledge, they have power tools that they have not had before. Power tools that they have been given as a transfer of authority. The *Designs for learning* model is very effective, but only when it is put to use. The students find it very useful since they, through the model, have a language to talk about their experience. They find it worthwhile since, they as partners are invited to solve the problems that they have pinpointed by using the model.

The method of Students as Partners highlights the subtle, but very important difference between an institution that listens to the student voice and an institution that gives students the opportunity to explore areas that they believe to be significant, to recommend solutions and to bring about the required change as it has been introduced to us at the Change Institute. In this paper, I present an early example on what will take place when you transfer authority and regard your students as partners in curriculum design.

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DAY 1:

@ JN Tata Auditorium
Cumulus Srithi 2017



Institution

Department of Art, Aalto University

Country

Finland

Keywords:

activism; art; philosophy

2. THE ANARCHIST BANKER

Author: Max Ryynänen

Abstract: For *The Anarchist Banker* (1922), Fernando Pessoa created a protagonist, who claims to be a successful anarchist. As a banker, he helps poor families by giving them (too) good loans. If he would manifest his agenda, he would not be able to have impact. It sounds like an antidote for today's "aesthetic culture of politics", where the flood of social media memes, panel discussions and nearly populist political art have become a commonplace. Administration is a work where we distribute shared resources. My letter is informed by my performance lecture, where I become performatively the anarchist banker, and tell fairy tales from the world of MA programs, academic societies and galleries which I have run/chaired – in an enlightenment costume, echoing the roots of modern university administration (18th century). I hope to revitalize Pessoa's concept for our common benefit, to poeticize the work-mode we need for a well-functioning society and a politically agile art school.



Figure 2.1 Performance Lecture in Casanova Costume, Finland. Photograph by Antti Ikonen. 2017.

PROLOGUE:

Fashion advertisements say: become the supermodel of your life.

I say: become the anarchist banker of your life.

(Of course you can become both.)

Anarchist banker?

2.1 > THE ANARCHIST AND ANARCHO-SYNDICALISM: A CULTURAL ANTIDOTE?

For his novel, *The Anarchist Banker* (1922) Fernando Pessoa (1888-1935) created a protagonist, who claims to be the most successful anarchist on earth. "Anarchist" here stands for a broad sector of humanist politics, because anarchism, more precisely anarcho-syndicalism (a Hegelian movement), was in Pessoa's time in Southern Europe a major mainstream movement for middle class people, who were interested in democratizing societal practices. In today's speech, this could maybe be "the most activist," or just the most "democratic" person there is, I believe.

Pessoa's protagonist is interested in impact, not political brand or performance. As a banker, he helps poor families in secrecy. He gives them loans, which are just *too good to be true*. If he would manifest his agenda, he would not be able to have an impact, but as he does his political work silently, nobody, maybe not even the poor families, will understand how he helps the society to become more equal.

This sounds like an antidote for today's *aesthetic culture of politics*, where the flood of social media memes, panel discussions, populist political art (we call it political, but it is often all too simple and black-and-white to be called anything else than populist) and mainstreamed activism (who would not be 'an activist' these days?) have become a commonplace.

2.2 > A DAYDREAM: MANIFEST #EQUALITY INTO EXISTENCE

In today's world, it is important to manifest what you stand for, but there are still no critical methods for checking what people and institutions really do. What do we do, in the end, with statements like *We stand for equality* if they can be said by anyone and there's no way to check if the claim has a connection to reality? For me one of the key symbols of our times was a man who harassed women and finally murdered his girlfriend in Finland this year. It is a very sad story. The murderer had been actively (note the "quotation marks") "*working and standing for women's rights in the social media*," as one newspaper somewhat put it.

This does not mean that you couldn't raise awareness of issues in the social media or in any media, it is just that the medias are always at least partly about fiction. When anyone can say anything without a control system (which is of course also nice), the connection to real life can sometimes become quite a theoretical issue, and this, I am a bit worried, is something we often tend to forget as we celebrate communication. For example, we want museums to say straight what they think about something, but we are not craving for a system which would make us able to show if things really are alright. Why? I so wish we could exchange #equality for investigating if it really exists. But maybe as the latter one is hard to achieve, it is good that people can continue daydreaming... And of course, it takes too much time to build a system, so it is maybe more comfortable if we stay within the boundaries of discourse only. Sometimes this type of daydreaming can become even destructive and a mockery of the whole enterprise.

2.3 > CULTURAL POLITICS: THE TURN TO ANTI-RESISTANCE

My own "bankerist" turning point was the end of a gallery space, which the city of my ex working place supported economically. The city had a great cultural officer who had offered a group of young artists an old wooden building where they could keep a gallery for free (the city wouldn't take any rent).

At one point the house, which had been marked as having to be demolished as it did not have any museum or architectural worth, was going to be destroyed, partly for safety reasons. The city contacted the artists, after 10 years of support, and asked if they'd like to move their gallery somewhere else. The city would continue to offer them a free space.

But the artists, too much in deep weed with the resistance-driven leftism which is a commonplace in the arts, did not give clear answers. They just manifested their freedom and criticized the city for annihilating the building (this was not in the hands of the cultural officer of the city). I think they also changed the chairperson at the same time, and during this chaotic last year, they never answered the city in the end.

The bulldozers came, and what happened? The resistance performance started. Middle class hippies invaded the site, preparing vegetarian food, repairing bicycles and playing drums as support for the gallery. Noteworthy people in the arts wrote for the local newspaper and criticized the city. Cynical? Yes. Not me, I think...

I had for a long time been drifting into anti-resistant-natured waters by reading Peter Sloterdijk, especially his book *A Critique of Cynical Reason*, which was written in Pune, India (1978-1980). (The late Sloterdijk flirts too much with extremes for my taste, but this early work is witty.)

Sloterdijk claims that resistance, performativity and paranoid cynicism (exemplified by my gallery story) has made leftist, feminist and critical thinking, and practice impotent. Although I am not totally buying this, I saw the point in relation to my own life experiences. I felt the urge to rethink cultural politics.

Do we often have to choose to either perform or to work for impact when we work with arts, art education and politics? That is my hypothesis and that is why we made a deal with my wife that we don't put time in manifesting our political ideas, so that we would have enough energy to do things.

2.4 > NON-PERFORMATIVE ACTIVISM: A DISCOURSE OF THE ANARCHIST BANKER

After running a pop art gallery in the beginning of the 2000s, I ran another more contemporary one in the beginning of this decade. We worked with homeless people and offered medical treatment (the doctors, not me) to people without a passport, when the gallery was closed of course. If we had told anyone about it, we would have endangered our delicate practice.

I also became the godfather of an Afghani refugee. Most of my friends have put dozens of hours on demonstrating on what they call inhuman refugee politics, but I have helped one person to find a home, a job and to learn a language (Finnish). It has worked.

I could say that I have truly become more and more the anarchist banker of my life - a silent, small scale, grass root political non-performative activist. I am honestly not sure anymore what I think about communication and discourse. I have been educated to be a philosopher, and I used to write for political media, and where did that take me? Was I like theatre director Bertold Brecht, who in Theodor Adorno's philosophical critique was claimed to write plays for people who think like he did, for an audience which cheered, but did not change even their mode of thinking?

Talking about the banker, i.e. me, the silence is broken now, of course. I write and talk about it. But that's actually a part of the resonance with Pessoa's story: as you remember, the anarchist banker tells his friend even arrogantly that he is the biggest anarchist of them all. This is not what I want to say, though. And I don't believe in it. If I, just a small level university teacher and a clerk can tell you my story, I am sure anarchist bankers, we who have secretly chosen to become non-performative for the sake of effectivity, are probably many, and some of us must be powerful... And, we of course do not have any reason to believe we are better than others... here the banker of the original story goes wrong. But I understand his frustration, his work for a better world, and being attacked discursively by people who did not make a real difference.

When we ran our gallery, we got a lot of critique for not being political. It felt crazy as we really did something, we just did not perform it. But we had to keep silent and take the critique.

2.5 > YET ANOTHER ANARCHY: THE FICTIONAL WORLDS OF ACADEMIC ADMINISTRATION

I direct a big MA program (we have 130 students) and I often think about administration. At one point, I really had too much of it, and needed therapy. That's when my idea historian colleague said "its all the fault of the Monte dei Paschi di Siena," a small but old bank in Tuscany, which I remembered from the days when I studied in Pisa, a city close to Siena. My friend claimed that the bank had, in Europe, taken administration to a new level, where the contact with the real world would have been lost for the first time. She lent me some key texts in the history of administration and talked about administration as being partly *fictional*, which, maybe, shocked me a bit in the beginning. But only in the beginning.

I started to look at my working place. Every year, we had to report our hours to the university. We reported with a Software the hours we had worked during the year and what we had done. It was not possible to write extra hours, which we every year laughed at, as we all worked overtime every year. And when we wrote the real amounts, the administrative officer mailed us that we had the wrong percentage of this and that. Why did we fill in the form? The hours were and they still are fictional for us, whether the root of the practice has to do with the historical bank or not. It is like in the novel of the Russian writer Nikolai Gogol, *Dead Souls*, where even dead people are counted in statistics to make more profit.

To not think of administration just as a negative thing – it gives you a workload but it also secures that many procedures are done in the right order – I'd like to ask: could I become an anarchist administrator, in the fashion explained earlier in the case of the *Anarchist Banker*?

I can't give loans. But as a director, I can be a human shield. I am anyway so occupied with administration that I can forget philosophizing or working artistically on new things, really, these years.

A couple of years ago the cultural minister of a close country visited our department. He said that he thought his main job was to be a shield for his workers. As a director, I can be a

human shield. When neoliberal discourse takes over, I can be there fighting the demons, so that the people working in the program can concentrate on their work. I can listen to upper level bosses who push us around, I can take showers of neoliberal jargon, but I can work so that this would happen only to me.

It makes me a twisted banker as I actually engage in fictional enterprise even more than the people who the banker was criticizing for doing empty performative deeds. Here I am taking another banker route, one started – not consciously – by the bankers of Siena. I talk about hours that don't exist, I discuss university strategies which are totally detached from our real work, and so on. Our university is not among the heaviest ones in this respect. Still, it is of course a monster. What huge organization wouldn't be? And the banker does not have to take it so seriously. In the end, the most important thing is that he enters the work of fiction, plays the game, so that a group of employees can try to stay in the real world as much as possible. Being between fiction and reality might be the strategy to do well in this work.

I have so learned a lesson from two different forms of bankers. And the *Anarchist Administrator*, or the *Anarchist Director*, is born – once again not pointing to anarchy, but to a way of ameliorating the world, making it better. And have I succeeded? God knows. But when the going gets though, I think about the *Anarchist Banker*, and all the texts Pessoa wrote during his lifetime using pseudonyms. As a writer, he showed the way for silent, secret work. I will become silent again, and return to my duties. But you know the story.

Institution

ELISAVA Barcelona
School of Design and
Engineering

Affiliated to

Desislab TIME

Country

Spain

Keywords:

drawing; environment;
senses; participation;
sustainability

3. ENVIRONMENTAL DESIGN: DRAWING AS SENSITIVE MAPPING

Authors: Juan Albert Estevan and Rebeca Font Alloza

Abstract: Imagine a world where drawing was a language that explored environment sensibly, empowering us to understand its complexity and to modify it in a sustainable way. From a human centered design perspective, drawing can be a collective and participative project tool in the design process. It can emphasize observation and sensory perception to the improvement of our habitat. We live in a world where technology, globalization and speed generate a state of anxiety and blindness regarding the abundance and wealth of the world around us. Making people losing the fear of drawing generates new dynamics of active participation and a less rational approach to the context, looking for a more sensory reading and interpretation of it.

In TIME (Teaching Innovation Methods and Exploration), at ELISAVA Barcelona School of Design and Engineering, we are concerned about the generation of more exciting and sustainable scenarios within our environment. We propose an interactive session where the participants will use drawing as an emotional tool to foster active participation in the generation and renewal of places. We will discover how drawing explores new ways of perception, habits, behaviors and social relationships to imagine and guide transformative processes to help us to create a better world.

3.1 > SUSTAINABLE FUTURES: THE COMPLEX, COMPACT, COHESIVE CITY

We imagine a future where people are involved in a creative way in the configuration of their cities and where cities become spaces of relation, connecting people and creating new and exciting links with the world. Cities are not designed from scratch; its richness is a product of the overlapping of many space and time layers. We pretend people and designers to perceive the abundance of our cities participating in its improvement, reinforcing its positive aspects



Figure 3.1 Sensitive exploration of urban violence, Barcelona. Personal photograph by authors. 2017.

and minimizing the negative ones. The real sustainable city is a complex, compact and cohesive city. We can learn to read and give visibility to the abundance and richness of this complexity. We must learn to perceive the energies of its density and the relationships that weave the life of its inhabitants.

3.2 > APPROACHES: IMAGINATION AND DIVERGENT THINKING TOOLS

Nowadays designers are lead to work with systems rather than with single products as they have been doing since now facilitating people to participate in taking data and making decisions regarding the improvement of their environment. We consider that many of the current processes of participation and co-design are too focused on quantitative aspects and forget a more qualitative approach to the development of cultural and perceptive aspects of the environment.

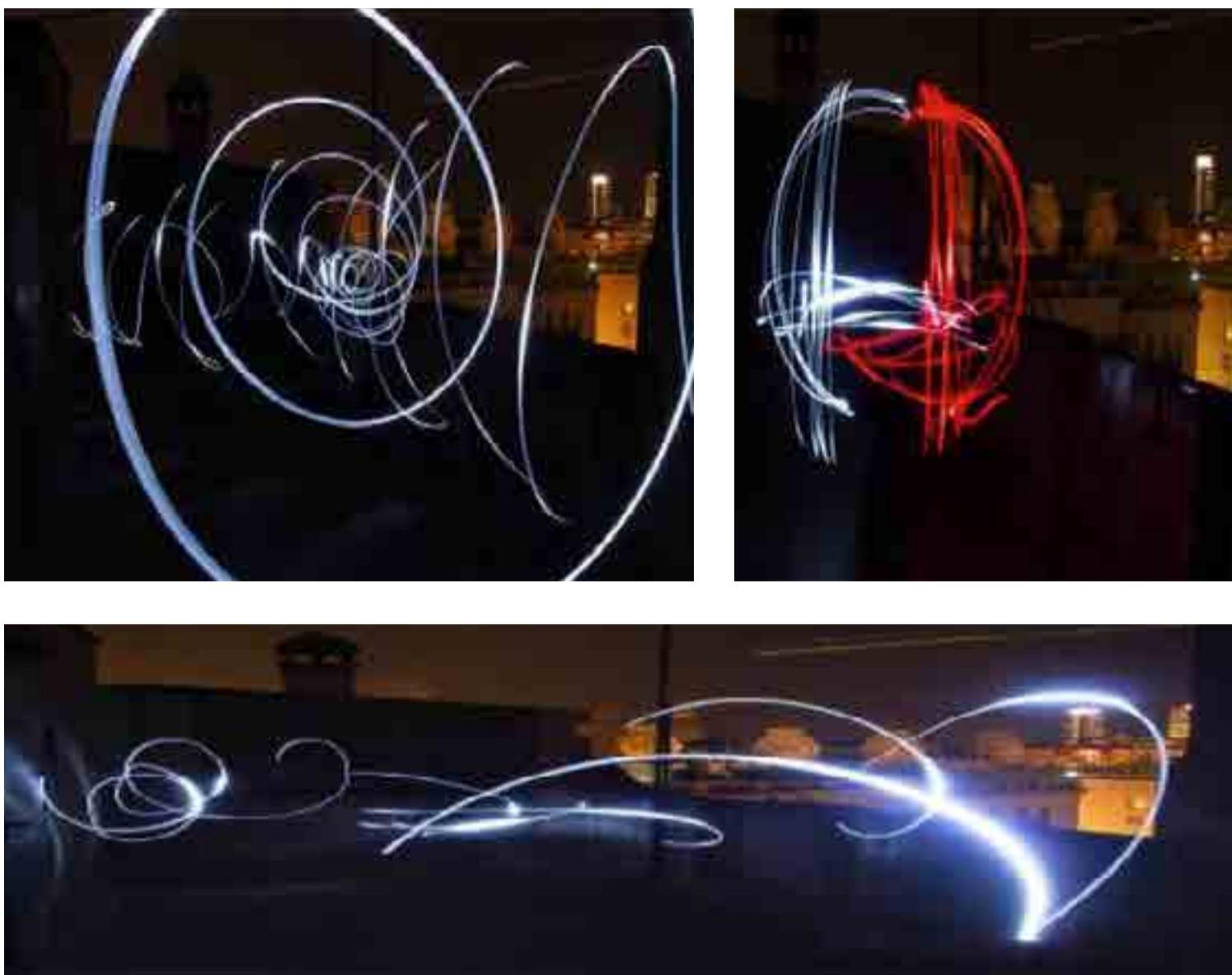


Figure 3.2 Exploring relations between drawing and space, Barcelona. Personal photograph by authors. 2017.

The social and environmental challenges we face as designers will not only be solved through a rational approach, but will have to be solved through imagination and creative approaches that depend not only on analytical thinking but also on divergent thinking, empathy, intuition and sensual perception. We should use our imagination to discover new ways to intensify the sensory richness of human experience in a more effective way with our environment.

3.3 > DRAWING CITIES AND REALITIES: ACTIVE PARTICIPATION IN URBAN LIVES

In many cases, modern architecture and design have conceived our cities as 'products' made of objects without taking into consideration people. They have become neutral, sterile environments disconnected from nature.



*Figure 3.3 Interpretation of different urban realities of Barcelona city through light drawing, Barcelona.
Personal photograph by authors. 2017.*

Developing perceptual skills toward our environment can be the first step of empowering people for the improvement of our cities. 'Reality' is not something that is given, but is built on experiences and perceptions. We are used to see the world in a passive way. Perspective representation separates us from the environment and turns us into mere spectators reducing everything to a definite and distant image. The senses can reconnect us with nature and make us feel actors and participants of our urban life.

Because of our direct connection between hand and senses, drawing allows us to express in an unlimited way, realities, that are not reached by another language. Our proposal is that through drawing, people can participate in reading and mapping the abundance, wealth and relationships that exist in the built environment of a city.

3.4 > THE LANGUAGE OF DRAWING: COMMUNICATING 'NEW' RESILIENT CITIES

Our proposal is that through drawing, people can participate in reading and mapping the abundance, wealth and relationships that exist in the built environment of a city. We pretend to sink inside the lines, finding the place of connection between the drawer's mind and the habitants of the city, working with drawing as a language and understanding it as a way of communication.



Figure 3.4 Sensitive exploration of urban violence, Barcelona. Personal photograph by authors. 2017.

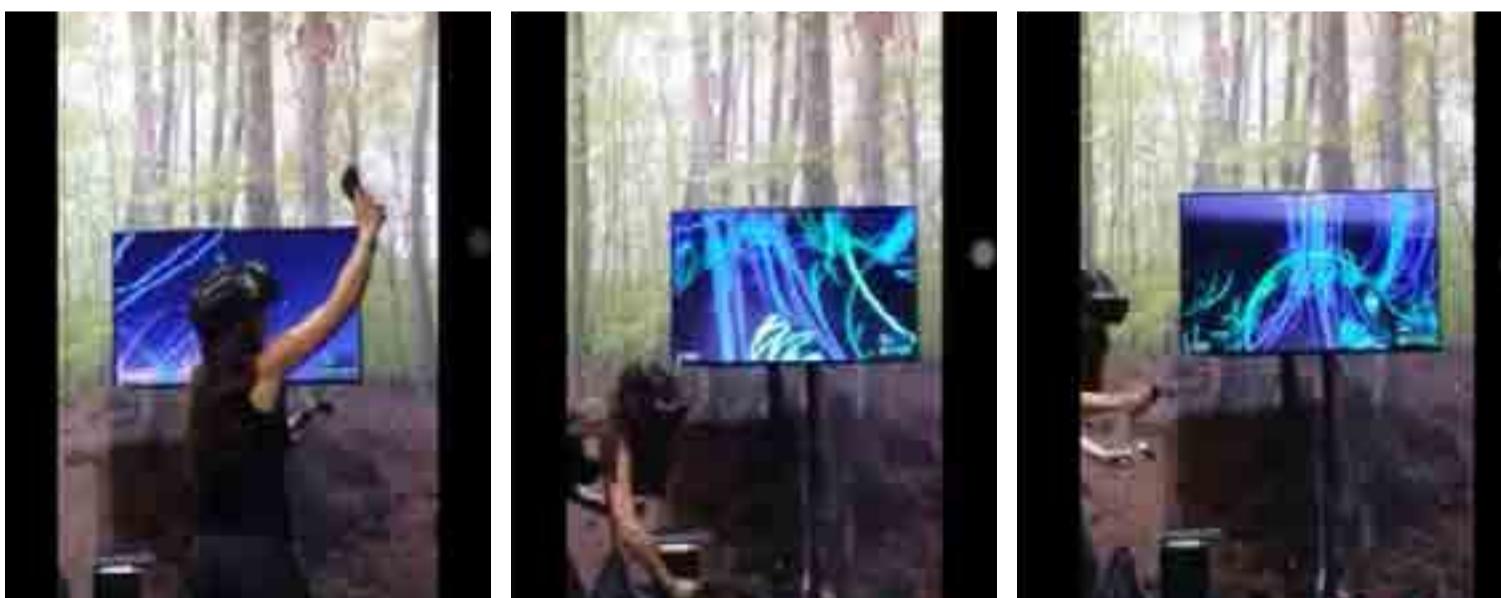


Figure 3.5 Tilt Brush session exploring new ways of perception of our environment, Barcelona. Personal photograph by authors. 2017.

Security, mobility, orientation, wellness are important aspects in the configuration of public spaces. Noises, odors, thermal sensations, the way we move in space, are essential aspects of our daily life in the city. Drawing can be a tool for people to visualize and communicate these sensations contributing to generate truth, empathy, friendship, and a sense of community towards the achievement of the common good. Through drawing we can improve our relational ecosystem for the construction of more resilient cities.

Through our proposal, we will discover how drawing explores new ways of perception, habits, behaviors and social relationships to imagine and guide transformative processes to help us to create a better world.

PERFORMANCE NOTES:**An Interactive Session: Process and Tools**

We propose an interactive session, where the participants will use drawing as an emotional tool to foster active participation in the generation and renewal of places.

1 > Introduction to drawing as environmental approach

We will introduce participants to a sensitive approach to the design of our cities.

We pretend to use drawing as a language to explore the environment. Participants will immerse in the use of drawing as a mean of expression and communication of their perceptions towards space. We will introduce participants in the interpretation of their drawings and we will all establish conclusions about their approach to the environment.

2 > Tracing the city

We will propose an action drawing experience in different areas of Yelahanka.

Participants will visit different areas of the city, and through drawing, develop perceptive skills. Then, they will be able to express their experience towards the city.

3 > Exhibition

Finally, we will make a lecture of the drawings in order to establish conclusions and to come up with the generation of new ideas for the renewal of our habitat.



Figure 3.6. Sensitive exploration of urban violence, Barcelona. Personal photograph by authors. 2017.

Institution

ArtEZ University of the Arts

Affiliated to

ArtEZ Centre of Expertise Future Makers

Country

Netherlands

Keywords:

research through design;
speculative design;
societal challenges

4. IMAGINING THE FUTURE THROUGH SPECULATIVE DESIGN: TOWARDS A NEW PARADIGM WHERE ART MEETS SCIENCE

Authors: Daniëlle Bruggeman and Jeroen van den Eijnde

Abstract: Research through creative design practices leads to new insights and thought-provoking questions regarding urgent societal challenges. In the letters we write to each other, we personally reflect on speculative design in combination with science to dream of the possibilities for the future. We will do so by analysing the work of a selection of Dutch designers, artists and speculative researchers, such as Arne Hendriks and Koen van Mensvoort. For example, the provocative future scenario 'The Incredible Shrinking Man' by Arne Hendriks focuses on the implications of downsizing the human species to better fit the earth, and thus addresses the continuous obsession with 'growth' in our culture and society. This exemplifies a scenario where artistic research, speculative design and science meet in order to imagine radical future scenarios to help create a more responsible and ethical engagement with the earth and its abundant resources. We propose to understand this ethical engagement from a post-phenomenological perspective (Verbeek 2000), and thus in terms of sustainable relations between human beings and the material objects that surround our bodies and living spaces that mediate our human experience. We envision a new paradigm where art meets science in order to imagine the future through speculative design processes to help us to create a better world.

4.1 > LETTER TO DANIELLE

Dear Danielle,

"What then is time? If no one asks me, I know what it is. If I wish to explain it to him who asks, I do not know." This quotation is from Augustine (354-430), one of the first thinkers in Western philosophy about the concept of time. The past is an unreliable memory game played by humans in the present. Our material world that surrounds us gives people the confidence that there is a concept of continuity and thus a trust in a future. The chair on which we sit, the garments with which we dress, the space in which we are located, we believe that all this will be there again tomorrow. The future is not empty: it is already filled with our built environment, the things that surround us, the knowledge and skills we already possess. But are we sure about it? Not yet...we can only speculate. But then again, why should we?

I can give you two reasons. One is conservative in nature: we like to live in a world that is familiar and comfortable, in which we are free from hunger, pain and tension. If we live in such an environment today, we want it tomorrow too. It's nice to wake up in the morning in the same bed where you stepped in the evening before and have breakfast in the morning with cups, plates and cutlery immediately recognized by your eyes and hands. Daily rituals confirm the continuity of our existence.

There is also a progressive reason. Daily circumstances can be hard, merciless, unbearable or just awkward. The future then is the only form of hope, a far point on the horizon where life is just a little better, healthier or safer than it is now.

For me, these reasons represent two important traditions in the art of making artefacts. As an (art) historian, I see from the history of material culture two types of production modes: to imitate and to speculate.

Production by imitation characterizes a stable society with a rich culture of making in which the existing world is appreciated, copied and only incrementally improved on the basis of place and time-related features. But when a society is unsettled, for example due to rapid technological changes such as mechanization, digitalization, or radical cultural shifts, imitation can become a forced effort to maintain a known and recognized world. Modern cars get the shape of an old-fashioned carriage, railway stations turn into medieval castles and the digital revolution is packed in postmodern form sites, derived from the rich history of architecture and design. Imitation in the form of historicism, eclecticism, neo and retro styles displays people's desire to a world that has been gone, and in many cases, has never existed. A society in transition – and I think we are in such a period – has a different, speculative production attitude, where makers look ahead and enter unknown paths with the aim to improve our existence. Technological developments play an important part here; they are the instruments of our hope. But how do we explore that future for better opportunities in our daily lives?

The future has often been explored in literature. But these are often literally untouchable images of the future because they are expressed in language and are therefore unreliable. The visual arts of sketches, paintings, pictures and films offer us more opportunities to create a future that we can experience visually and auditorily. However, if we want to experience our future in the most realistic way, we will have to appeal to all our senses. Our speculations must be as material and sensorial as possible so that we can experience continuity from now to the future, from here to there.

I used the word future many times in a way that suggests a major undefinable area that we would like to explore materially. Futurologists, however, talk about multiple futures. Everything after the present is a potential future, but not everything in that future is possible, probable, plausible or preferable. When designers are driven by improving the world, they aim for a preferable future. Whether that is possible (based on future assumptions), probably (based on current qualitative data) or plausible (based on current knowledge of natural laws and social processes) depends on what kind of potentials the present offers them (Dunne & Raby 2013: 2-6, Voros 2017).

In his essay on speculative design, the Dutch artist and philosopher Koen van Mensvoort (1974) places design fiction between the scientific mathematical models and scenarios for the future and, on the other hand, the imaginations in science fictions of literature and film (Van Mensvoort 2014). Science provides the most reliable insights in the future, but these are accessible only to a limited group, partly because scientific data and scenarios do not communicate any sensorial and experiential consequences. The power of science fiction is precisely that it shows these consequences through texts and images that trigger the imagination of a huge group of people. However, the imagination dominates this genre at the expense of scientific facts.

Film remains one of the most powerful media for visualizing a possible future. In the 1990s, Dutch artist Jeroen Eisinga (1966) made a video of a rising Boeing707. At first sight, it seems a boring documentary reporting of an ascending plane until you notice that this huge aircraft will make an impossible loop. The codes which guide our way of seeing are so strong that you think for a few minutes: this is real, but it's not possible at all. Until you realize how easy it is to make a video of a roaming plane with some technical intervention. The same effect has the YouTube movie 'Human Birdwings' by artist Floris Kaayk (1982) in which a man makes a successful flight with a pair of homemade wings.¹

However sensational the mentioned examples, film remains a form of science fiction that is limited to our eyes and ears. The power of design fiction or speculative design, as Van Mensvoort mentions in his essay, is that a large group of people can physically experience the scientifically computable future, whether or not supported by film.

The project 'OSCAR. The Modular Body' by Dutch artist Floris Kaayk (1982), illustrates this very well.² During an exhibition, he showed some flesh-coloured organs that could move

independently on a table top. An accompanying movie makes clear that we are looking to 3D printed body parts, as part of a modular organ system including lungs, hearts, kidneys and limbs that can be assembled, based on personal wishes and needs, provided that there is only a closed system of blood circulation. Kaayk builds on recent scientific research in America, where new techniques are being developed for the printing of body tissues. Kaayk does not only let us experience the technology in the long run, but raises important ethical questions. Speculative design does not always show what we desire, it can convincingly show us a dystopia with the purpose of thinking about a future in which we want to live.

A similar ambition is embedded in the project 'Parturient', made recently by bachelor students Product Design of ArtEZ University of the Arts in the context of the Bio Design Challenge.³ In collaboration with scientists, students developed a device that allows couples to facilitate extra-maternal pregnancies without physical constraints. The video reached a very large audience who responded shockingly, assuming it was a product already for sale to everyone.⁴



Fig 4.1. Jeroen van Kempen, Lovisa Minkiwicz, Jasmijn van der Weide (students ArtEZ Product Design), 'Parturient', www.parurient.artez.nl. Photograph by Jeroen van Kempen. 2017.

A final example that raises similar responses is 'DIY Surgery Robot'; a project by Dutch designer Frank Kolkman (1989). He notices that medical specialists use very expensive, high-quality technology, such as the Da Vinci Operational Robot, for precision surgery that is accessible to patients only if they are part of a well operating healthcare system. When patients are not part of such a system, they turn to all kinds of improvised solutions that they share on YouTube. Kolkman's aim was to make the Da Vinci Robot's technology accessible to all those who do not have health insurance. He designed an operation robot that users can build by themselves using existing technology that could be ordered at online shops like Alibaba and with simple components that could be produced by open source technology.⁵ The result is an (not yet optimum) operating device that primarily aims to discuss the ethical question of what to do with people who have serious disorders but no health insurance. Will the 'DIY Surgery Robot' be the solution that our society wants?

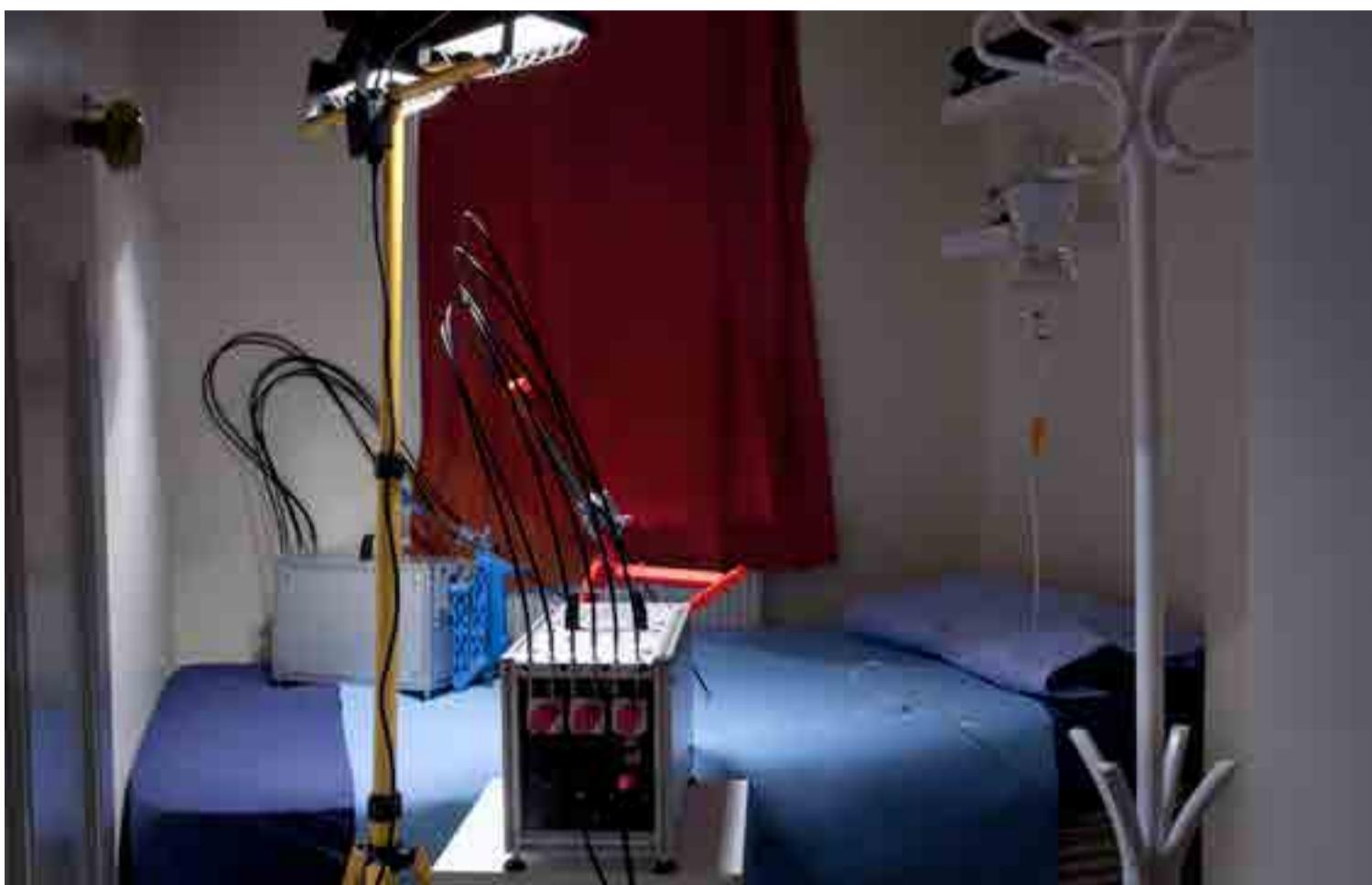


Fig 4.2 Frank Kolkman, 'OpenSurgery - Domestic Surgery Theatre'. Photograph by Juuke Schoorl. 2015.

These examples show the strengths and weaknesses of speculative design. The results can be so tangible and convincing that they are seen – as in a world dominated by visual media – as existing realities. Because speculative design does not know clear platforms, such as design fairs and art museums, it operates mainly in the world of (social) media in which fact and fiction can hardly be distinguished from one another. Speculative design reaches an enormous audience, but it also (often consciously) confuses people about what is real and based on technological potentials and scientific truth. You could ask if speculative design is in this context the possible game changer that it wants to be.

Its strength is that it connects scientific knowledge to the imagination of artists and designers who provide a physically feasible form. This allows us to speculate more convincingly about a better future. I think that we can't start early enough to bring artist, designers and scientist together. So, in the context of design education, I propose to replace the old Bauhaus paradigm Art & Industry and idea of an art school as a modern factory, with the new paradigm Art & Science and design education as a laboratory for speculative design.

Looking forward to your response.

Kind regards,

Jeroen

4.2 > LETTER TO JEROEN

Dear Jeroen,

Thank you very much for your interesting and thought-provoking letter. You started with a reflection on the notion of 'time' in relation to our cultural desire to speculate about the future, after which you discussed imitation and speculation as two approaches for the production of material culture. First, I would like to briefly discuss a few contemporary sociological and philosophical theories about the fragmented time and society in which we live today. In my view, these theories help to develop a deeper understanding of the notion of 'time' in relation to our desire to speculate about the future.

The French philosopher Gilles Lipovetsky (1944) has argued that we live in a time of 'hypermodernity', which is characterized by 'movement, fluidity and flexibility, detached as never before from the great structuring principles of modernity' (2005, 11-12). In a similar vein, the Polish sociologist Zygmunt Bauman (1925-2017) argues that the structures of modernity have changed and are no longer given in our 'liquid modernity' (2000, 32). Both analyses thus characterize our contemporary time, culture and society in terms of fragmentation and flexibility, which simultaneously creates uncertainty and anxiety. Moreover, today, we are also witnessing an acceleration of time. As Jonathan Crary (1951) states in his book *24/7 Late Capitalism and the Ends of Sleep* (2013), we are living in a 24/7 universe – a 'time without time' – as a consequence of the expanding non-stop life of twenty-first-century capitalism (2013, 8). This has evidently changed our experience of time. Bauman also suggests that, with the speed and global scale at which information circulates, our linear experience of time is replaced by a 'pointillist time', as in a pointillist painting, which is 'broken up, or even pulverized into a multitude of "eternal instants"' (2007, 32). This non-linear experience of time and the fragmentation of society both lead to 'new needs for unity and meaning, for security and a sense of belonging' (Lipovetsky 2005, 64). As you've stated in your letter as well, we live in a society in transition, a time of insecurity, tension and new challenges, which gives rise to future speculations that stem from a desire for a more promising future.

It is interesting that you refer to two important traditions of producing material culture: imitation and speculation. Whereas imitation seems to be more related to postmodernism, as an ironic reflection or deconstruction of the past, I would argue that speculation is related to what cultural philosophers Timotheus Vermeulen and Robin van den Akker have called ‘metamodernism’. In their view, we have entered a time of metamodernism, which oscillates between postmodern irony and modern hope. Vermeulen and Van den Akker observe that ‘CEOs and politicians, architects, and artists alike are formulating a new narrative of longing structured by and conditioned on a belief (“yes we can”, “change we can believe in”) that was long repressed, for a possibility (a “better” future) that was long forgotten’ (2010). Now that we are moving out of the skeptic postmodernist paradigm, we are allowed again to speculate about the future, to move forward, and to dream of a more meaningful and joyful future. In these metamodern times, there is a new informed sense of engagement to create a desired and develop new narratives about a more hopeful future.

More and more people are aware of and well-informed about all the political, environmental, economic and social challenges in our late capitalist society, which leads to the desire and urgency to ‘imagine ourselves out of here’ – as Dutch designer and artistic researcher Arne Hendriks (1971) recently stated.⁶ Comparable to Koen van Mensvoort, Hendriks is known for his provocative future scenarios, based on scientific research, in which he speculates about radical solutions for societal problems. In his ongoing speculative design research project ‘The Incredible Shrinking Man’ he focuses on the implications of downsizing the human species to better fit the earth. Being a man of almost 2 meters tall, he states that human species should shrink, as we’ve outgrown out naturally given space on earth. Drawing upon scientific research on, for instance, our biological cell climate, genetics, growth hormones, and dwarfism, he builds up his speculative argument on the implications of shrinking to a height of a maximum of 50 centimeters. According to Hendriks, this means that human beings would only use 2% of the resources that we need now. Just imagine the implications that this would have for housing, transport, food production, etc. As part of this ongoing research project, Hendriks also addresses the continuous obsession with ‘growth’ in our culture and society, which has exhausted the earth and its abundant resources. Part of his speculative design strategy is his ‘Studio of Suspended Disbelief’, a research studio that invites the public to engage in research and to create radical ideas in order to ‘initiate a paradigm shift regarding our species [...] to disrupt understanding rather than illustrate what we think we already know.’ Suspending disbelief, disrupting established ways of thinking, and especially the power of imagination are at the heart of this speculative approach, aiming to ‘shrink towards a world of abundance’.

As the examples of Koen van Mensvoort, Frank Kolkman and Floris Kaayk also demonstrate, these speculative design researchers often raise ethical questions to provoke and to let people reflect on our current human condition and behaviour and its future implications. As you also pointed out in your letter, it is important to let people experience these future scenarios or possible future realities by triggering all the senses, to experience the continuity between where we are now and where we might be in the future. The senses are indeed essential here.



Fig 4.3 LucyandBart, A Collaboration between Bart Hess and Lucy McRae, 'Grow on You'. Personal photograph by authors. 2017.



Fig 4.4 Bart Hess, 'Digital Artifacts'. Personal photograph by authors. 2017.

With regard to this sensorial experience, I would like to reflect on one more example – the Dutch designer and experimental researcher Bart Hess (1984). He always works directly on the body, and experiments with different kinds of materials and technologies to dress the human form, while offering visions of future bodies. These often alienating images seem like science fiction and raise questions about, for instance, the increased integration

of technology in our physical bodies or about the cultural desire to perfect the human body. Hess thus physically transforms bodies and faces, exploring the intimate relationship between the physical body and certain unexpected materials as a second skin. Operating in an imaginary realm, these materials function as surrealistic extensions of the human body – exploring, stretching and transgressing the boundaries of what a human body is or can potentially be in the future. Since this happens directly on the physical body, we are invited to imagine the tactility and materiality of these potential future bodies. This sensorial dimension relates to the power of speculative design as Koen van Mensvoort argued in his paper on ‘design fiction’, which you referred to in your letter. I agree that if we want to imagine the future as a potential reality, or critically reflect on the future implications of our current actions, it is essential to trigger all the senses.

The sensorial experience between human beings and material objects relates to the post phenomenological perspective that Peter-Paul Verbeek (1970), a Dutch philosopher of technology, theorized in his book *What Things Do: Philosophical Reflections on Technology, Agency and Design* (2005). In this book he builds upon the philosophy of Don Ihde (1934) to sketch the contours of a post phenomenological approach to technology, moving towards a ‘post phenomenology of things’ (2005, 111). In doing so, he emphasizes that both subject and object ‘constitute each other. Not only are they intertwined, but they co-shape one another’ (2005, 112, original emphasis). Post phenomenology thus aims to overcome the radical separation between subject and object, starting from the idea that reality arises in relations. This approach helps to understand the importance of revaluing the agency of things, in order to develop a more sustainable relationship between human beings and the material objects that surround our bodies and living spaces and that mediate our human experience. This is what we could call the ethical dimension of engaging with material objects, with the abundant resources of the earth, and with each other as human beings. In order to move towards a more ethical and meaningful future we need to rethink the ways in which we relate to matter, materiality and material resources.

The combination of artistic research, speculative design and science can help create radical future scenarios to imagine a more responsible and ethical engagement with the earth and its abundant resources. Therefore, it is important to envision a new paradigm where art meets science in order to imagine and sensorially experience the future through speculative design.

Looking forward to our future discussions,

Best wishes,

Danielle

1. www.youtube.com/watch?v=6hoy8fIFKFM
2. www.themodularbody.com
3. www.parturient.artez.nl
4. www.youtube.com/watch?v=kA6hyiU6hvg
5. www.opensurgery.net
6. Arne Hendriks, keynote lecture at the Future Makers year event in Arnhem, The Netherlands, June 14, 2017.
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Institution

Edinburgh Napier
University

Country

United Kingdom

Keywords

sound art; consumption;
slow food; digestion

5. GASTRIC TONES: A STUDY IN SOUND

Author: Paul Holmes

Abstract: In this installation, the artist manipulates the speed and duration of the sounds made by his digestive tract before, during, and after the consumption of a meal. Gordon (1993) discovered hidden performative meaning within moving images subjected to extreme slow-motion. In a similar way, this decelerated work reveals latent sonic gestures. Resembling the calls of animals, the rumble and howl of extreme weather, or the hush and crash of the sea, these tones celebrate the primordial power that is in us all. Acknowledging that power and wealth are functions of speed, (Hauer 2017), the work takes its thematic inspiration from breakthroughs in sustainability, pioneered by the Slow Food movement (Tencati and Zsolnai, 2012), and is an aesthetic rebuttal to global inequality and scarcity in our dromological age. These tones also possess the power to imagine. Their retardation creates rhythmic pulses, punctuated with silence. When the artist's stomach speaks, a collective imaginary dialogue emerges from these interstices in which we can share our dreams of abundance, and of an end to anxiety and want.

ABOUT THE ARTIST

Paul Holmes's practice focuses on the gestures and actions of the human body. Pared-down and isolated, frequently viewed in close-up and robbed of their context, these simple movements and expressions carry meanings that go unseen in standard spatial and temporal frames. Often taking his own face and body as the model, he uses still images, light, film, graphics and sound to renegotiate our understanding of modes of expression and viewing, of narrative and performance. In his previous sound works, the artist has captured and transformed recordings of the human voice; this is the first piece that makes use of involuntary human noises. As a foil to their apparently rarified nature, Holmes's works are frequently shown in unconventional spaces, often also using domestic display equipment: TVs, VCRs, and as with this installation, audio speakers.



Fig 5.1: *Gastric Tones: A Study in Sound* by Paul Holmes; Installation View 1. Personal photograph by author, 2017.

BEHIND THE INSTALLATION

To create this installation, Holmes recorded the sounds made by his digestive tract before, during, and after the consumption of a meal. By manipulating the pitch, volume and speed of the audio, the work reveals characteristics that are normally latent in these noises. Small-scale secretions and their accompanying peristaltic movements are brought into exaggerated relief in this soundscape. Resembling the calls of animals, the rumble and howl of extreme weather, or the hush and crash of the sea, these tones celebrate the power of Nature within us all.



*Fig 5.2: Gastric Tones: A Study in Sound by Paul Holmes;
Installation View 2. Personal photograph by author, 2017.*

THE INSTALLATION

Sculptural in appearance, the transparent sound box is mounted on a plinth and lit, becoming the visual focus of a work that cannot really be seen at all. The invisibility of the work is an ironic commentary on the enigma of its meaning. When the artist's stomach speaks, what is it saying? It protests quietly when it is hungry, and complains volubly at the hard work of consumption. Its moods and expressions swing between the extremes of abundance and scarcity and struggle to achieve balance. Much like the human spirit, then, and much like humanity's treatment of this planet and its limited resources.

Taking its thematic inspiration from breakthroughs in sustainability pioneered by the Slow Food movement, the deceleration that is at the heart of the work offers a more optimistic reading. It's very retardation is an aesthetic rebuttal to global inequality and scarcity in an age in which ever increasing speeds of communication, production and consumption seem to go hand in hand with increasing inequality. This retardation creates rhythmic pulses, punctuated with Cagean silences -interstices in which random external elements permeate and enhance the work in an analogue of, and as part of, the creative act.

Among these elements, the viewer of the work is able to assert their own imaginings. As the artist's stomach speaks, then, a collective imaginary dialogue emerges from these interstices in which we can share our dreams of abundance, and of an end to anxiety and want.

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Institution

Universidad de Monterrey

Affiliated to

AIGA

Country

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transnationalism;
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6. I SLEPT FOR FOURTEEN HOURS: THE TRANSNATIONAL DREAM OF A *DÉPAYSÉ*

Author: Daniel Wildberger

Abstract: This letter is an account from a displaced man. It examines transnationalism through the exploration of personal experiences of migration. Navigating the realms of the real and the imaginary, this work seeks shelter in Tzvetan Todorov's concept of *dépaysemant*: a "new, different, surprised regard to a new culture." It aspires to show how a perspective of internal "otherness" (the perspective of the *dépayisé*) can reframe the concept of exile into one of refuge: a safe space where the displaced man can find enlightenment. As the *dépayisé* continues travelling, he writes this letter proposing the reinterpretation of reality and its signs. The first, prolonged, fourteen-hour sleep after an intercontinental flight is used as a metaphor for creating a series of fourteen visualizations that are analyzed on the article. This project combines design and technology to convey a language where places, objects, and stories connect to navigate networks of place and time, through the familiar and the foreign.

“More and more people throughout the world are experiencing forms of transnationality.”¹

PROLOGUE

Amberton Hotel Room, Vilnius. Sunday, February 11th at 10:00pm

I’m exhausted. It’s been a long day. Four countries, two continents, and several time zones later, I’m in bed. My lids are heavy, and now my eyes are closed.

6.1 > INTRODUCTION: A LIFE LIVED IN TRANSIT

This letter is for the “strangers”: the foreigners, the aliens, the outsiders. Those who have felt displaced in a country and society which is not their own, and those who have experienced that sense of estrangement within their own homeland. This letter was written as a response to a moment of crisis and displacement—the author’s exile in his own country—and deals with the sustainability of hope when life reconfigures itself in unexpected ways.

Part travelogue, part meditative journal, this letter describes and reflects upon events that occurred during the first day of travel to a new foreign land: an academic visit to the Vilnius Academy of Arts in Lithuania. The long flight, the first walk around town, the sense of confusion (and freedom) in a visit to an old antique shop/bookstore, are some of the incidents of this visit—which marks a turning point in the writer’s career, leading to optimistic future scenarios. A much needed fourteen-hour sleep at the hotel after the journey is used as a metaphor for imagination and recovery. With regained confidence, the designer-author makes use of visual language to respond and give form to the transnational experience, giving his perspective to the challenges and rewards of the life lived in transit.

As in a dream, the sequence of events here are not chronological. This letter uses technology as a vehicle for what Ed Finn calls “the magic of symbolic language”.² The algorithm, used on the accompanying visualizations, form a bridge between the real and the abstract. And, like our dreams, they respond to data input (our experiences) and give shape to “complex assemblages of abstractions, processes and people.”³

The visualizations are an exercise in information design, but perhaps they are not the typical data visualizations one is accustomed to read or look at. They are somewhat journalistic (there are facts and events being reported), but they also delve into the states of memory and imagination, and are therefore subject to the interference of emotions and subjective interpretation. With the support of a programming language -systems of shapes, lines, and colors- are created in different spatial arrangements to form distinct graphics. The computational language is programmed by diverse parameters from the conscious experiences (one never dreams of a place he/she hasn’t experienced). Thus the algorithms, fed with data from the events, give us a new insight into the moments of displacement.

My visualizations are a form of infographics: visual displays created with the purpose of providing a better understanding of complex information. They enhance our cognition, revealing unknown relationships and patterns that may be hidden or just too difficult to presuppose. Hence, they are an aid that derives from the process of encoding data as visual form, heightening our mental abilities through the decoding of visuals as meaning. Visualization plays the ever-growing role of giving form to digital information, making it critical to complement and analyze current human activities. According to Isabel Meirelles, “With the omnipresent access to large amounts of data, computational techniques have become integral to the practice of visualizing data.”⁴

This letter seeks to bridge the gap between the abstract—a dream, or a theory—and the pragmatic with the aid of the computer and the visual language. According to Finn, technology and creative thinking can complement each other in what he calls “algorithmic reading”. While computational language is “always leaving a gap between the two in the details of implementation. The implementation gap is the most important thing we need to know, and the thing we most frequently misunderstand (...)” Furthermore, Finn emphasizes that the best way to clarify this misunderstanding is to make use of “the critical methods of the humanities.” The algorithmic reading is, therefore, a way of enhancing the analysis of the real and the imaginary, which defines a methodology for this letter by providing “a way to contend with both the inherent complexity of computation and the ambiguity that ensues when that complexity intersects with human culture.”⁵ This letter is my effort to manage this junction.

It is, in a way, a re-imagined “city symphony”⁶ —an experimental documentary with the eye of technology being guided by the hand of the human spirit. This letter also draws inspiration from Tzvetan Todorov’s concept of *dépaysement* (a “new, different, surprised regard to a new culture”⁷) and aspires to show the perspective of internal “otherness”—always unfit but constantly “becoming”—as one of constant transformation that transcends time, place, history and culture.

6.2 > “HOME IS WHEREVER I’M WITH YOU.”⁸

“For a long time, I would wake up startled” says Todorov at the opening of his autobiography *L’Homme Dépaysé*, before describing a recurrent nightmare for those who have left their birthplace: the impossibility of returning to their adoptive places, thus becoming an exile in their own homeland.⁹ In 2015, I actually experienced this, not as a dream but as a reality. After spending twelve years in the United States, I applied for a Green Card with my wife, Isabel. I was a full-time Assistant Professor in Graphic Design at the University of Memphis, where she was finishing her PhD in History. Yet, what looked like the culmination of our journey living abroad together turned out to be a rejection letter. So, we packed our books, sold our car, our house, gave away our furniture, said goodbye to friends, colleagues, and, occasionally, cried. We would never get to harvest the seeds we had planted in our backyard.

I was back home but, for a long time, I just wished I would wake up. I moved back into my parent's place, a three-bedroom apartment, feeling like an exile. It was like another recurrent adulthood nightmare: the fear of "failing and going back to the nest." But it was also time to pick up the pieces and move on. On the first few days, I caught myself rejecting my native language, Portuguese. Dealing with denial, I used technology as some kind of a phantom limb because it offered me a refuge in a transnational reality that was transcultural and without borders. The Internet worked as a replacement drug for an identity withdrawal, recreating a space where I could still be in touch with lost neighbors, students, and friends. I could follow the news on the same streaming device I used at home in the U.S., and make long distance video-calls that allowed me to look in the eyes of my pending goodbyes.

Kobena Mercer contends that "identity only becomes an issue when it is in crisis, when something assumed to be fixed, coherent and stable is displaced by the experience of doubt and uncertainty"¹⁰. In my moment of crisis in Brazil, my identity went through a phase of resistance when I tried to "strengthen and reaffirm" a local identity from my second home country, the United States, while renegading the language and issues of my birthplace (an internet-provided technological refuge). But thankfully the nightmare eventually subsided. The local culture, the familiar faces, spaces, and experiences were too rich and familiar to ignore. So, I embraced myself as a hybrid, a constant alien, at home or abroad. As Kathryn Woodward notes, the phenomenon of the global diaspora, everyday more common due to economic inequality and cultural globalization, "produces identities which are shaped and located in and by different places." I agree with her assertion that "these new identities can be both unsettled and unsettling."¹¹

Born of dispersed, fragmented cultures, the cultural identities formed by the experiences of migration are the main interest of this letter. They are complex and nimble mutations that reflect our fast-changing technological context. In *Cultural Identity and Diaspora*, Stuart Hall defines cultural identity in terms of two distinct forms of thinking. One "defines 'cultural identity' in terms of one, shared culture, a sort of collective 'one true self', hiding inside the many other, more superficial or artificially imposed 'selves', which people with a shared history and ancestry hold in common." The other, however, "recognizes that, as well as the many points of similarity, there are also critical points of deep and significant difference which constitute 'what we really are'; or rather—since history has intervened—'what we have become.'" Therefore, "cultural identity, in this second sense, is a matter of 'becoming' as well as of 'being'. It belongs to the future as much as to the past. It is not something that already exists, transcending place, time, history and culture."¹²

6.3 > INSIDE AN AIRBUS, ATLANTA AIRPORT, SATURDAY, FEBRUARY 10, AT 4:00PM

"Your flight to Amsterdam is full. I'll put you on the window, ok?" The voice of the Delta Airlines attendant played in my head as I scanned the seat numbers on the airplane's corridor. I arrived in seat A26, arranged my things, and fastened the seat belt. Once

accommodated in my new safe space, I stretched my neck to look at all the passengers coming in and thought to myself, “no chance.” Only a stroke of luck would keep the chair next to me empty through this eight-hour flight. My fantasy of clumsily spreading my body over two chairs on an Airbus was crushed when my travel neighbor arrived: a bespectacled older gentleman, white hair and beard. He sits by my side carrying nothing but a stack of printed sheets and a rollerball pen. While he puts on the seat belt with some difficulty, I deviate my attention to the entertainment center menu in front of me. Only a few seconds later, there’s a rough cough, and I noticed through my peripheral field of vision that the grizzled man is leaning forward, focused, looking fixatedly through his lenses to the papers on his hand. My curiosity propels me to take a peak: the paper is filled with mathematical equations I cannot read, like a foreign language of signs that had no discernable meaning to me. The scientist, however, reads the familiar code with ease. Next to the algorithms on the paper, he scribbles notes after pauses and sighs. That red ink ritual would go on for the duration of the entire flight. We prepare for take off.

6.4 > SOMEWHERE OVER THE ATLANTIC OCEAN. SATURDAY, FEBRUARY 10, AT 10:00PM

On the intercontinental flight to Amsterdam, my neighbor sitting next to me intercalates naps with moments of intense algorithm scrutiny. While he scribbles, a weird feeling of academic brotherhood takes hold of me. The Delta Airlines entertainment center plays a Werner Herzog documentary. On the first shot, we see a university campus in California (UCLA). The sequence cuts to a scene inside of a campus building, where there is an aseptic atmosphere. “The corridors look repulsive”, declares Herzog in his unmistakable cadence and accent. We are about to watch Leonard Kleinrock, one of the pioneers of the Internet, enter a room in which there is an old packet switch, a machine “so ugly on the inside, it is beautiful.”¹³ He punches the device three times to show how this computer, built for the military, was supposed to last for many years. It is hard to deny that they did a great job. The thing looks as if it could resist the blast of an atomic bomb. But besides its impressive ugly or beautiful looks, Kleinrock’s reverence to this machine is purposeful: we are looking at the first computer that “talked” to another computer. This conversation obliterated constraints of space and the information travelled many miles away to the Stanford University campus, where another team of researchers were watching incredulous that technological milestone. Watching this moment in the documentary, I paused. Not only because computer science and human behavior would never be the same after that, but by recognizing an astounding coincidence — the fact that algorithms, like us, are travelling connectors of knowledge forging, through migration, a transcultural network that disrupts both the physical and the socially constructed space.

In our current technological stage, identities get formed not only within the spatial constraints that we inhabit but by all the virtual spaces we are able to reach through highways of moving information. In the documentary, *Lo and Behold: Reveries of the Connected World*, Leonard Kleinrock compares the feat of data travelling to the achievements of the era of circumnavigation, putting into perspective the critical point

we have reached—when the shock of sighting new lands is an omen to a period of change, even chaos, before we find consensus (and build a new set of paradigms). Joi Ito puts it well, when describing the boiling point when two revolutions, in technology and communications, are combined: “The first is Moore Law. Everything digital gets faster, cheaper, and smaller at an exponential rate. The second is the Internet.”¹⁴ Information is not only mobile, like the algorithms that travel in the hands of a scientist on a plane, but techno-mobile as the data flowing through the streams of the Internet that allows you to watch this film.

6.5 > VILNIUS, LITHUANIA. SUNDAY, FEBRUARY 10, AT 4:25PM

It had snowed in Vilnius Old Town. Sensitive to the sunlight reflected on the bright whiteness of the streets, my vision warns my senses and the smell of snow confirms it: we are not in Mexico anymore. Better get this Latin American body reprogramed to this Lithuanian weather. The accent overheard on the streets was nice to the ears, and every street sign I looked had interesting diacritics I had never seen before.¹⁵ Having just finished my first meal at the hotel, the first taste of the Baltics, it felt like a good time for a stroll.

6.6 > A WALK DOWN L. STUOKOS-GUCEVICIAUS, THEN SVENTARAGIO, TO GEDIMINO

I saw the Vilnius Cathedral up close for the first time, with its imposing neoclassical style surrounded by the Cathedral Square (As I later learned, that was the place where all the Grand Dukes of Lithuania were crowned.) I am at the heart of Old Town. Going up on Gedimino, the old city dresses itself as a bustling strip of famous stores and chain restaurants. The National Theater and the Opera House are here and, a mile further, the Holocaust Museum. Walking up the strip I see, behind the corporate signs boasting the flags of consumerism, beautiful old buildings. Their facades are not shiny but their skin and bones still convey so much history, even if hidden under the heavy make-up of commercial signage. I head down south on Totoriy to Dominikonu until a little sign that reads *Antikvariatas* catches my attention. Without speaking any Lithuanian, my best guess is that this is an antique store. The replica of a medieval knight in full armor protects its entrance—I walked right in.

6.7 > DOMINIKONU GATVES ANTIKVARIATAS — SUNDAY, 6:00PM

Inside the little shop, the space was filled with used books and souvenirs. Everything was written in Lithuanian. They were all a mystery to me. Seriously impaired in my cognition, I could only look at the pictures and appreciate the vintage typography. My brain was lost, trying to make sense of what I was looking at. But it felt delightful—being released from the need of logical understanding had somehow made me feel free. My perception navigated a space that was much more subjective and responded to a creative and playful impulse for building imaginary connections.

6.8 > SIGNS WITH NO DISCERNABLE MEANING

Like an illiterate child, I spent hours browsing books with no discernable meaning. The satisfaction of being in a place of signifiers without assigned signification is characteristic

to the feeling of *dépaysement*. In the bookstore, I was consciously trying to organize what Amanda Loos calls the “endless web of signifiers/ieds and associations” while unconsciously tapping into random memories that fill the space “between the ego and its images.”¹⁶ I have built my own semantic network in the absence of a verbal language I could understand. My mind was navigating the Lacanian spaces of the imaginary — the ideal image space, where the iconic signifiers of Pierce, or the signifieds of Saussure, take form — and the symbolic — where language finally gives order to subjects in a complex code of associations.¹⁷

This feeling of introspection, from the aimless walk around the city—which points to the myth of the *flâneur*, famously celebrated by Charles Baudelaire and Walter Benjamin—and the silence in the face of an unknown language, are typical occurrences in the context of *dépaysement*. It deals with issues of contemplation (the *flâneur* as a spectator of life) but can also be an act of rebellion. French author David Le Breton explains in an interview that “The moment you leave the house you find yourself involved by practical issues that show perfectly where you are supposed to go (...), hence the contemplative walk “implies a resistance against utilitarianism and also against rationalism (...).”¹⁸ During these introspective moments, when the traveller looks at her/himself, they are reassuring their “otherness” not as point of fragility but as an act of resistance.

The perspective of “otherness”, a key concept explored by Todorov which philosopher Julia Kristeva described as being “strangers to ourselves” must be brought to relevance since it reveals one growing paradigm of our time when transcultural identity is reaching a new level due to this moment of forced displacements and techno-mobility.¹⁹ Today there is palpable understanding that exile can take place in different cultural spaces that are not necessarily in different physical spaces—like my own Internet refuge. So, the Internet-age generation is one that is more than ever susceptible to internal foreignness, to a seductive fascination with the other that fulfills the promise of difference and disruption. These modern fragmented identities manage to navigate between shared cultural codes of ancestry and a skeptical view of the self as one who is unsure where to place their own identity. As technology continues to challenge time and space boundaries, the cultural identity of the “stranger” and the “misfit” have become the possibility model for the post-colonial, non-hegemonic behavior that is redefining socially constructed norms.

6.9 > THE TRANSNATIONAL DREAM

The transnational dream takes places in a context of de-territorialization. According to the book *Nations Unbound: Transnational Projects, Postcolonial Predicaments and Deterritorialized Nation-States*, “The term ‘transnational’ is used to signal the fluidity with which ideas, objects, capital, and people now move across borders and boundaries. Scholars of transnational culture speak in the vocabulary of postmodernism and make reference to hybridity, hyperspace, displacement, disjunction, decentering, and diaspora.”²⁰ Transnationalism offers a perspective in which de-territorialized spatial dimension (one that has plural locations spanning across different socio-spatial units) plays a central role in how we experience our reality.

By making it easier and faster to move across distances and borders, technology has challenged our physical relation to space. It also defies our virtual relationship with it, questioning well-established constructed notions of socio-spatial units. The authors of Transnational Spaces mention that transnationalism “encompasses all of those engaged in transnational cultures, whether as producers or consumers. It includes not just the material geographies of labour migration or the trading in transnational goods and services but also the symbolic and imaginary geographies through which we attempt to make sense of our increasingly transnational world.”²¹ Hence abstract thinking, memories, and dreamed experiences can also inform our transnational spaces.

6.10 > CAN WE COUNT THE ELECTRIC SHEEP?

After I closed my eyes and slept for fourteen hours, I had dreams that were an assemblage of borderless memories with images of Brazil, United States, Mexico, and Lithuania. Right before bed, I checked the Internet and the news of growing authoritarianism and xenophobia were very disturbing. Thankfully, I don't remember having nightmares about those issues, but bad experiences can also be shaped by cybernetic journeys. Technologically enhanced realities can be poisoned by hate and programmed for extremism, affecting large social groups. Gene Youngblood sustains that “Aesthetic application of technology is the only means of achieving new consciousness to match our new environment.” Since there is a growing belief that the computer is the tool that “someday will erase the division between what we feel and what we see”²² this letter understands that we must remain alert to the ways technology can influence our reality. Migration and diaspora have historically suffered from the spread of divisive ideology—fast-moving information can also bring chaos to the promise of plurality in the transnational dream.

6.11 > A NEW BEGINNING

Nine months before this trip to Lithuania, when I arrived here in Monterrey, Mexico, I was once again a stranger. Since the beginning of my exile, there was a visceral desire of connection with Latin America. It was as if my identity needed to rekindle with a lost brotherhood, which was my Latino cultural identity. Yet, in this new foreign land, my *latinidad* was immediately challenged and I could barely understand the language (although, ironically, as most Brazilians I assumed I could perfectly understand and speak Spanish). So yes, there was an initial estrangement. Change is often complex and full of dilemmas. But that was also accompanied by great sense of being or, as Stuart Hall put it, of ‘becoming’. It was life lived in movement. The best feeling was to ‘be here’, and to feel welcomed after being ‘expelled’ from another place. It felt good to start anew and to join a university again. It also felt very good to be in the classroom—a place where I always feel at home, regardless of geographical markers. Like Mexico, my trip to Lithuania represented a point of transformation and recovery, and it is why I use it in this letter: it was the first time my research took me somewhere in the world that was not ‘here’, but ‘out there’.

6.12 > CONCLUSION

If our dreams seem to fade during moments of crisis, there is always a possibility of redemption. Although many questions regarding the future remain, this account is my attempt at an answer.

The feeling of uprooting was the start of this reflection about the places that leave a mark on the spirit. I hope this story of transitory moments finds you well, in the place you call home or elsewhere. Even though this letter ends here, it continues through the paths of others that follow non-linear, broken lines. So, the next time you meet a stranger, do me a favor and say ‘hi’ to them for me.

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Institution

Westerdals Oslo ACT

Country

Norway

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7. TRANSGRESSIVE GRAPHIC DESIGN: DEFAMILIARISATION, HUMAN AND NON-HUMAN FUSIONS

Authors: Margaret Rynning and Synne Skjulstad

Abstract: This paper inquiries into how we, as humans in the Global North, envision troubling scenarios of future interaction with technologies. Selected student projects in graphic design and art direction, within a Nordic university college setting, explore speculative future visions. The works address concerns about how technologies increasingly permeate our existence as a species in rendering human and non-human life as disturbing amalgamations. We inquire into how our mediated realities and speed of life, may have impact on the future. Via the concepts of *defamiliarisation* and *transgression*, we discuss the ways in which speculative graphic design and art direction may oscillate between the familiar and the unknown. We inquire into how design may interrupt habitual or automatic perception of phenomena, so as to open up spaces for reflection and assure a sense of impossible possibilities.

7.1 > INTRODUCTION

This paper explores how graphic design is put to work in examining future scenarios that include fusions of the human and non-human. Such fictional fusions may provoke reflections by challenging our interpretative apparatuses as part of a critical approach to design and design teaching (Mazé and Redström 2007). Taking up the concepts of defamiliarisation, transgression and familiarity (Auger 2013), we examine how these concepts may aid us in reflecting upon visual articulations of the future within the context of teaching graphic design and visual communication. Via discussion of selected student works drawn from a Nordic university college setting, we explore issues relating to ways of reflecting visually on the technologized life and visions of human and non-human fusions in the Global North. In the works examined, we inquire into how speculative approaches to graphic design (Skjulstad and Rynning 2015) may open up for a wider reflection of how portrayals human and non-human fusions may serve as symbols of a technologized existence. *Doing this we ask how the concepts of defamiliarisation and transgression may open up spaces for reflection?*

This paper presents some preliminary attempts at sketching out how speculative graphic design scenarios reside in articulations that draw on the conventions of the present. The paper is structured as follows: First we unpack our main analytical concepts. Secondly, we present two selected student projects within speculative design which reflect upon human-nonhuman fusions. We then present the cases for discussion. Finally, we discuss how transgressive, speculative graphic design may oscillate between defamiliarisation and familiarity. We conclude by pointing to the space for reflection which potentially open when looking at the design of familiar products and services anew.

7.2 > (UN)FAMILIAR WAYS OF SEEING

According to philosopher Wolfgang Welsch (1997), more and more parts of life are becoming aesthetic constructs. He refers to such processes as *aestheticization* (Welsch 1997). In such a context, graphic design provides opportunities for the exploration of difficult and even scary future scenarios in rendering aesthetic what may we find alien. The habit of relating to a broad range of different aestheticized designs have in many instances become automatic. In order to experience the meaning behind the designs or the services, this automation needs to be interrupted. Originally writing on literature, and as part of the Russian formalism in literary and linguistic theory, Viktor Shklovsky points to the need to look anew, so as to transcend our familiar perception of phenomena. In his original essay from 1917 (translated and reprinted in 1965), *Art as Technique*, Shklovsky discusses, with close reference to Tolstoy, how to make us perceive the familiar anew. He refers to this estrangement as “defamiliarisation” (Shklovsky 1965, section 15), stating that “The technique of art is to make objects ‘unfamiliar’, to make forms difficult, to increase the length of perception because the process of perception is an aesthetic end in itself and must be prolonged”. In giving weight to the process, placing the aesthetic experience in the subject, not the object itself (Hausken 2009, Hausken 2013), defamiliarisation refers to luring the imagination to see beyond naturalised perception. For designers, disturbing and altering the ways in which potential audiences may perceive a given visual articulation of a subject matter provide creative opportunities. Relating

Shklovsky's writing to the design of domestic technologies, Bell et al, (2005, 154) point to how the concept of defamiliarisation "...provides a lens to help us see our own design practices in a new light". Wilde & al (2017, 5159) point to defamiliarisation as means through which we may "...prolong the moment of arriving at an understanding...", thus resulting in a deeper and more detailed one. Dunne (2008) approaches estrangement in order to find the space between people and the object that will open up for discussions and criticism, as well as for drawing attention to legal, cultural and social rules that otherwise will go unnoticed. He refers to this space as the poetic distance between people and the object (Dunne 2008, 22). As part of design practices that are critical, speculative, discursive, or in one way or the other designed so as to ask its audience to reflect as opposed to consume, the concept of defamiliarisation provides a valuable way into discussing what is not always articulated graphically, yet outspoken.

7.3 > TRANSGRESSIONS

Designing for defamiliarisation is to design for transgressing the habitual. "To transgress is to break, violate, infringe, or exceed the bounds of: laws, commands, moral principles or other established standard of behaviour" (Rice and Littlefield, 2015, 1). Among what may be transgressed is our familiar ways of relating to phenomena, either if it is flogging as in the case of Tolstoy, or novel amalgamations of humans and technology in travel and in experiencing empathy, as reflected upon in the student projects we discuss below. Transgressions can be part of ground-breaking innovation and radical change, and transcend what is perceived as possible and imaginable today. Transgressions in design may be perceived as provocative, thus providing designers with ways through which to address important, and at times difficult issues (Dunne & Raby 2013, Mazé & Redström 2007). However, the transgressions of today may become regularity of tomorrow. When transgressions are systematised, they flow into new inaccessible spaces, escaping capture and slipping away. Transgressing boundaries in design can thus be seen as part of aesthetic action, as "*Transgressors don't cross borders, they move them: by moving them they innovate*" (Iaconesi and Persico 2016, source without page numbers).

Writing on fashion, Müller (2014) shows how transgressive aesthetics may open for new possibilities in perception and in imagination. He reflects on the political aspects of transgressions in design. According to Müller, aesthetic interventions are central for creating both order, but also disruptions and disorder. Thus, aesthetic border transgressions may penetrate or even exceed the restrictions of what mundane everyday reasoning can handle. Such transgressions, he points out, are becoming more and more media based. Similarly, Dunne and Raby (2013) as they refer to speculative design scenarios, see such an approach to design as a potential catalyst for change. As they emphasise the importance of finding and framing problems and articulating spaces for reflections on these, as opposed to solving them, aesthetic interventions are key in reflecting on possible, probable and preferable futures via design. These aesthetic interventions aim to feed the imagination, and provide designers with conceptual tools through which they may critique difficult topics via the creation of fictional scenarios and

visions on societal issues relating to politics, technology, and culture (Fuller 2016, Bardzell et al. 2012, Rynning and Skjulstad 2017, Rynning 2017).

7.4 > FAMILIARITIES ENHANCING APPRECIATION

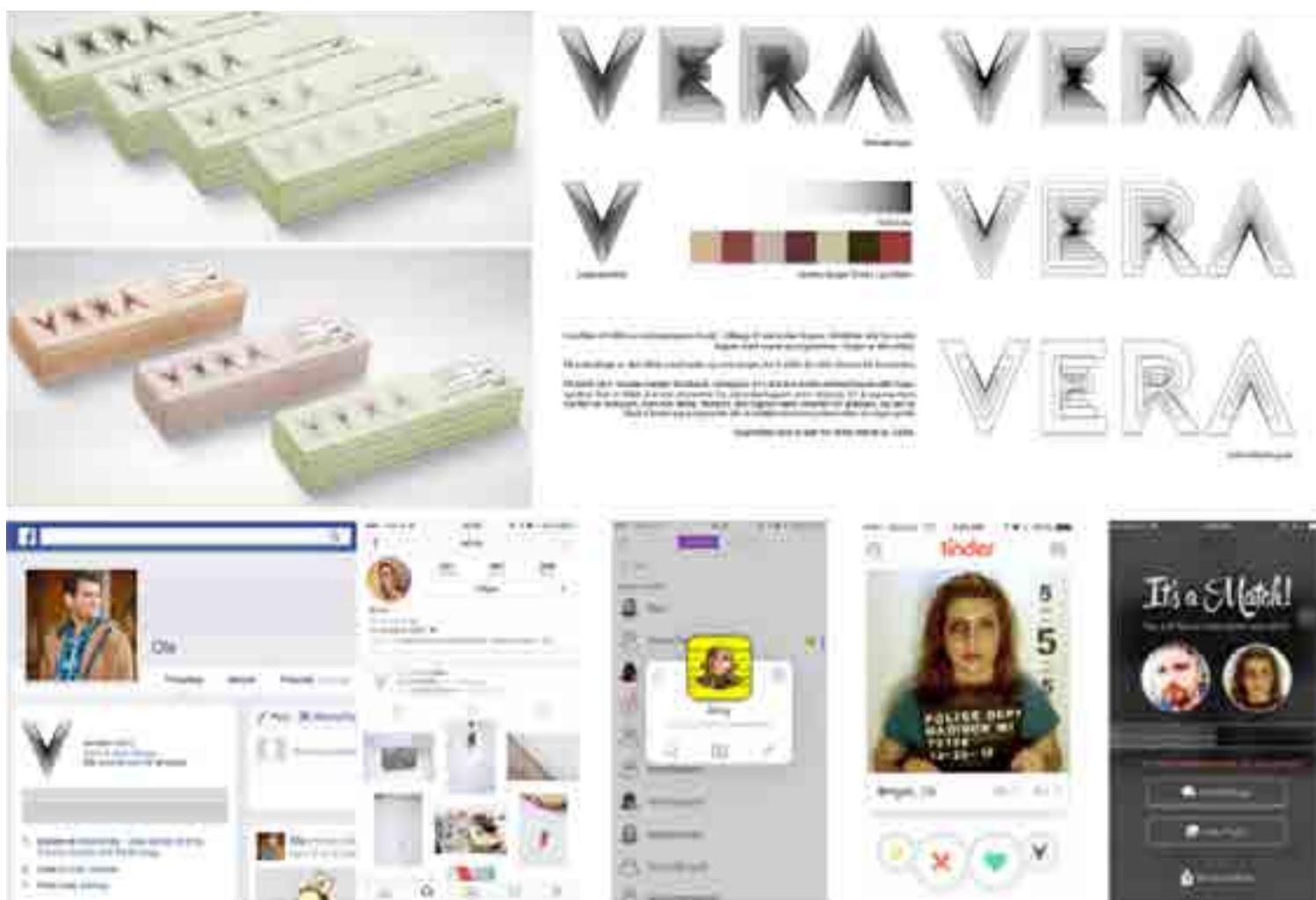
Speculative graphic design provides means through which graphic designers can creatively comment- and reflect upon social and societal issues (Skjulstad & Rynning 2015). However, it is easy to cross the fine line that makes the audience's attention slip away, as the designerly articulations of these might easily be rejected as they can appear too repulsive or too strange to be engaging (Auger 2013). Auger have devised what he refers to as perceptual bridges so as to aid designers in finding ways to engage the audience in speculative design scenarios. One of the techniques he suggests for making a speculation engaging is to tap into existing familiarities, so as to ground the audience's perception of the speculation in the familiar. This means that that in recognising elements in the speculation, it becomes easier to understand and relate to it. Familiarities may also enhance the appreciation of the design as the audience activate their already existing hermeneutic skills (Bardzell & al 2014). The role of situating graphic design speculations in known, and at times also conservative designs are discussed more fully by Skjulstad and Rynning (2015). Drawing on this, we inquire into the role of defamiliarisation as part of rooting the speculations in the familiar.

From a HCI perspective, Bardzell & al (2014:1951) describe different ways of reading and interpreting critical, and often transgressive designs pointing to need to further develop a more "...coherent 'discourse around criticality'...". When presented a piece of provocative design, they point to how our immediate reactions is to be either intrigued or repelled. However, these reactions are fuzzy, as we often have problems pinpointing what we like or dislike and why. Strong, but ambiguous feelings may stimulate our interpretative apparatuses, as we try to position the design according to our schema, conceptions and norms (Bardzell & al 2014). The scenarios of speculative and/or critical designs are often designed so as to challenge the recipient cognitively and emotionally (Dunne and Raby 2013).

7.5 > METHODS AND SELECTED STUDENT PROJECTS

For the last couple of years, the programmes in graphic design and art direction at our institution has incorporated speculative approaches to design in teaching and research. This paper is part of an ongoing inquiry into speculative approaches to graphic design and visual communication (see Skjulstad & Rynning 2015, Rynning & Skjulstad 2017, Rynning 2017). The student projects discussed below are drawn from two work-intensive five-week courses. These courses emphasized how design can deal with social, cultural or ethically difficult issues, inviting the students to reflect upon design outside of commercial contexts. These students were asked to design future scenarios presented via visual identity design, taking (as suggested by Dunne and Raby 2013) as their point of departure the question 'what if'? The projects were selected because they oscillate between drawing on the familiar and the unknown. Below we explore the student work, focusing on transgressions and defamiliarisation as these themes are articulated. Defamiliarisation provides a lens

through which we may discuss issues of alienation of the human subject that recur in the student works. The two cases presented below both present disturbing scenarios of future interactions between humans and technologies, and inquire into how our present human choices, and speed of mediatized life may have impact on the future, and they indirectly ask us to reflect on these scenarios.



VERA by Nikolette Kalkinn, Katarina Cordas and Aurora Bratli Brunvoll. *VERA contact lenses for increased compassion, presented through visual identity design and examples of how the concept works in social media.*

Work#1 VERA

Fig 7.1: Student projects to address design future scenarios, presented via visual identity design. Personal photograph by authors. 2017.

VERA contact lenses are designed so as to correct the human capability of emotional intelligence and compassion, and it inspects our increasing self-centredness (Twenge 2009). The purpose of the lenses is to contribute to a friendlier society and the product's function is to correct the way we see each other. The intensity of the active agents of the lenses is illustrated by the number of visual layers in the logo. The friendly pastel colours are chosen so as to enhance compassion and care, the very effect of the fictional product. The technologically enhanced emotional intelligence is expressed and communicated via visualisations of how this imagined product could be presented across social media platforms such as Facebook, Snapchat and Tinder, showing the user's level of 'verification'. The media

platforms through which the project is presented serve as means to relate the product to current media practices and media use so as to make credible the existence of these lenses. In this scenario, the packaging is designed so as to aid the audience in seeing this as an actual product, even as the functionality of the lenses deviates considerably from what one would expect, thus rooting the speculation in the everyday.



Bodycation by Lars Nynas, Mathias Aanmoen and Janinti Gauslaa suggest holiday using somebody else's body.

Work #2 BODYCATION

Fig 7.2: Student projects to address design future scenarios, presented via visual identity design. Personal photograph by authors. 2017

'BODYCATION' offers a digital travelling service, where one can rent a period of time in someone else's body somewhere in the world, and rent out one's own body, like one can now rent domestic space on Airbnb. As the point of departure, this project started with the question: *what if the brain was in the cloud?* By asking this question, the project presented a critique of the pressure many young people experience relating to their body and to current beauty standards. However, it also raises larger questions about the relations between mind, body, technology and feminism (see Haraway 1984). This project does, as VERA, provide technological solutions to problems that cannot be solved by simply introducing yet another technological devise or service. The issue of minimizing ecologic global footprints by using less fuel when travelling is presented as the overarching goal of this human – technology amalgamation. However, in presenting such a way of travelling as yet another digitally enabled service, *Bodycation* transgresses a critique of just body standards, leisure aviation, or the emerging critique of the sharing economy. Even as the visual design mimics the

visual style of services such as Airbnb the project also presents a technological solution to problems that cannot be easily solved by technological means.

7.6 > FINDINGS AND DISCUSSION

Both projects address concerns about human-technology fusions envisioned as possible futures and they tackle issues that are seen as relevant to a Nordic context. They open up spaces for reflection on how bodily matters become part of a technologized future, as they both aim to invoke a sense of alienation, presenting services that transgress the human capability to be fulfilled as human beings. In presenting the projects as grounded in the present reality and visual conventions, the design interrupt habitual perceptions of products and services, once the scenarios and functionalities of the service and products are revealed. One preliminary finding is that the criticality these works embody rests not in radical graphic design per se, but rather in the designer's abilities to express complex critical articulations of issues relevant for the students via future scenarios that emulate and tweak current design conventions.

Not many years ago artificial intelligence were phenomena of sci-fi movies. However, in 2017, artificial intelligence resides in regular smart phones, bleeding unnoticeably into everyday life. Hence, the boundaries of what is perceived as impossible or transgressive is continuously on the move. For instance, being able to enhance emotional intelligence and the way humans see each other through a set of contact lenses may relate to the already well-known possibility of physical enhancing the human body through technologies, such as for example pacemakers and hearing-aids. As pointed out by Haraway (1984) a long time ago, we are all cyborgs.

A speculative approach to graphic design may be transgressive in drawing on specific visual codes so as to betray to eye into reading the design as the kinds of products and services we encounter in our everyday lives. However, the familiar elements in the design may also aid the audience in relating to the scenario (Auger 2013, Rynning and Skulstad 2017). As discussed by Mazé and Redström (2007), and seen in both projects, repositioning design within existing frames, such as glossy expos, or by borrowing the presentational techniques from the field, visual simulations of mediated versions of products and services form vital aspects of the speculations. In embracing the familiarities of existing conventions in graphic design, familiar styles, such as found in contact lens packaging, or contracts and advertisements for travel services, provide important contrasts to the wildest aspects of the speculations, affording the audience's perception to oscillate between the alien and the familiar. The simultaneous articulation of commonality, possibility and impossibility in the student designs may primarily be found in the scenarios and the functionalities in the products and services, not in the visual articulations of them as such. However, even as the projects invite the audience to relate to a speculation, they do not, we suggest, actually have to believe that the scenarios are actually going to take place in the future. As initially described by Shklovsky (1965), the aim is for the audience to perceive the familiar designs as slightly differently than the ones they emulate.

7.7 > CONCLUSION

The potential for defamiliarisation lies in the known, the ordinary and in everyday design conventions and in the ability to slightly interrupt these. However, when being nudged into thinking about the possible, but unarticulated chains of events leading up to the speculation (Dunne & Raby 2013), the familiar designs provide a fruitful platform for giving visual shape to the possible and impossible outcomes of today's processes that slowly technologize our lives, but are only suggested as having taken place in a past leading up to the scenario designed. In the case of *Bodycation*, the user of the service travels without moving. However, the design invites the spectator to travel her own mind, and therefore invites her to transgress the routines of interpretation. VERA invites the reader to reflect upon the reasons for why the lenses are needed for looking at one another with compassion, or at least a sense of it. We do not believe that these two projects change the world. However, what we hope for is that the power in design may be put to work for creating visual connections between our present and the futures we wish for. And if speculative approaches to graphic design enable us to further develop ways of designing poetic articulations of matters that matter now, and for invoking a sense of criticality and reflection on the here and now, that is, at least, more than nothing.

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Institution

The Sustainable Design
School

Affiliated to

Plastic Odyssey

Country

France

Keywords

waste; oceans; recycle;
innovation

8. MESSAGE IN A PLASTIC BOTTLE

Authors: *Maurille Lariviere, Simon Bernard
and Alexandre Dechelotte*

Abstract: **Installation:** Through an artistic installation made by design students using plastic waste, we encourage participation to resolve the plastic waste problem in the world. The format is a symbolic bottle, that holds letters of emergency. Conference participants can add messages, that express their fears and hopes. We also expose items designed by students through easy means, that stimulate the use of plastic as a resource: a sail, tools, items done with developed plastic thread.

Video: Simon & Alexander, founders and project leaders of Plastic Odyssey will talk about their solution proposal, linked to waste management. The video is placed into the context of the design student work. Plastic Odyssey is an innovative boat that will circumnavigate the globe to promote plastic recycling. It will make its own historic trip around the world to help build and spread plastic recovery solutions, adapted to each country visited. The end goal is to reduce drastically this type of pollution by stopping the leakage into our environment while encouraging social entrepreneurship. Designers and design students from all around the world may be part of this innovative and engaged process.

ABOUT THE CONCEPT

Our dream is, that the future journey of Plastic Odyssey, starting in 2020, is supported by creative people from all continents of this world, and will have a major impact on the plastic waste problem.



Fig 8.1: View of the vessel of Plastic Odyssey - 3D image of the 25 meters catamaran Plastic Odyssey. Personal photograph by authors. 2017.



Fig 8.2: Map of the expedition « 3 years expedition - 33 calls - 40,000 nautical miles sailed. Personal photograph by authors. 2017.

We, as creatives, as artists, as designers, as architects, can afford to dream. We have the advantage of our creative minds, allowing to imagine useful and adapted items for people of any culture. With our knowledge, we can transform given material. With the essence of our conviction we can communicate about production methods, that are full of sense.

Through the organisation “Plastic Odyssey” we wish to create an endless and open network of people, who are contributing to the implementation of production methods, that will avoid new plastic waste and that will use the existing waste as a raw material.

INSTALLATION NOTES

The installation is a vertical bottle, structure in wood, surrounded by a fisher net.

Height: 1m, width: 31,6 cm.

The bottle can stand on a table.



Fig 8.3: Plastic sail boat. Personal photograph by authors. 2017

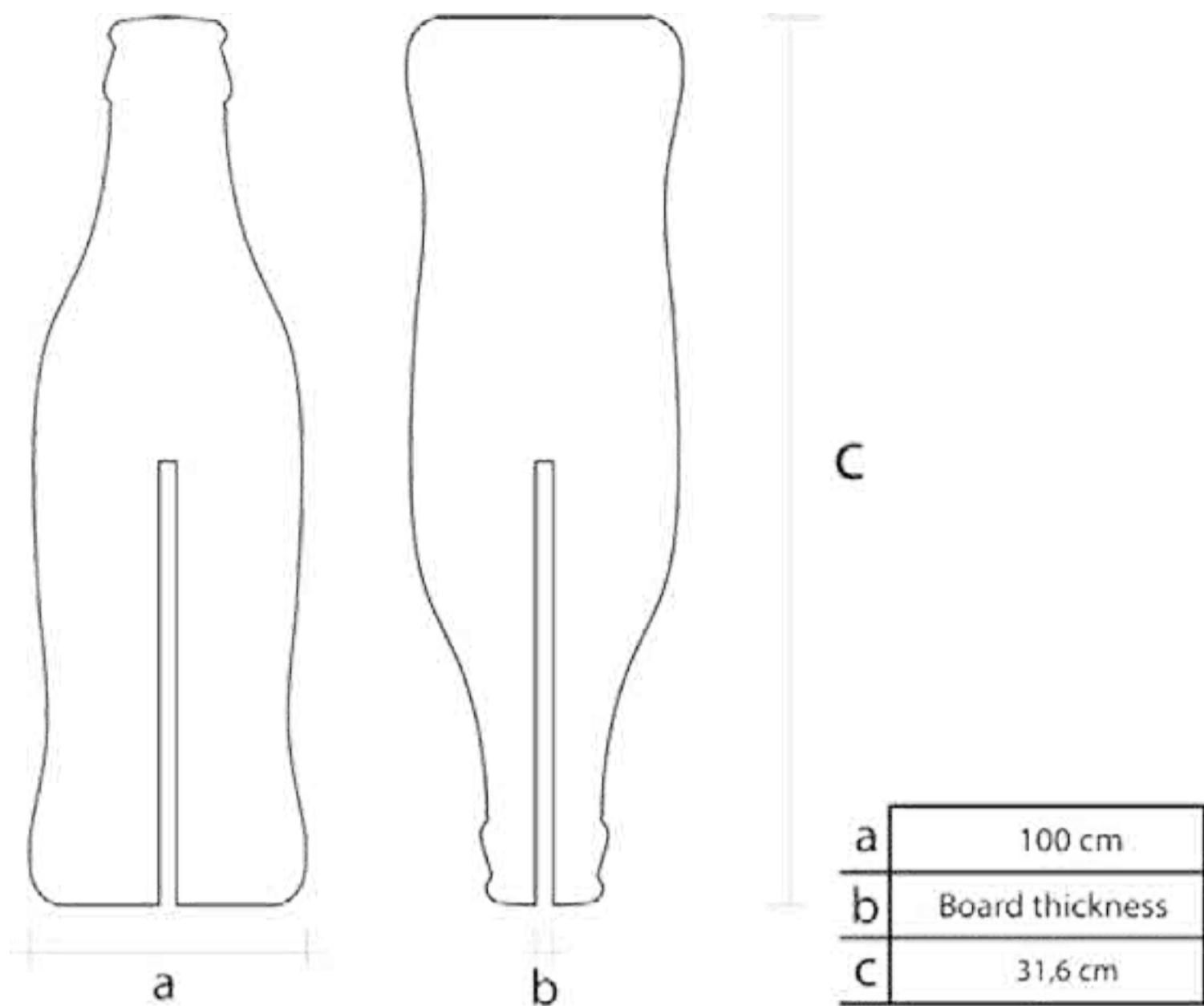


Fig 8.4: Plastic bottle concept. Personal photograph by authors. 2017.

We also bring along a sail, made from trash-shopping bags, which can hang on the wall.
Size: 3,60m².

VIDEO NOTES

The video has a full length of 15 minutes.



Fig 8.5: Video: Plastic Odyssey. Total length: 12' to 15'

STRUCTURE OF THE VIDEO

- Project pitch by the founders of Plastic Odyssey, including static pictures illustrating the pitch
- Design work presentation by students of The SDS
- Design vision of the project by Marc Van Peteghem (Naval Architect & Designer, The SDS cofounder)
- A word addressed by the Plastic Odyssey founders to the design students of the world.

OUTCOMES

The video/learning outcome

- Explains the project of Plastic Odyssey,
- Shows the values and ambition of the two co-founders,
- Explains the environmental context with facts and figures,
- Demonstrates the outcome of collaboration with design students and how student participation is a major tool for the project with concrete examples.
- Shows which space designers can hold in the project, through the talk of Marc Van Peteghem, Naval architect & Designer.
- Settles the project into an environment of creativity, conviction and volunteer work.

The installation/learning outcome

- Allows direct participation.
- Next to the bottle, we distribute printed recycled paper sheets with space to write a message and indications how to fold an origami boat.

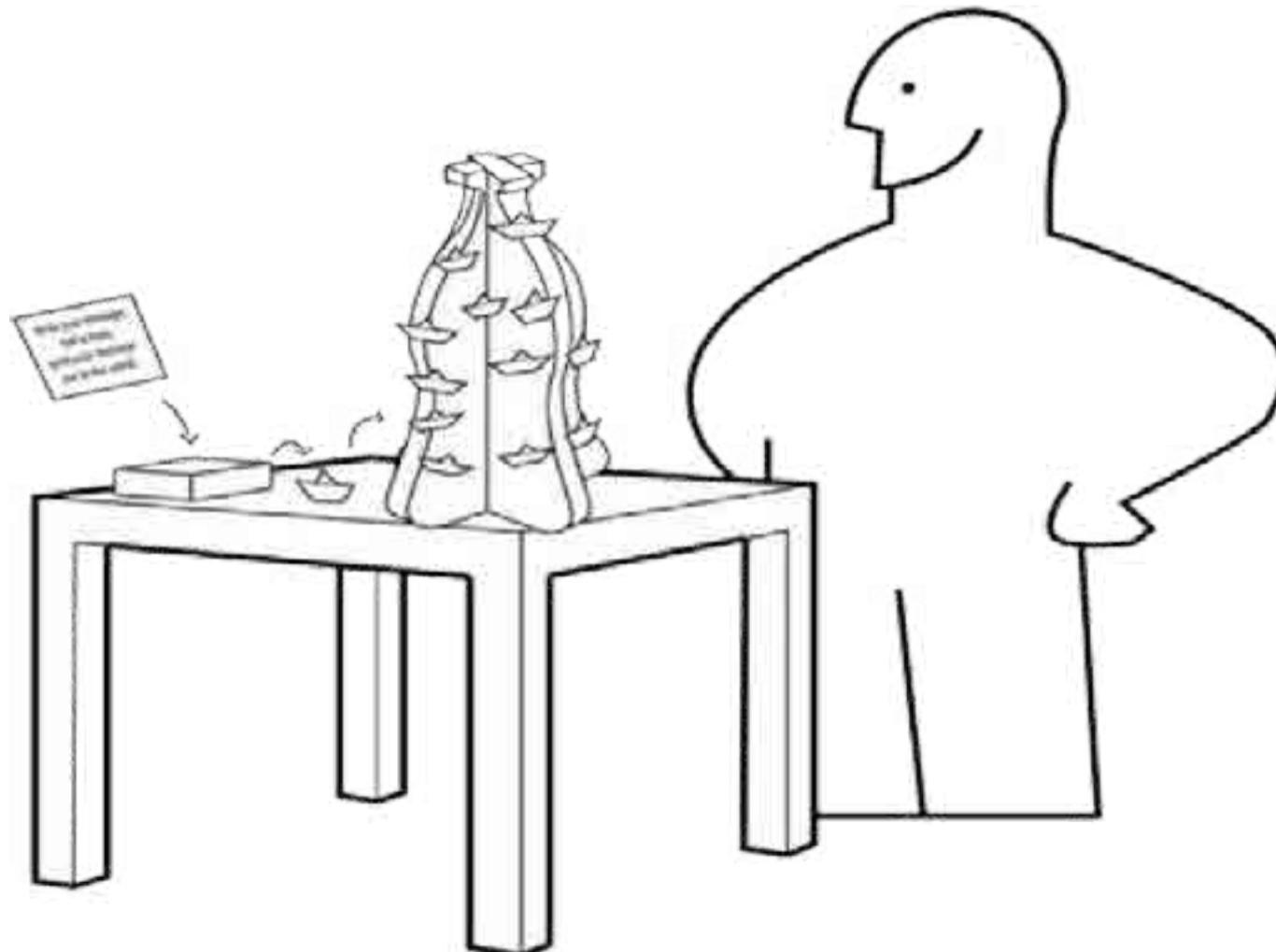


Fig 8.6: Concept of origami message boats. Personal photograph by authors. 2017

- The “message-boats” will be attached to the bottle, or can be put inside.
 - The bottle has the function of a letter box.
 - We invite students and participants to write in their own words a personal message to the future. The messages are going to be reused at Paris, next Cumulus conference, with the theme “Together we can get there”.
 - People who post a message will get a little bracelet “Mingle” in return, with the QR code of Plastic Odyssey. It will connect the people through to the next step at Paris.
-

FOOD AND FOOD SUPPLY FUTURES

Day 2: Cumulus Srithi 2017



SECTION #2

THE FUTURES BETWEEN

Institution
Linnaeus University

Country
Sweden

Keywords
subversive design;
extreme users;
transgender

9. I CAN AFFORD SUBVERSIVE DREAMS

Author: *Anthony Clair Wagner*

Abstract: Wellbeing is a rare luxury. It can even be a fragile utopia for many so-called extreme users- people whose bodies, lives or interests are considered to fall out of the accepted norms. In its extreme, normative society's apprehensions, directed towards extreme users, can manifest as fears or phobias, for example, homophobia, transphobia or ableism.

Continuously confronted with marginalisation and discrimination, extreme users have to develop considerable ambition to ensure their own wellbeing. This ambition can take the form of exploration and creation of options through play. I am a privileged extreme user because I feel I can afford to play. As an artist, I play at performing alternative realities and possible utopias. As a designer, I play at creating my own space in the world through, what I call, subversive design. That is, the subversive modification or creation of objects, languages or systems that meet the needs of users neglected by dominant norms. This paper introduces the concept of subversive design and its significance for society, using examples of transmasculine and non-binary clothing strategies. In conclusion, it argues that society could become more sustainable through merging subversive design, inclusive design and participatory design to enable wellbeing and equality for everyone.

9.1 > THE PRECARIOUSNESS OF WELLBEING

It is no secret that wellbeing continues to be a luxury for many, even a utopia for some. A person's wellbeing depends not simply on physical and mental health or good economy, but rather on the interplay of multiple factors, such as, equal rights, equal access to education and other resources, protection from discrimination and violence and the freedom to live life to the fullest. Especially marginalised people are subjected to severe restrictions in their opportunities. Such restrictions can be a result of society's apprehension towards the Other, the fear of that which is different, the fear that the presence of certain people will have unpleasant consequences. The stronger the apprehension, the more likely it will turn into outright phobia – with often lethal consequences for the individuals that are the target of such loathing. Such severe dislike is not usually the rule, but even minor marginalisations prevent wellbeing for the individual or group affected by them. For the most part, the basic requirements for wellbeing for all have not been achieved on the global nor the local level. And yet, humanity is undertaking multiple efforts to ensure a future of universal wellbeing. From the United Nations' 1948 Universal Declaration of Human Rights and the 2014 Sustainable Development Goals, to an increasing multitude of top-down, bottom-up and hybrid process social innovations (Manzini 2014). What many of these diverse big and small initiatives have in common is that they transform apprehension into ambition and show up possibilities for making society more sustainable through reducing social exclusions and inequalities.

In this paper, I will build an argument around specific developments in design and design education, such as participatory and inclusive design, that have the potential of contributing to increased social equality and thereby to a future of wellbeing for everyone. Based on my postdoctoral research into trans-masculine and non-binary clothing strategies, I will do so through connecting such design developments to a wider understanding of so-called "extreme users" and the subversive solutions these users design to ensure their own wellbeing. I call these solutions "subversive design" and argue that society could increase wellbeing and become more sustainable through merging subversive design, inclusive design and participatory design.

9.2 > MAKING THE SOCIAL SUSTAINABLE

Often extreme users, that is people whose bodies, lives or interests are considered to fall out of the accepted norms and who therefore become overlooked users in the designing of products and systems, are understood as people with permanent disabilities or elderly people who are increasingly challenged by age-related disabilities. Departing from the social model of disability, which identifies a mix of social exclusions as factors that disable an individual by preventing them from fully participating in society, I would like to widen the definition of extreme users and argue that a significant number of people suffer situational disabilities that occur in moments of exclusion based on society and mainstream design overlooking or ignoring the needs of individuals and groups that are not fulfilling normative expectations. Such situational disabilities are caused by the social and are not the result of an individual's ability. They can therefore occur independent of a person's physical or mental

impairment. But they can be permanent as well as temporary, depending on the severity of the exclusion. Not only do social exclusions disable people in small or big ways, but they thereby compromise the wellbeing of the people thus affected.

I am an extreme user. Not because of age or physical or mental disability, but because I live in a gender binary society. A gender binary society recognizes only male and female, only men and women as legal subjects with rights. Transgender, gender non-conforming, and intersex people make up some prominent groups that complicate the established social norms of male and female bodies and social genders. Transgender and gender non-conforming people do not live in a gender role that corresponds to the gender they were assigned at birth or to societal expectations. Intersex people are born with sex organs, chromosomes, hormones or anatomy that do not fit the dominant binary division of male and female. Because of their difference, these groups experience a range of exclusions and inequalities ranging from light to severe. For the US, the findings of the 2014 National Transgender Discrimination Survey show, at 41 percent, a significantly higher suicide attempt rate for transgender people, than the general US population (at 4.6 percent) or even than adult lesbian, gay or bisexual people (at 10-20 percent) (Haas, Rodgers, and Herman 2014, 2). Those community members that experience further marginalisations based on class, ethnicity, health, and so on have especially elevated suicide rates (*Ibid.*). Intersex infants are even regularly subjected to harmful surgical interventions (UN General Assembly 2013). How can members of disadvantaged groups, such as for example the transgender community, ensure their own wellbeing?

Repeatedly confronted with marginalisation and discrimination, extreme users have a history of developing considerable ambition to ensure their own wellbeing. This ambition can take the form of explorations of options through norm-creative play and activism which in turn can result in the creation of what I call subversive design. The term subversive has been put to various use, often with negative connotations. I intend the term subversive to be understood not in terms of troublemaking, but rather as constructive and positive change to problematic systems and situations. Likewise, Foad Hamidi and Melanie Baljko who work with assistive technologies, use the term “subversive interaction design” to express “a stance that questions, challenges, and transforms extant prevalent social dynamics, potentially mediated by interactive digital media” (Hamidi and Baljko 2014, 25). In my research, the term subversive design is not limited to technology, but refers to workarounds, norm-creative designs and practices of resistance against such hegemonic narratives that prioritize standardised bodies and lives through normative designs and systems. Subversive design happens, for example, when extreme users intervene in established systems. When they bend their minds towards either altering existing products through workarounds or developing entirely new designs. Subversive design can happen as participatory or co-design, collaborators can be friends and family, designers, artisans or other professionals, but while professional designers might be involved, the incentive in subversive design comes from extreme users.

Considering Alastair Fuad-Luke’s definition of design as “the act of deliberately moving from an existing situation to a preferred one by professional designers or others applying

design knowingly or unknowingly” (2009, 5), I would argue that subversive design is potential activism, that is, “taking actions to catalyse, encourage or bring about change, in order to elicit social, cultural and/or political transformations” (2009, 6). Likening subversive design to (design) activism may seem overly ambitious since a majority of subversive designs are made by persons in search of an individual solution rather than a systemic change. Nonetheless, considering that the specific needs behind these innovative solutions can be caused by social inequality and that the subversive design efforts of individuals or groups can create precedents that contribute to criticising and countering such inequalities, I would argue that subversive design encourages systemic change, furthers social innovation and may therefore, on several levels, be related to (design) activism.

I would like to give an example for how subversive design is not only the subversive modification or creation of objects, but also of communities, languages or systems to meet the needs of these users independent of dominant norms, thereby allowing them to enable themselves in the face of social exclusions. In the US, disadvantaged African American and Latinx gay, lesbian and transgender people have created what Marlon Bailey calls “a community of support,” through Ballroom culture and the related house kinship systems (Bailey 2013, 633). A house is made up of a group of people that express a family-like kinship to each other and together create stability and a safe-space. Ballroom culture, in turn, revolves around performances at balls where representatives of the different houses compete in different categories. Bailey calls ballroom culture a “minoritarian social sphere where performance, queer genders and sexualities, and kinship coalesce to create an alternative world” (Bailey 2013, 631). The documentaries Paris is Burning (Livingston 1991) and, more recently, Kiki (Jordenö 2016) provide glimpses of this scene. Like other subcultures, ballroom has developed a distinct vocabulary, but the main characteristic is that of performing or “voguing” at the balls. Successful performances give status to the performer and their respective house. During these highly competitive events alternative realities can be expressed and creatively imagined through the expressive costumes and dance styles. Arguing that the kinship and performance practices of the Ballroom community create “Black queer space” Bailey explains:

Ballroom members often respond to forms of exclusion and marginalization by using performance to carve out – to engender – and transform normative geographies into spaces of communal celebration, affirmation, and support. For Ballroom members, space is a cultural production rather than a concretized fixed location. (Bailey 2014, 490)

I would thus argue that Ballroom members practice a rich form of subversive design that provides wellbeing through what Bailey calls “socio-spatial practices” that create norm-creative family formations, events, language, and the creation of community space (Bailey 2014, 490). Ballroom culture can be understood as a spectacular example of subversive design activism that creates wellbeing through norm-creative play. But even though it has extended beyond the borders of the United States, it remains a small subculture.

Outside the Ballroom culture, the everyday challenges that transgender people face have generated multiple strategies for countering the frequent exclusions and abuse inflicted by the hetero- and cisnormative hegemony. Many such strategies are related to appearances, specifically clothes and styling. From the 1930s onwards, a major concern was performing cisnormativity in public and a lot of effort, especially among transsexuals, went into dressing and behaving in ways that would prevent discovery. Prominent out transsexuals, such as Christine Jorgensen in the 1950s US, furthermore had to consider the public image of transgender people and live up to accepted normative behaviour. Changes in society may no longer require that transgender people stay in the closet, but, considering the amount of trans- and homophobic violence directed at transgender people, passing continues to be a safety issue (Stotzer 2009, Grant et al. 2011). Successful dressing is thus a necessary skill and often a challenge. For trans-feminine persons that have been assigned male at birth, techniques such as tucking the genitals to mask their existence, and for trans-masculine persons that have been assigned female at birth, binding the breasts, is often essential. Out of the many individual solutions for achieving the desired effects some have recently been developed into marketed products. My research focuses specifically on trans-masculine clothing strategies, specifically on binders. Interviewing trans-masculine people on their personal binder solutions and binder companies on their product development I hope to trace the development of this specific design from individual subversive designs to presently available products by companies such as gc2b, Danäe, or Underworks. Since trans binders are a recent development it remains to be seen if I can collect data that allows to deduce if trans binders can become a solution that also benefits men with gynecomastia, that is an increase in male breast tissue, or women. Nonetheless it already seems apparent that as binders become more comfortable and more widely available more and more people, for example in the Cosplay communities, might find them an appealing option. The US company gc2b, for one, offers its models in five different skin tones and a wide range of sizes to make them accessible to the diverse people in the transgender, non-binary, and queer communities, as well as anybody else who might want to wear one.

Increasingly, transgender and non-binary people are making small but noticeable impacts in the fashion industry. The THINX company created the THINX boyshorts period underwear after they understood the exclusions inherent in their slogan “For women with periods” since “not all people who have periods are women” (Rutherford-Morrison 2015). Likewise, not all women like to wear women’s underwear, for reasons of comfort and personal preference. Even men’s tailors, such as Bindle & Keep in the US, are discovering a new market in cooperating with the butch and trans-masculine community to create masculine custom suits for female body shapes.

Transgender people and butch women are not the only ones that long for clothes that appropriately reflect their identity and some fashion producers are picking up on new non-binary trends – with mixed results. In 2016, the fashion label Zara launched a section of gender neutral clothing called “Ungendered” that received mixed reactions and was

criticised on Twitter for lacking boldness and creativity (Cherrington 2016). This critique could easily have been avoided, not only because blurring gender lines has been tried in fashion, especially runway fashion before, but simply because Zara´s fashion designers could have considered a cooperation with some people who consider themselves non-binary. Just a quick Google or Pinterest search would have yielded multiple hits for joyful, non-binary clothing strategies and possible collaborators. Alternatively, Zara could have studied the NPD Group´s 2015 market research publication *Blurred Lines: How Retail is Becoming Less Gendered, and Why You Should Care* for information on gender-neutral fashion and the potential of eliminating the division of store space into men´s and women´s.

The fact that subversive design can benefit not only extreme users, but the general population points to what Angela Glover Blackwell calls a “curb-cut effect” (2017). A curb is the raised edge that elevates the sidewalk above the street level. It is also an inconvenient and disabling barrier for people in wheelchairs. The history of the curb-cut is another example of subversive design activism. It started with a few wheelchair users in the early 1970s who illegally poured concrete ramps in Berkley to make curbs accessible. Disabled activists’ subversive design efforts were rewarded when the city finally installed the first official curb-cut a few years later. Finally, in 1990, with the Americans with Disabilities Act, curb-cuts became a mandatory feature that was eventually recognized as benefitting a great range of people, such as people with baby strollers, bicyclists, skateboarders, and people transporting loads (Glover Blackwell 2017).

The social model of disability and the curb-cut effect can be put into relation to a shift in design thinking that resulted in Design for All, also known as, Universal Design, which had the goal of ensuring accessible solutions for everyone. Inclusive Design is a closely related idea which aims to find design solutions that reflect the diversity of the population and that enable as many people as possible while acknowledging that “no design will work perfectly for everybody” (Clarkson and Coleman 2015, 240). It also relies heavily on participatory and co-design to develop inclusive solutions. The potential of inclusive design is being discovered by the industry. Microsoft, for example, is recognizing that “[p]hysical, cognitive, and social exclusion is the result of mismatched interactions” (Shum et al. 2016, 20) and aims to design diverse solutions instead of a one-size-fits-all, to accommodate the greater diversity of people. Microsoft does so in cooperation with extreme users, who they recognize as “the real experts in adapting to diversity” and whose “diverse perspectives are the key to true insight” (Microsoft 2017). Likewise, the Inclusive Design Group at the Cambridge Engineering Design Centre is working on countering design exclusions in industry. Both the Inclusive Design Group and Microsoft have developed Inclusive Design Toolkits “to encourage designers to deliver more inclusive products and services” (University of Cambridge 2015). The Inclusive Design Group included simulator gloves and glasses in their toolkit design to let designers gain empathy through experiencing the consequences of impairment. But the Design Group takes care to stress that toolkits “are not a substitute for working with real users and are intended to reinforce the need to bring real users into the design process” (Hosking, Waller, and Clarkson 2010, 498). Hosking, Waller and Clarkson of the Engineering Design Centre

also urge that besides “capability variations” other aspects, such as, “gender, culture, lifestyle and aspiration” need to be considered in inclusive design (*Ibid.*). I see this as a good sign of a long overdue development and would like to suggest that inclusive design can benefit from widening its understanding of extreme users, who are now understood as “lead users” (Cassim and Dong 2015, 295) to include people who are subject to situational social disabilities based on sex, gender, sexuality, ethnicity, class or other factors that mark them as extreme. Consider, for example, the exclusions that people of colour have endured in the colour and digital photography industry because the dominant norm of whiteness neglected to design these technologies to adequately reproduce skin tones other than white (Roth 2009). Moreover, diversity and accessibility cannot be reduced to factors of impairment, nor can society reduce disabled people to their respective disabilities. Disabled people too face intersectional struggles, based not just on impairment, but also on sex, gender, sexuality, ethnicity, class, and more. Considering the overlapping discriminations and exclusions that many extreme and overlooked users, in the widest sense, face, I would like to argue that all design should practice intersectional thinking to ensure a more inclusive future. Cooperating with marginalised users to learn of their respective subversive design solutions could yield similar unexpected benefits as the curb-cut, closed captioning and other design innovations that were created with a small target group in mind, but ended up benefitting the greater society.

9.3 > AFFORDING SUBVERSIVE DREAMS

Speaking to you from the early stage of my research into subversive design, I titled this paper “I can afford subversive dreams,” in honour of Martin Luther King’s sentiment regarding a future of equality (American Rhetoric 1963). I am mentioning disability studies and civil rights leaders with the intent of impressing upon all of us that we cannot follow a rhetoric that reduces the multiple social injustices faced by the marginalised and the overlooked to what Audrey Lorde (1984) called, “single-issue struggles”. The responsibility for humanity’s wellbeing and future cannot be compartmentalized nor reduced to the responsibility of individuals. While all of us have to uphold our part of the struggle, it is the social, the greater sum of the parts that has to be transformed from a dream of inclusion and equality to a reality.

My letter to the future wishes to send a message of ambition that rests upon the conviction that social innovation and social change are possible on many levels because of the interconnectedness of disparate struggles and concerns. I see glimpses of a cooperative future that supports the diversity of humans and is invested in wellbeing for everyone rather than in widening the gaps. My theory is that marginalised people and communities hold strategies and solutions that can contribute significantly to this future and I see certain trends in design and social innovation as significant players and collaborators. In inclusive and participatory design’s attitude that narrates extreme users as “lead users,” (Cassim and Dong 2015, 295) I can glimpse a future that discovers the potential of subversive design for the wellbeing of many instead of only the wellbeing of the privileged. Supporting diversity is the expense that we have to meet to afford a sustainable future. It is my hope that the concept of subversive design will be able to contribute to this development.

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Institution

MPhil / PhD, Department of Design, Goldsmiths University of London

Affiliated to

Tutor in Radical Ecologies
Minor, Design Academy Eindhoven / Thought Collider (Design Studio)

Country

United Kingdom

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10. AN ODE TO FAT

Author: *Mike Thompson*

Abstract: Fat. THE most iconic substance of our time. Yet despite an intimate relationship with this substance, we appear crippled by a negative stigma that taints our understanding of its vital role in health, energy, beauty, ecology and consumption. Fatberg is a speculative research exploring the true potential of fat. The project's activities stem from one central, bizarre action: the building of an island of fat – the fatberg. Building an island, a manifestation abstracted from everyday experience, our aim is to confront society with fat as substance, encouraging an open dialogue regarding our relationship with this material, what it is and what it might become. This paper and 'design happening', review and demonstrate three distinct public engagement activities conducted throughout Summer 2017. Drawing from Kaprow's 'happenings', and the notion that playing with everyday life is simply paying attention to what is conventionally hidden, a series of unscripted engagement events were staged to tangibly explore this substance to ask: do we know fat like we think we do? Examining these experiences, I highlight opportunities in the design of open-ended public engagement activities, for mediating the formation of problems (and solutions) around which publics coalesce.

10.1 > BACKGROUND TO FATBERG

Fat. Perhaps THE most iconic substance of our time. A fundamental building block of life, and life's battery. An energy reserve, stored within the body for times of scarcity. And yet, particularly in western society, we have developed a negative stigma towards this substance that taints our understanding of its vital role in health, energy, beauty, ecology and consumption. As Orbach (2016) notes, 'fat' today is not so much a description of size but a moral category tainted with criticism and contempt. Such is the aversion this attitude extends from the body to man-made systems. In October 2017, a 130-tonne 'monster fatberg' was discovered in the sewers beneath East London. This hardened mass of oil and grease, had grown to completely block a 250 metre stretch of 1.2m diameter sewer pipe (Taylor 2017). Acquiring a chunk for the Museum of London, Alex Werner, lead curator, noted the fatberg "calls to attention the way we live our lives in a modern city" (Greenfield 2017). Rather than a symptom of contemporary living, perhaps it's time we address the cause of the blockage – fat.

Drawing from Kaprow's 'happenings', and the notion that playing with everyday life is simply paying attention to what is conventionally hidden, a series of 3 unscripted engagement events were staged to ask: do we know fat like we think we do? Examining these experiences, and their evolution from engagement to emergent events, I highlight opportunities in the design of open-ended public engagement activities, for mediating the formation of problems around which publics coalesce.

10.2 > FATBERG AS DESIGN RESEARCH ENQUIRY

Adopting the thinking through making approach to generate experiential knowledge and insights (Ingold 2013), the projects activities stem from one central, bizarre action: building an island of fat. Detached from any cultural or biochemical point of reference, the aim is to confront society with fat as substance, encouraging dialogue regarding our relationship with this material, what it is and what it might become (Thompson and Hendriks 2015).

Kirby (2010) introduces the 'diegetic prototype' to describe the ways in which fictional objects, for example, cinematic depictions of future technologies, demonstrate a technology's need, viability and benevolence. Such technological artefacts exist within a fictional world – the diegesis – as functioning, everyday objects, enabling the exploration of alternate realities. Fatberg, and the tools that emerge through its production, function as diegetic prototypes, shaping a reality both familiar and strange, acting as triggers for story-telling to ask: do we know fat as we think we do?

10.3 > METHODOLOGY

Reflecting on archetypal forms of science communication event, Horst and Michael, by way of Latour, introduce the model of emergence as an event typology lacking the standard privileged flow of information to science. Here, entities themselves (a public

and a science) act as mediators, who change and are changed through the event of coming together. Through this definition, event is understood as the coming together of elements by which novel relations and identities emerge (Horst and Michael 2011). The purpose is to form what Haraway dubs ‘situated knowledge’ – knowledge produced by social actors on account of their position or location within society (Haraway 1991). Akin to Ratto’s concept of critical making, Fatberg’s activities employ the shared act of making as an explicit practice of concept elaboration, and reflection (Ratto 2011). The focus does not so much lie on the created artefact, making as a concentrated reflection upon the techno-socio-cultural. The designed staging of the event, and the performative aspects that occur, thus produce particular realities potentially opening up new insights.

Horst and Michael (2011) introduce Stengers’ figure of ‘the idiot’ to refer to the nonparticipant, whose unexpected or unintended behaviour might be described as ‘idiotic’. Discussing the social sciences and speculative designs contrasting approaches to public engagement, Michael (2012), by way of Fraser (2010), contends that the speculative design approach does not so much engage audiences in solution seeking, but rather enacts what Fraser calls, ‘inventive problem making’. The ‘idiots’ presence is disruptive, and this ‘overspilling’ from the expected advances opportunities for inventive problem making, where the parameters of perceived ‘issue’ shift in new and unprecedented ways. How might ‘the idiot’ be harnessed to advance ‘inventive problem making’?

Fatberg shares similarities with Kaprow’s ‘happenings’, free-form activities, with ambiguous instructions determining participants actions. In a 1997 essay, Kaprow remarked that “experimentation involves attention to the normally unnoticed... To play with everyday life is simply paying attention to what is conventionally hidden” (Kaprow 2003). The encounters that ensue through happenings were thus improvised responses to the situation, actions and surrounding props. Fatberg’s rudimentary objective similarly provides an unscripted scenario enabling actions and dialogue to unfold unexpectedly. Design is hereby employed as a form of order imparted onto a series of conceptually and structurally chaotic activities.

10.4 > DESIGN EVENTS

In 2016, Stichting NDSM-Werf, the cultural foundation responsible for the reformed NDSM shipyard in Amsterdam, agreed to host Fatberg. Approximately 500,000 people pass through the 30-acre site throughout the summer months, attracted to the extensive programme of cultural events, markets, bars, restaurants, creative studios and graffiti hotspot. NDSM therefore not only presented a physical space for production, but a vibrant public. In early 2017, Fatberg moved to its new home, with a custom shipping container, acting as studio and exhibition space, positioned overlooking the custom-built production site, comprised of four floating pontoons. Island building requires a huge physical and material effort, therefore a key aim of the project is to form an active Fatberg community. How might individuals be stimulated to adopt a role in the building of the island and exploring a new relationship with fat? Utilising the new facility, a series of engagement events were planned in Summer 2017 to tangibly explore fat as substance, each event

displaying a distinct theme and methodology. These included: Fat & Food, a public discussion and performance; Float Fest, the official project launch, including event preparation and launch ‘happening’; and, designLAB: a collaborative workshop with students from the Gerrit Rietveld Academy, Amsterdam.

10.5 > FAT AND FOOD

A hybrid of activities: Fat and Food was imagined part-talk-show, part-performance, part-engagementevent. A food journalist and professor in health and nutrition were invited as expert panellists in a public discussion. The discussion was purposefully unscripted to encourage explorative dialogue, allowing the panel (including the hosts) and public, to build on one another’s train of thought. The tangible experience of fat was introduced via a set of sensorial activities conducted in parallel to the central discussion, including Lardo di Colonnata tasting (Italian cured pork fat), fat massaging, and a butter churning performance. Such activities helped situate dialogue within a material experience.

Material and Coherence: Typically, the island, floating within its custom tank, acts as focal point around whichactivities and themes coalesce. Noting the containers limitations, the event was uniquely staged outdoors. Due to the practical difficulties of relocating the tank, Fatberg was absent from proceedings, a decision which proved critical to the direction and cohesion of the event. The panellists, for example, were able to remain within their comfort zone, sharing and debating their existing knowledge and expertise. Furthermore, there was no definitive plan for the introduction of the sensorial activities. Actions such as the Lardo di Colonnata tasting, were subsequently shunted to the periphery by the dominant group discussion. The butter churning performance, conversely, was intended as ongoing action, referenced as related concepts emerged. Following 2 hours of manual labour, the performance came to the fore as the cream transformed to butter. The filtering of butter through the performers own t-shirt provided an absurd climax, as the relation of fat to taste, behaviour and experience combined through eating. While never prominent within the discussion, the performance formed a tangible connection to fat as substance. This was notable, for a substance contended typically forgotten or obscured, had remained an abstract point of discussion, with one panellist commenting: “... if fat is not observed and not reacted upon it’s there, but it could just as well not be... when you see fat as a Fatberg you may actually start to think about it. Because, people never think about food in a different way than it satisfies their impulses.”

For this individual, it is the collective experience of a disrupted material, both familiar and strange, that holds potential for inventive problem-making, for it is its ‘overspilling’ that might trigger new paradigms.

10.6 > FLOAT FEST

Setup as event: Float Fest functioned as official launch of the production site, marking the moment the island embryo finally made its way to open-water. The event was scheduled to coincide with IJ Hallen, Europe’s largest flea market, which attracts several thousand visitors.

Float Fest comprised of two designed stages: setup, during market hours; and, happening, the official launch from 18:00. While the happening was the focal point of the event, setup was imagined as an activity in its own right. For the purpose of this account, I will focus on setup as an activity.

Prior experience of designing events, had led to observing a notable difference between consumptive and co-created experiences. ‘Fat and Food’, for example, was designed to encourage free-flowing dialogue between participants, rather than observed conversation amongst panellists. In conceptualising Float Fest, a distinction was made between ‘presenting’ and ‘being present’. Whereas ‘presenting’ implies demonstrating work, ‘being present’ signifies being active at work in context. The combination of our presence working and visual communication (fly-posters, branded merchandise etc.) proved successful in drawing the curiosity of passers-by. Pointing to and explicating features of the site, created opportunities for story-telling and story-gathering via conversations with the public.

Prototyping community: Certificates of co-ownership were produced to stimulate the formation of a community of Fatberg builders. Purchasing a certificate, co-owners receive a signed, numbered and dated print detailing the terms of co-ownership, with sales proceeds invested in material for island building. A ‘combo deal’ was additionally advertised, with a t-shirt and certificate available for €25. Rather than evaluate the effect of merchandise in stimulating the formation of community, I instead wish to explore the emergent features of community that emerged through conversation. In particular, an exchange with one passer-by, r1, demonstrates that the features of community, rather than predetermined, might be instead prototyped ‘on-the-fly’.

Describing the goal to build an island of fat, and presenting the production site, we introduced our vision for a community of fatberg builders. It was explained that a contribution might take various forms, from the financial, such as purchasing a certificate of co-ownership, to participating in the rendering of fats, or the building of the island. R1, to our surprise, presented a counter offer: to manage Fatbergs social media accounts. Taken aback by the proposal, while handing over the purchase we spontaneously asked, “Can I take a photograph to remember you by?” R1 replied: “Do you mean a photograph or a video?”. Enthused by the response, we proposed to record a short video of r1 reciting their name and “I am a FATBERG co-owner” to the camera. What emerged impulsively, became an integral feature of becoming a co-owner. The impromptu addition of the video-selfie perhaps demonstrates the value of allowing prospective community members the freedom to explore their role. Rather than the design researcher predetermining the form of enquiry, members of the public together make sensible the meaning and value of fat as material.

Compared with Fat and Food, where individuals were invited to partake in an unscripted collaborative discussion, at Float Fest, community was posed as open enquiry, enabling participants to co-create their role. At the final event, this free-form approach was taken a step further, as control of the project was handed to participants.

10.7. DESIGN LAB

The final event marked a pronounced shift from design employed as a steering influence, to design as a set of loose parameters through which a community ethic might be formed.

Absent for the month following Float Fest, a string of calamities left the project in chaos. First, a bout of heavy rain caused the fly-posters to peel from the container, leaving a bare wall graffiti artists were quick to colonise. Second, thieves ransacked NDSM, stealing copper piping and setting the platforms afloat, casting the embryonic island adrift. To our dismay, fatty remnants of the berg were smeared across the site. The production facility had mutated into a scene of utter chaos.

Piecing together a methodology: Coincidentally, we had been invited to run a semester long project with 2nd year Bachelors students from the designLAB department at Gerrit Rietveld Academy. For designLAB, where design is considered an instrument for questioning, understanding and shaping the world (designLAB 2017), the remit was simple: to provide a critical environment for students to engage with fat. Rather than developing individual projects, it was agreed that the 16 students work collectively to build the island. The site was, however, devoid of any visible island, save for traces of prior activity amongst the wreckage. Rather than return the site to its former glory, it was determined the catastrophe presented an opportunity for participants to mould the project in their own image. The first class was thus imagined as an explorative workshop. Students were briefed to observe the space as archaeological dig, exploring the site in-depth to form an understanding of prior activity, analysing the remains of materials and tools in view of our collective goal.

Emergent Behaviours: Observing the students, two marked behaviours emerged. Firstly, there were those individuals who adopted an intuitive, ‘doing’ approach, with hands-on investigations conducted directly at the site of discovery. By contrast, those who fluidly interchanged between locations took a more forensic, ‘thinking through doing’ approach, cross-referencing evidence with reconstructive experiments, to construct a holistic view of prior activities.

Doing (confronting reality): While the ‘doing’ character was quick to experiment, such investigations occurred unconsciously, with little reflection on the material and tools at their disposal nor the task at hand. For example, a group of individuals, constructed a small fire, placing a pan directly onto the flames to melt a mixture of foraged material including pre-rendered and animal fats. As the group waited patiently, they failed to observe the contents of the pan slowly smoke and burn. Another individual was observed vigorously cleaning their hands with a bar of pig fat soap discovered in the container. Strangely, there appeared no thought to the composition of the soap, nor the unsanitary basin water. In both instances, it was as if participants were confronted with materials anew, disregarding prior knowledge or experience.

Thinking through doing (reconstructing reality): The ‘thinking by doing’ character conversely displayed a more strategic approach, systematically piecing together traces of evidence to

reimagine modes of production. This meant manufacturing a quality and plentiful building material, as well as methods and tools for construction. One noteworthy individual resolved to accumulate material, passing to and from the container to forage and render fats. Another acted as second link in the chain, methodically exploring dripping as technique for building. Dripping liquid fat from a syringe into a tank of water, various parameters and techniques were investigated including volumes of fat, intensity of dripping, and differences in form and temperature, to discern the materials behaviour. A third individual, maintained an overview, observing activities to ruminate on how mathematical models might be employed to predict and automate the dripping process. Such individuals (re)construct the reality of the site, resolving limitations in the prior process, to conceptualise their own methodologies, accepting authorship of the project.

10.8 > DISCUSSION AND INSIGHTS

Several tactics were employed over the course of the 3 events in support of the aim to build a Fatberg community. The conception of community however emerged in unexpected ways as a result of the incomplete and sometimes incoherent strategies employed, causing the terms and definition of community to be renegotiated. The merit of incoherence

Considering the overarching staging of the 3 cases, the hybrid setting and composition of loosely related activities and expertise, were employed to form a dialectic space (McCarthy and Wright 2015) for explorative and inventive discussion, negating the archetypal privileged flow of information as per the model of emergence. Yet, if we acknowledge these design events as free-form experiments in the shaping of community, we might anticipate, building from Dewey's contention, that its formation occurs upon the agreement of shared problematics. In this sense, the incoherence determined by unscripted actions inadvertently acts as strategy where vaguely related themes and activities are reconciled and made sensible. The groups that materialise might be thought of as a pre-formation of community, and thus the event a first step in outlining shared matters of concern (Latour 2004). This is observed by the evolution of participants' roles over the course of the 3 events. Reflecting on Fat and Food, one participant remarked upon the inclusivity of the discussion, for "...we created a situation in which knowledge was shared... it was not just given to the audience but, the audience took a role in... bringing that knowledge into a certain direction". Referring to DiSalvo (2009), by way of Dewey (1927), it is the actions and effect of others communicating consequences, that motivate a public into being. DiSalvo and Dewey's definition thus questions how community might be defined in the context of the event.

Designing Participants: Ironically, design driven acts of 'community building', instead appear to instrumentalise individuals, employing predesigned tools to entice participation in service of the project. The predesigned conceptualisation of community, manifested through artefacts such as the certificate, reifies its definition. It can be questioned whether members of the public thus actively participate within the community, or are instead assimilated within a designed format as raw material.

Surveying the 3 events, we observe a gradual loosening of the conception of community, where its form is prototyped in-event, through dialogue with the public. This perhaps highlights incoherence as a strategy for design events, providing room for participants to design their own identities. R1's proposal to manage the projects social media accounts, as well as the in-event prototyping of the video-selfie, reveal blind spots in the designed conception of community, that are reconciled through the projection of the participants' experiences and ideas onto the projects abstract goal. Similarly, at designLAB, the shared goal of island building island acts as the single predetermined factor binding the group. Here, participants were obliged to (re)construct an abstract scenario, moulding the project in their own image.

Despite revealing a capacity to effect inclusion and co-creation, openness and incoherence as tactics simultaneously reveal their contradictory nature. For example, the absence of Fatberg from Fat and Food caused a perceived lack of disruptive experience of fat. Yet, at designLAB, it was the abstract task of building an island that directs an otherwise freeform activity. It can thus be presupposed that purposefully designed incoherence acts as filter through which themes, questions and participants must pass. It is thus the disturbance created by such unstable happenings that prompts creative thought (Koestler, 2014) and where issues and identities of community emerge.

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DAY 1:

@ JN Tata Auditorium
Cumulus Sristhi 2017



Institution
Pearl Academy

Country
India

Keywords
ungendered; equality;
symbols; power; fluidity

11. UNGENDERED POSSIBILITIES

Authors: *Shalini Gupta and Radhika Jain*

Abstract: The premise for violence against women finds its roots in historically enforced binary gender roles with skewed power dynamics. In India, traditionally, positions of power have been assumed by men whether in biological roles and social roles. To safely explore and play with the notions of ungendered plurality should be the right of every human being.

Symbols like the ‘Bindi’ and the nose ring to name a few, with implications beyond just ornamentation, have actively been solicited as a means of enslaving women. However, these same symbols when adopted by men can change their gendered intention.

This project underlines the intersectionality of human beings and implodes the binary perception of gender symbols. It presents instances where ‘men’ have the option to free these symbols from stereotypical presumptions. The fluidity we are now experiencing is proof that gender does not define us, choice does and this project, through juxtaposed visual narratives proposes that going forward, equality when contextualized for human wellbeing needs to move from presupposition to agency. The format is a photo series, each photo supported by a letter from the perceived oppressor to the future oppressed.

11.1 > PROLOGUE

1. Rape: 34,651
2. Kidnapping: 59,277
3. Dowry: 7,634
4. Domestic Violence: 1,13,403
5. Eve-teasing: 8,685

Total crimes against women -3,27,394 *

***Unconfirmed data from 2015.**

Mentioning this to a male friend, I said “this is so depressing”.
And he replied “I can imagine your anger”.

MY ANGER.

Should it be me who is angry? Yes!

But so should he! He and all like him and all like you and all of us should be angry.

For I and the likes of me are just afraid. All the time!

This should anger you!

But what CAN you do?

If gender informs biology and biology divides in ways that are oppressive, then can we all

‘UNGENDER’?

This photo series Titled ‘#ungender’ is an attempt at ungendering symbols. Each character is a symbol of oppression. The difference is that they have embraced, themselves, the women they symbolically oppress.



Fig 11.1: #ungender: Acid Attacks. Photograph by Rohit Dhingra and Digvijay Singh. 2017.

Dear Future Survivor,

Your life, your being, your existence will no longer be defined by who you were to me and what I did to you. I am ashamed of this act of cowardice with no thought of the pain and defenseless-ness that I made you feel. I made each one of you pay for what I could not have, what I could not control. Your love, your attention, your freedom will all be yours. Me or my kind will not take that away. Government data projects 249 reported cases of acid attacks in 2015 which is an 11% increase from the previous year. I am that scorned lover, that unhappy husband, that misunderstood friend. I will work with the policy makers to ensure that the means to procure this hateful substance are further regulated. I will report any violations that come before me. I will march to my politician to push for stricter punishment so I may be afraid too, of taking away in an instance, your dignity, your self-esteem and your lively hood lest mine be taken away just as easily.

And I will be angry for you and angry with you.

**With love,
Your future Un-Oppressor**

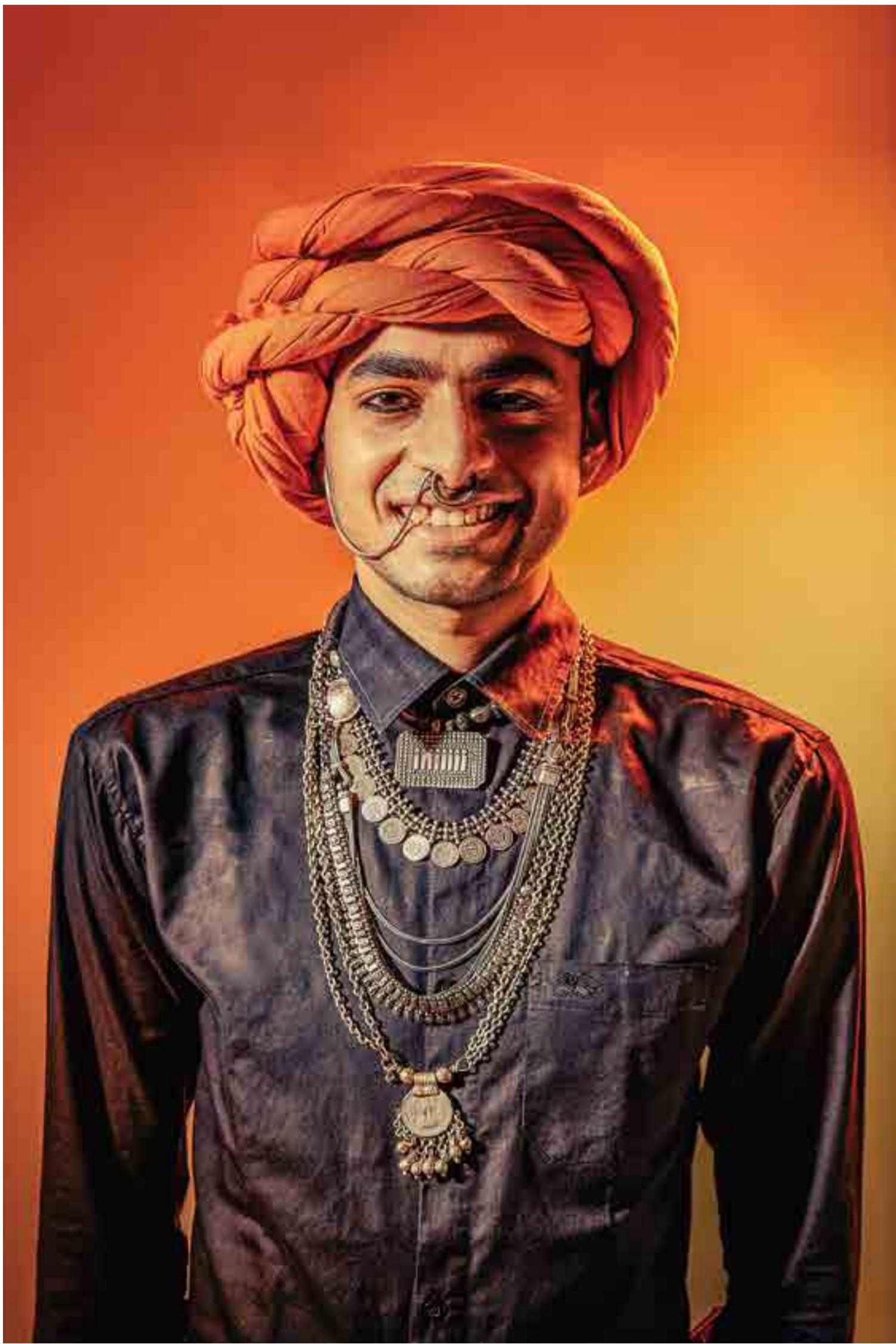


Fig 11.2: #ungender: Child Marriage. Photograph by Rohit Dhingra and Digvijay Singh. 2017.

Dear Future Child Bride,

I did not deserve you. You are a gift. Over 40% of the world's child marriages take place in India. I promise to give up my right to your life. In my hands is only another day. Another day to listen and love and walk in your glory. I will not lose this time with you. I will not find you another home to lighten a burden you are not. You will not be shuttled from one unloving home to another where pregnancy, social isolation and interrupted schooling, all of which contribute to limited opportunities, are likely to increase your risk of experiencing domestic violence. I will not leave you to the mercy of strangers when you should be loved and sheltered by your own. You will grow strong and tall and capable. Capable of making decisions about your life and your love. Capable of choosing a partner who will treat you with kindness and respect and not a child who knows no better.

Don't discard yourself, be more of it so I may revel in the glory of all that is you.

**With Love,
Your Future Father**

Dear Future Daughter,

I gave birth to you as much as your mother. I will protect you from all that are like me. All that choose to end your beautiful and meaningful existence before you take your first breath. All who see you as a burden. According to the 2011 Census, from 927 girls for every 1000 boys in 2001, the ratio has dropped to 919 girls in 2011. You are a blessing and I will always choose you. I will educate you to the best of my means and beyond, and empower you to live your life with the same possibilities that were available to me. You are the reason I will become the man you need me to be. "Children in India 2012- A Statistical Appraisal" a study conducted by the Central Statistical Organization claims that India lost 3 million girls to infanticide. This shocks me! The father in me wants to hide my face in shame. I vow to educate myself so I may be worthy of you. In India, a deep-rooted preference for sons exists for many reasons including that a son inherits property, whereas a daughter is perceived as a burden because she will cost a fortune in dowry, a practice that continues to be rampant despite being illegal (5)." I will not allow anyone, my family, my society or my helplessness come in the way of my responsibility towards you.

You my daughter will outshine us all and fly to the moon. You my daughter will do me proud. I will over throw the archaic traditions passed down to me and choose to walk another path. The one where you are leading the way.

**With Love,
Your Future Father**

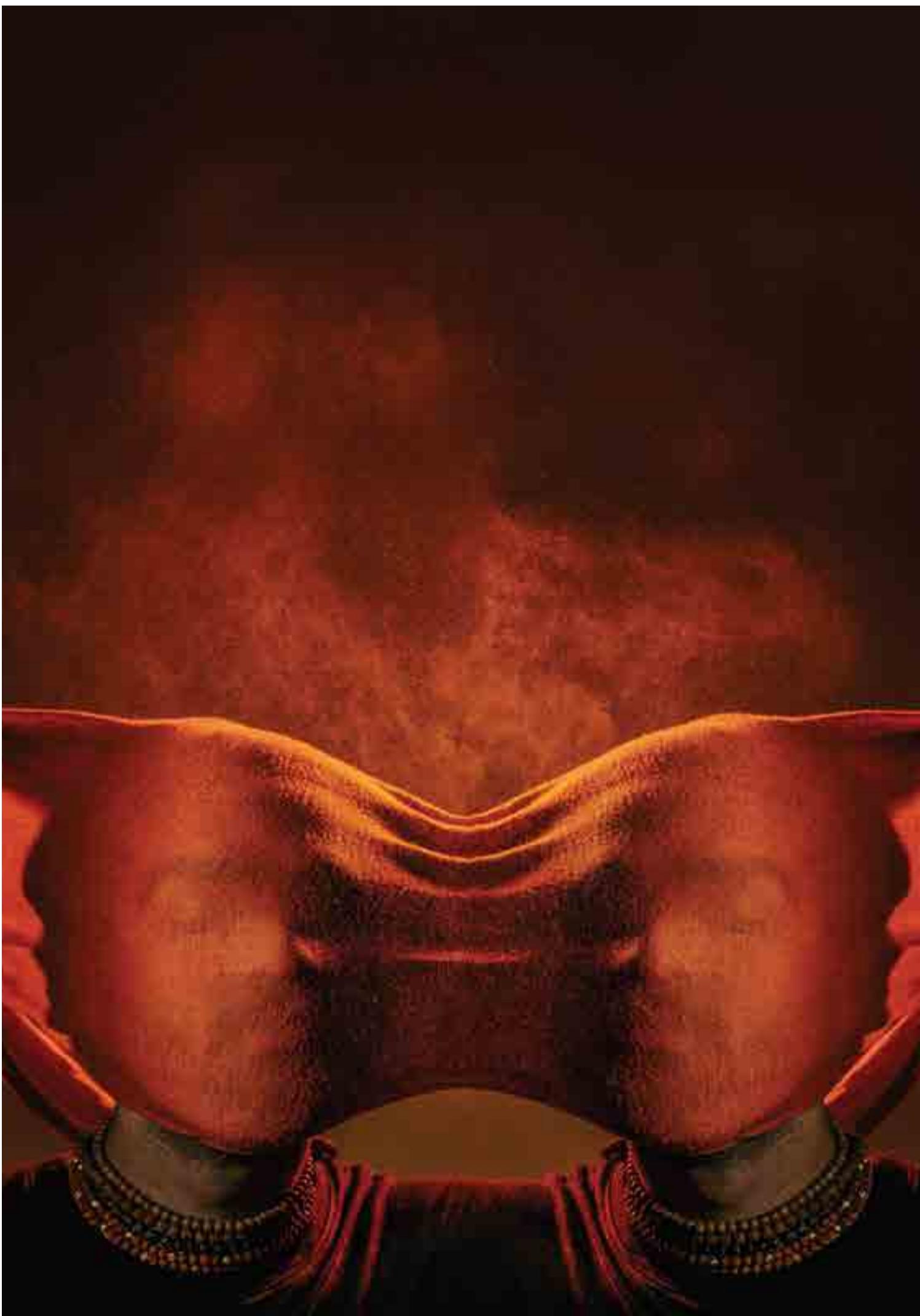


Fig 11.3: #ungender: Female Infanticide. Photograph by Rohit Dhingra and Digvijay Singh. 2017.



Fig 11.4: #ungender: Rape and Eve teasing. Photograph by Rohit Dhingra and Digvijay Singh. 2017.

Dear Future Violated,

Almost 65% of India's rural population defecates in the open and women and girls are expected to go out at night. This not only threatens their dignity, but also their safety. A girl cannot be educated and learn skills if she cannot freely and safely access school, college, health clinics, sports fields, markets and workplaces. If a girl is not educated, she will not become financially independent. The anxiety running through my life is the tension between what 'I should be' and 'what I am'. My anxiety doesn't come from thinking about you, but my need to control you. I promise from this day on to not indulge in talk that makes you feel unsafe and that threatens to violate your body or your life. I will stand beside you when you need me and walk behind you because of my need to protect you. I will lead the way where the path is dark and monsters like me lurk to destroy all you hold dear. I will not let your rejection bruise my ego because I am now strong and I believe I am worthy. And if you don't choose me, I will walk away with my head held high, knowing that I tried. Deep inner awareness of what I have done and what my motives were have changed me. There is a me that struggles with my thoughts and there is a me that walks with a song in my heart. I have the choice of these selves and I chose to not be the violator in me but rather the protector.

**With Love,
Your Future Protector**

Dear Future Wife,

I vow to grow wealthy and prosperous together and strive for the education and long fruitful lives of our children. This, a vow I take with you in the presence of our families and with the holy fire bearing witness, I vow to uphold. I vow to uphold every one of the promises I make to you, to protect and cherish and empower so you may thrive and with you I may be stronger. I choose to be the man who is worthy of you and of our children and to live up to the expectations that you and your family have of me. Today nearly half of all married women have suffered some form of domestic violence and continued abuse. In a 2012 survey, 39% of Indian men and women believed that it was sometimes or always justified for a man to beat his wife. I will not justify this mindset for myself or for my family. According to the 2005-2006 National Family Health Survey, in India, about 37 per cent of ever married women had experienced violence at the hands of their spouse. Domestic violence during pregnancy is a major contributor to child mortality. Dowry-related violence is widespread in India. In 2011 alone, the National Crime Records Bureau reported 8,618 dowry harassment deaths. Unofficial figures show that these numbers are at least three times as high. You will not be one of these statistics. I will not harm you, beat you or violate you. I will not let my failures become a reason to punish you. I will be strong for you and show weakness when it befalls. We will cry together and fight all odds together.

**With Love
Your Future Partner**



Fig 11.5: #ungender: Domestic Violence. Photograph by Rohit Dhingra and Digvijay Singh. 2017.



Fig 11.6: #ungender: Human Trafficking. Photograph by Rohit Dhingra and Digvijay Singh. 2017.

Dear Future Victim,

Women adults account for 51% of human trafficking victims globally. Women and girls together account for 71% with girls amounting for 3 of every 4 children trafficked. 3 out of every 4 trafficked women are victims of sexual exploitation. That was then and this is now, the future, your future where I, your tormentor, facilitate for you the means to education and employment so you may never feel the need to displace yourself or migrate to unknown lands. The “supply” of trafficked girls and women steams from their impoverishment, lack of income and lack of opportunities for decent work. Victims are often lured first into migration, and then into trafficking. I will ensure that you are never vulnerable and fall prey to false promises, hopes for love, a family and a better life. Your life will be perfect and fulfilling where ever you chose to stay because you choose this for yourself with informed clarity and conviction. The clarity that stems from education and empowerment. The conviction that comes from your ability to support yourself and your family.

And you will travel the world because you can.

**With Love,
Your Future Facilitator**

Institution

College of Design &
Innovation, Tongji
University

Country

China

Keywords

community design;
social innovation; health
care; environment &
energy; edible system;
community service

12. FUTURE COMMUNITIES: ACUPUNCTURE, EDIBLE SYSTEMS AND CO- DESIGN

Authors: Wu Duan, Ma Yuhong and Xu Ran

Abstract: Communities sit at the intersection of a number of trends: social media, digital transformation, change management, leadership and social learning. They are both complex mechanisms that can promote behaviour change, and simple social constructs that individuals can grasp (Happe, 2016). How could the new trends help communities build better communication, relationship, management, learning and sharing development? Through this research, we try to explore and embed new potentials for changing the value chain of organizations and community service. Those emerging changes may enable us to have confidence in dreaming a beautiful future of communities.

Among the Ten Problems we are facing in communities (Potvin, Nicki & David, 2014), health care and environment/energy are what we are going to discuss about in this proposal. Here we have two dreams about our future communities; one illustrates an ecosystem in an aged community in Shanghai by building an edible system, and the other facilitates a better relationship between residents and service in a community in Milan named Bao Hub.

Those dreams are not just linked to the themes of health care and environment/energy; they will work more like needles in acupuncture process, which intended to reframe the invisible relationship of to them.

12.1 > INTRODUCTION: COMMUNITY AND COMMUNITY DESIGN

“Design is a powerful force in shaping material culture, societal values and human behaviour.” (Ericson & Mazé, 2011).

Communities have encountered challenges and opportunities due to design, and will be transited by design as well. A community of place or place-based community is a community of people who are bound together because of where they reside, work, visit or otherwise spend a continuous portion of their time, (Ramsey & Beesley, 2007). A community offers many appealing features of a broader social relationship: safety, familiarity, support and loyalties as well as appreciation. An appreciation that is founded on efforts and contribution to the community, rather than the efforts, rank or status of an individual (Kemmis, 1992). Research on and about community is often interdisciplinary and geared towards practical applications rather than purely theoretical perspectives. Community is as a complex system as the human body and the complex itself encourages community interaction (Andersson & Moroni, 2014).

Contemporary designers have been increasingly engaged in critical practices to challenge assumptions, instigate debate and facilitate change in a wider societal context. A similar change is occurring in social innovation and community design. Despite the growing vitality of social innovation in the past decade as embodied in various forms of innovative products and services (Murray, Caulier-Grice & Mulgan, 2010), it has been focusing on theories of social change and the renewed interest in practice-oriented social innovation analysis since 1970s (Jessop & Hulgård., 2013).

Those emerging trends aligned socially-engaged design with community innovation, which calls for transforming current community modes moving towards a more complex, communicable, inclusive and multidimensional society. Community design has come to the fore in convergence with social innovation, social entrepreneurship, and design thinking. Despite the usage of emerging tools, the complexities of community design projects are often overwhelmed in final solutions.

12.2 > THE ACUPUNCTURE METHODOLOGY

What methodology and methods would be qualified for taking up this challenge of complex community problems? We were intrigued by the usage of acupuncture. Acupuncture is a type of alternative medicine that treats patients by insertion and manipulation of solid, generally thin needles, in the body. Single initiatives unified in a general framework can have a systemic effect. Acupuncture adequately stimulates key acupoints to affect the whole meridian system. In a similar manner, if one can find and redesign the key point in the old system, this will form a strong cooperative network to generate effects in the whole system of the entire system (Lou, 2010).

Accordingly, “design and innovation” has been approached from various perspectives and disciplinary traditions with the differentiated focus on the result, process, socio-cultural

context of design etc. It could be used as needles in the acupuncture process, which intended to reframe the invisible relationship behind them. Encouraged by the usage of these “design thinking”, “social innovation” and “sustainable development” as thinking about the future community possibilities, the overall objective of this paper is to develop a better understanding of what a design approach to sustainable relationship development could mean in the community context.

The two projects showcased in this paper are two dreams about our future communities. Yet it is not the future in a singular and linear sense, but futures in plural and non-linear terms (Ge, 2016). All these design explorations of the future community involve the proactive attitude of new trends when constructing a more desirable future, rather than assuming the trends as essentially novel. One project illustrates an ecosystem in an aged community in Shanghai by building an edible system, and the other one facilitates better relationship between residents and service in a community in Milan named Bao Hub.

12.3 > CASE STUDY I: EDIBLE COMMUNITY

Nowadays in China, renewing the old residential community is a trend within a rapidly transitioning society. The traits of this period of time are that the urban low-income population is large in scale, wide in scope and complicated in sources. Besides, the social stratification drives the difference in residential space. The old residential communities, for instance the old public housing built in the 1950s and low-level price commercial housing built in the 1990s, are in need for renewal. However, these old residential areas are encountering stumbling blocks such as:

- Communities' situations are too outdated to facilitate residents' diverse, unmet needs;
- Growing aging population challenges the development of society.
- Lack of opportunities and guidelines for residents to collaborate and participate in community management.

Urban farming has ushered in a new situation, which brings enhanced food security, reduction of food waste, community building, open green space in cities resulting in higher property values (Brown & Baikey, 2002). At present, the food supply mainly depends on the producing area which is far from the city. Besides lacking sustainability, residents act as passive customers who are indifferent about the experience of food culture. In China, a lot of ecological agriculture parks are built on the outskirts, and a farming-experience activity is popular among many citizens. Yet, this kind of urban farming is still deficient in the city center. One main barrier for that is the high land price in the center of the big city. To address this dilemma, how can we integrate the brown field or unused community space for developing urban farming?

The ‘edible community’ tries to use urban farming as an acupuncture needle to enhance the enthusiasm of residents to participate in community building and the experience of residential space. The goals are to integrate resources, such as unused space, labour, and

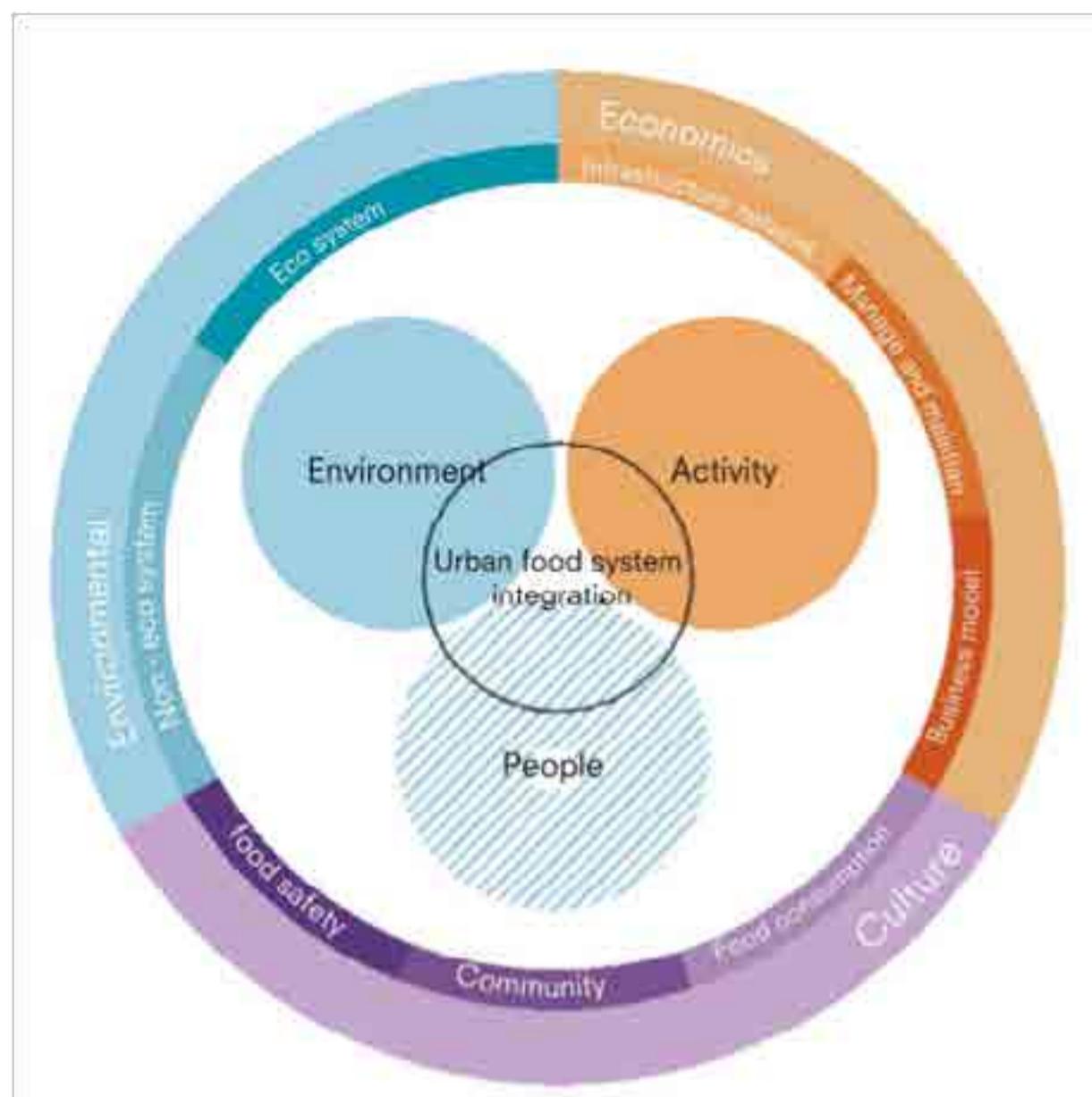


Fig 12.1: The composition of 'edible community' service system. Personal photograph by authors. 2017.

information, to improve the process of food urbanism and enhance the vitality of the community. Moreover, from building a sense of belonging to a sense of community identity, it is necessary to stimulate residents' initiative in community building, which means aggregate different culture and the influential events to achieve social ecology balance.

For validating the feasibility of an edible community concept, three methods are taken: 1) situation analysis, 2) concept design of edible community, 3) service system design. Initial research provides evidence for concept development, by studying the community space, analyzing the spatial situation and developing the need of residents to experience farming and food. IDEO has integrated 'the Shanghai people's demand of rural area' in 2009. It reported the needs of food and farming which concentrated in food security, commercial reputation, community, and informatization. The Siping neighbourhood community is a typical example of the old residential community built in the 1950s to 1990s. According to the theory of human activities (necessity, spontaneous and social), a well-designed space will promote the frequency of spontaneous activities along with the growth of social activities (Gehl, 2011). In summary, semi-public-private spaces in Siping community have high utilization value for agricultural transformation in the community.

Framing the concept of edible community is a challenge: to combine compatible and valuable concepts into reliable and systemic solutions that are action oriented for successful implementation in the future (Kumar,2013). The key point is to know people, the crucial element of the service, by shadowing and interviewing them. Since determining residents do have demand of urban farming within their community, it is necessary to invite them to experience the new idea of edible community. In the co-design session, the residents were invited to use card sort, collage, brainstorming and role-playing to express and share their ideas towards different tasks. The aim of co-design is to collect feedback, insights, and then structure the concept of service system due to their behaviour and needs.

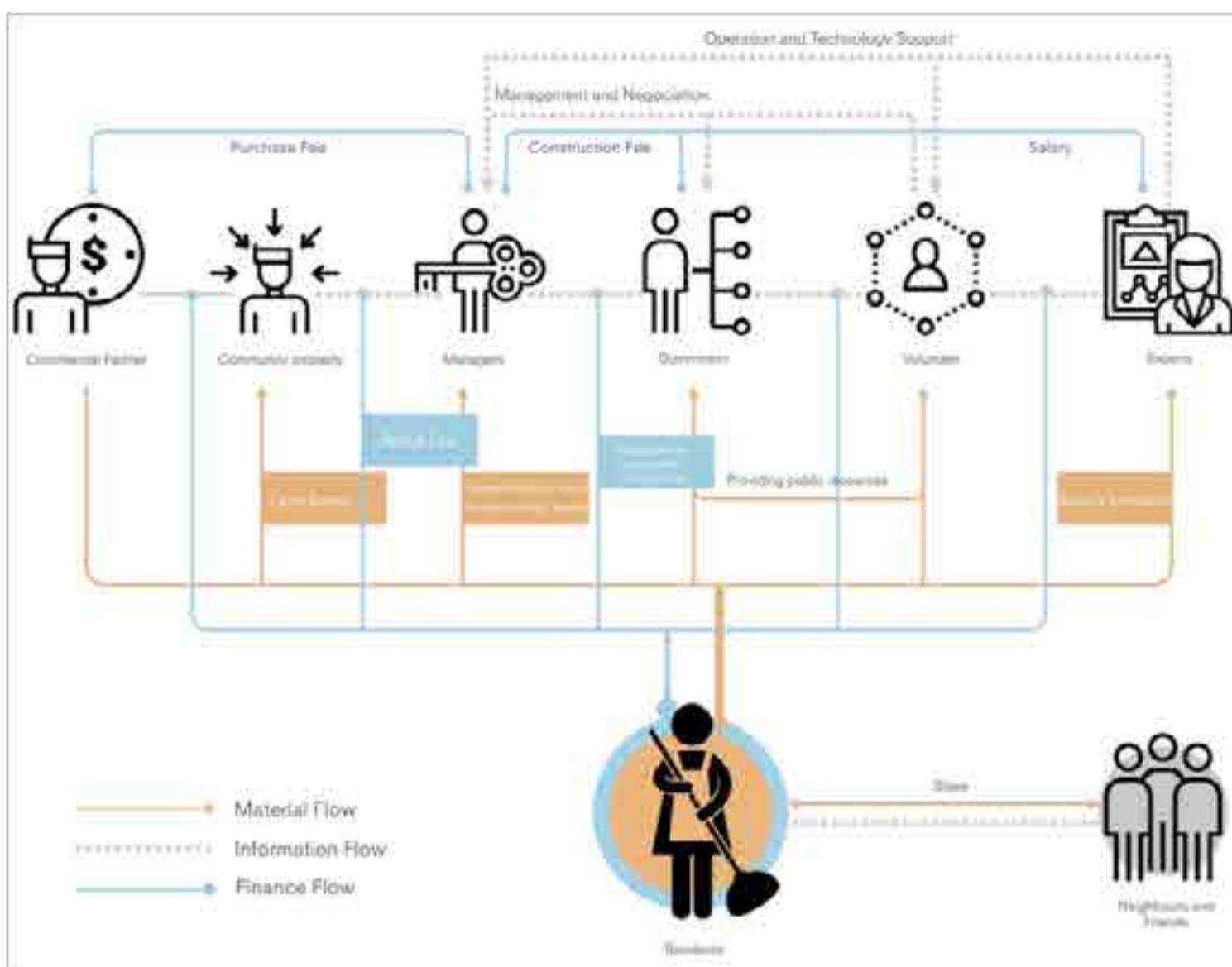


Fig 12.2: 'Edible community' service system map. Personal photograph by authors. 2017.

If we take the edible community as a metaphor of the acupuncture needle, it is mainly stimulating three 'acupuncture points' to renew community. First point is place making. Edible community creates a new mode of food system by shaping the landscape and neighbourhood communication. Three types of functional space modules- planting module, functional module and auxiliary space module- make things happen. The other point is that food services as a platform promote the dialogue between person and community. Meanwhile, system integration design maximizes the opportunity of people getting in touch

with nature and enhancing their experience of ecologic lifestyle. Since 'community vegetable garden' and 'field restaurant' as main activities are designed for edible community system, interaction quality map paves the way, testing the two contacts' validity and reframing the problematic points.



Fig 12.3: Perspective of 'edible community' in Fushun Road 363. Personal photograph by authors. 2017.

To summarize, edible community can be envisioned as a small-scale and localized project, which creates interventions in community transition towards systematic changing through synergy. It integrates the resources of public space, labour and information; provides services about planting, sharing and learning in the process of addressing urban farming and maintains opportunities and platforms to fulfil community transition. Future engagements will entail finding a self-standing business model to enhance the impact of the project, and be applicable to more communities. Ultimately, the edible community can act as an acupuncture needle to activate the network of people, environment and events, and moreover lead the transition of society towards sustainable lifestyles.

12.4 > CASE STUDY II: BAO HUB

Collaborative community is one of the appealing research areas within the rife community transitions all around the world. It is made by a group of people who are actively engaged in providing solutions to a wide range of their unmet needs and thereby creating a positive impact on society as a whole. In other words, collaborative service can mobilize residents to participate in community building and management (Jegou & Manzini, 2008). Moreover, many booming services nowadays are heterogeneous which means they are divided among

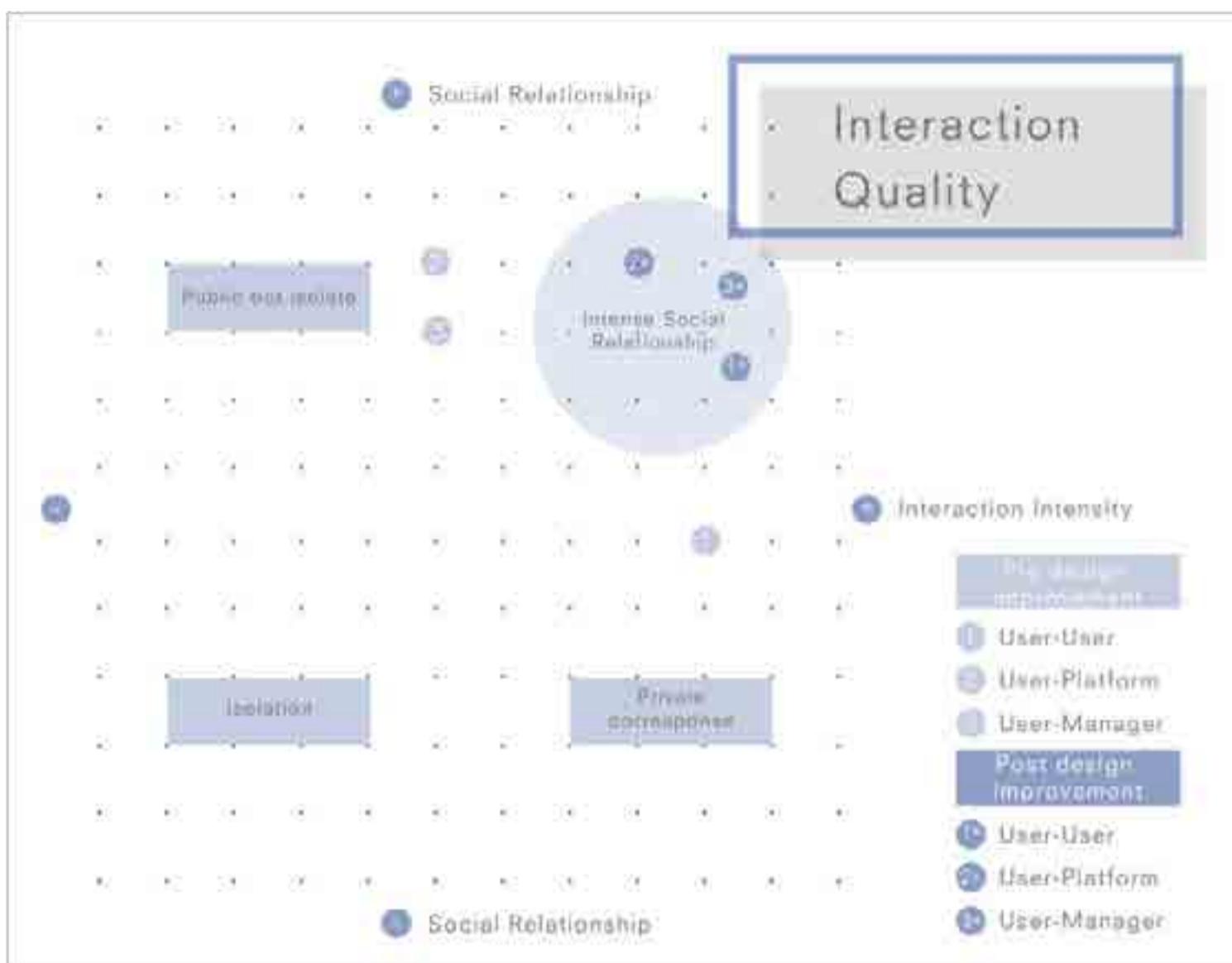


Fig 12.4: Interaction quality map. Personal photograph by authors. 2017.

private, public and social initiatives, without a unique hybrid, and therefore leads to a lack of accessibility. This aggravates the alienation residents encounter with community services.

Some creative companies and NGOs take the lead in exploring the possibilities of introducing clean energy to communities. Indeed, all of these solutions try to solve the issue which is that people do have the common will to save and use clean energy, but it is not supported by knowledge and awareness. However, these solutions are limited because of the simplification of service that cannot fulfil most residents' needs, and a company-oriented project cannot aggregate resident's collaboration.

These propositions lead to the following questions: how can we help residents access and live with sustainable energy? What can be done to find a hybrid solution to connect to services about energy? How can one improve the collaboration among citizens through a better coordination of activities in the community? To investigate all the above questions, initial research, co-design and service system design are used in the construction of methodology. They are relevant to build a service system inside community, because initial research provides the context of the user and the issues when they encounter energy; co-design engages potential users in developing and testing the ideas to iterate the solutions; and

service system design is a way of design thinking for integrating the resources as much as possible.

Initial research includes desk research, field research and framing the insights for solving problems. Starting with case studies, which show the promising and latest trends of the use and design of clean energy, the activity models are the innovative parts of services, the delivered services can be used to understand the mode of service operation, and the physical or digital links show the promotion channels. Secondly, use of online survey and offline interview to know people's behaviours, needs, and places when they encounter energy. It is shown that people have a common will of saving energy, triggered both by money saving and sustainable lifestyle choices. Unfortunately, they do not have clear information and coordination about these. Meanwhile, explorations were conducted at places and services adopting a zoom-out approach, starting from domestic spaces. The insights we gained from this research are

- There is not enough support for residents to get knowledge and awareness of clean energy;
- Alternative solutions are not widespread and there are no recognizable references to find them;
- They aspire to collaborate in a positive way, but they lack effective coordination and direction to generate big impact.
- There is a gap between customer and experts (or energy companies) who have the knowledge of clean energy.

Bao Hub is a concept idea that aligns context and people, leading to deep insights. It is a place to get in touch with knowledge, solutions and practices related to clean energy. It provides tailored support, tools and people, both for domestic management and for open development of new projects and solutions about clean energy. The offering map (figure 12.5 below) is used to portray a perspective of the details of services depending on the initial research. it is necessary to let residents be engaged in the process by providing sufficient of touch points.

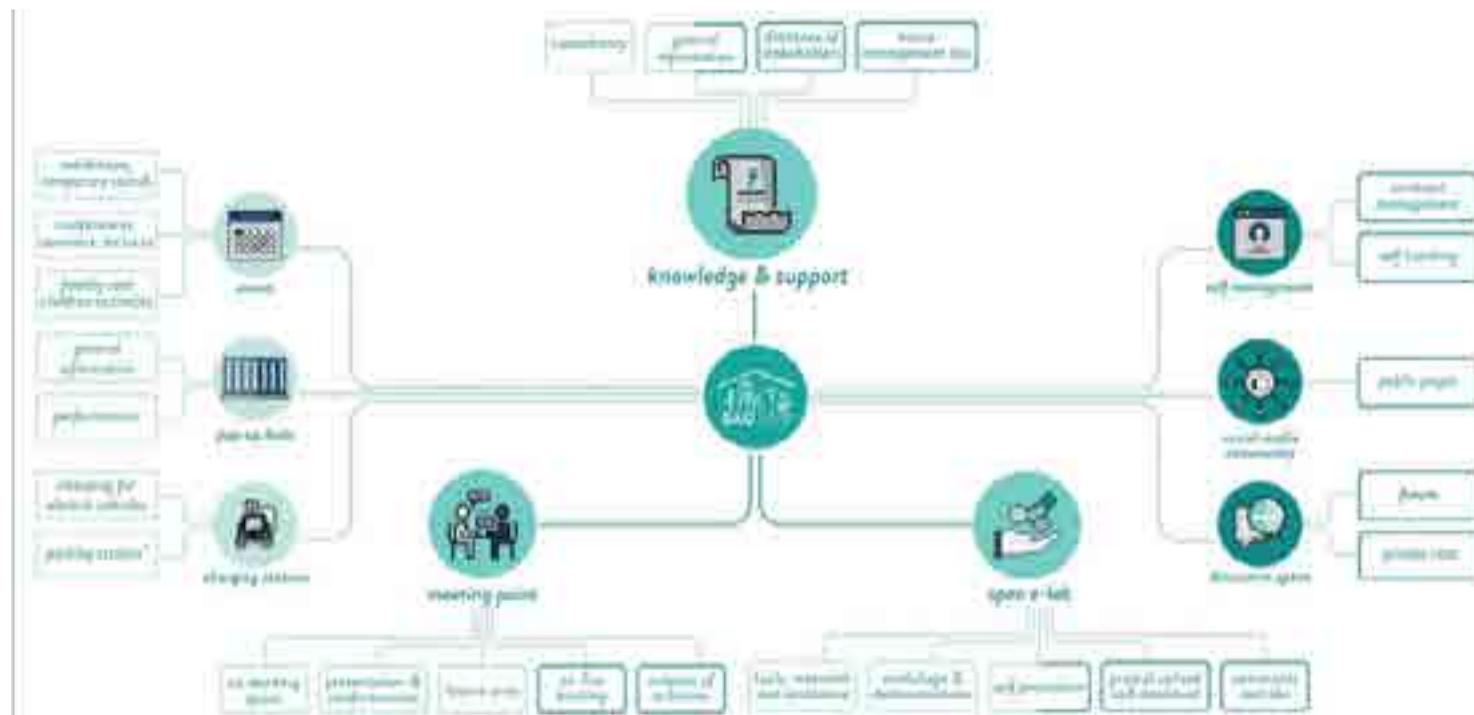


Fig 12.5: Offering map of Bao Hub. Personal photograph by authors. 2017.

Co-design is a method to engage users in developing strategies to address the problematic points. The main idea is to check if the concept of energy hub will match with the actions that people usually do. For designers, co-design can help to clear the process, discover omissions and define identity. By offering the participants a task-oriented game, an energy hero, they can think and choose what to do to fulfill the specific energy task from their own vantage points.

System design is an effective way to frame solutions and integrate all the resources. In this process, several relationships need to be taken into consideration:

- 1) Relationships between services;
 - 2) Relationships between stakeholders;
 - 3) Relationships between environment and services;
 - 4) Relationships between people and services.

The services' relation map shows the intrinsic association and affects the distribution of services in space. Motivation matrix provides a way of reframing the detail of services at stakeholders' perspective. The analysis of services and environment considers the interface between them and define the triggering elements visible from outside to catch users' attention.

 give it...	 MUNICIPALITY	 ENERGY COMPANIES	 ASSOCIATIONS	 COOPERATIVES	 INSTITUTIONS	 EXPERTS	 INVESTMENT COMPANY	 BAOHUE
	<ul style="list-style-type: none"> - to local communities and their members - to energy companies - to experts in their energy transition 	<ul style="list-style-type: none"> - governance of the bank and its services 	<ul style="list-style-type: none"> - governance of the bank and its services 	<ul style="list-style-type: none"> - governance of the bank and its services 	<ul style="list-style-type: none"> - governance of the bank and its services 	<ul style="list-style-type: none"> - governance of the bank and its services 	<ul style="list-style-type: none"> - governance of the bank and its services 	<ul style="list-style-type: none"> - physical place for the bank - personnel - information about regulations and possible tax exemptions
 MUNICIPALITY	<ul style="list-style-type: none"> - information about early development indicators 	 ENERGY COMPANIES	<ul style="list-style-type: none"> - opportunities of other associations and cooperatives - opportunities and challenges 		<ul style="list-style-type: none"> - opportunities for participation - additional knowledge 	<ul style="list-style-type: none"> - own opportunities 		<ul style="list-style-type: none"> - opportunities - information for the bank's database - contact to cardholders
 ASSOCIATIONS	<ul style="list-style-type: none"> - access to partners and/or parts of 	 COOPERATIVES	<ul style="list-style-type: none"> - opportunities for participation - opportunities to connect to other people 	<ul style="list-style-type: none"> - collaboration opportunity - access to cardholders 	<ul style="list-style-type: none"> - collaboration opportunity 	<ul style="list-style-type: none"> - possibility of collaboration - opportunity to be a good leader during their events 		<ul style="list-style-type: none"> - opportunities for the bank's database - access to cardholders
 INSTITUTIONS			<ul style="list-style-type: none"> - publications - opportunities to connect to other people 	<ul style="list-style-type: none"> - opportunities for participation - access to cardholders - access to a place where to build projects 	<ul style="list-style-type: none"> - collaboration opportunity 	<ul style="list-style-type: none"> - possibility of collaboration - opportunity to be a good leader during their events 		<ul style="list-style-type: none"> - opportunities for the bank's database - access to cardholders
 EXPERTS	<ul style="list-style-type: none"> - help in connecting with other experts - partners 				<ul style="list-style-type: none"> - collaboration opportunity - access to cardholders 	<ul style="list-style-type: none"> - collaboration in projects or research - possibility of collaboration 	<ul style="list-style-type: none"> - own projects to complete 	<ul style="list-style-type: none"> - own projects - research projects
 INVESTMENT COMPANY	<ul style="list-style-type: none"> - investment regarding the subject 		<ul style="list-style-type: none"> - possibility of collaboration 	<ul style="list-style-type: none"> - possibility of collaboration 	<ul style="list-style-type: none"> - possibility of collaboration - networking 	<ul style="list-style-type: none"> - own projects - opportunities to connect to other people in their place of work - opportunities for business projects 	<ul style="list-style-type: none"> - own projects to complete 	<ul style="list-style-type: none"> - help with cardholders' client base
 BAOHUE	<ul style="list-style-type: none"> - a place where to get in touch with clients 	<ul style="list-style-type: none"> - place where to promote their products - visibility to customers - last clients 	<ul style="list-style-type: none"> - opportunities to build diversity - opportunities to present themselves - building alliances 	<ul style="list-style-type: none"> - opportunities to build diversity - opportunities to present themselves - building alliances 	<ul style="list-style-type: none"> - opportunities for participation - opportunities to work with others 	<ul style="list-style-type: none"> - place where to show their capabilities - opportunities to self-promote and networking 	<ul style="list-style-type: none"> - opportunities to find opportunities which are aligned 	<ul style="list-style-type: none"> - a place where to meet and network for better management and development of the local community and related micro-enterprises

Fig 12.6 Stakeholder motivation matrix. Personal photograph by authors. 2017.

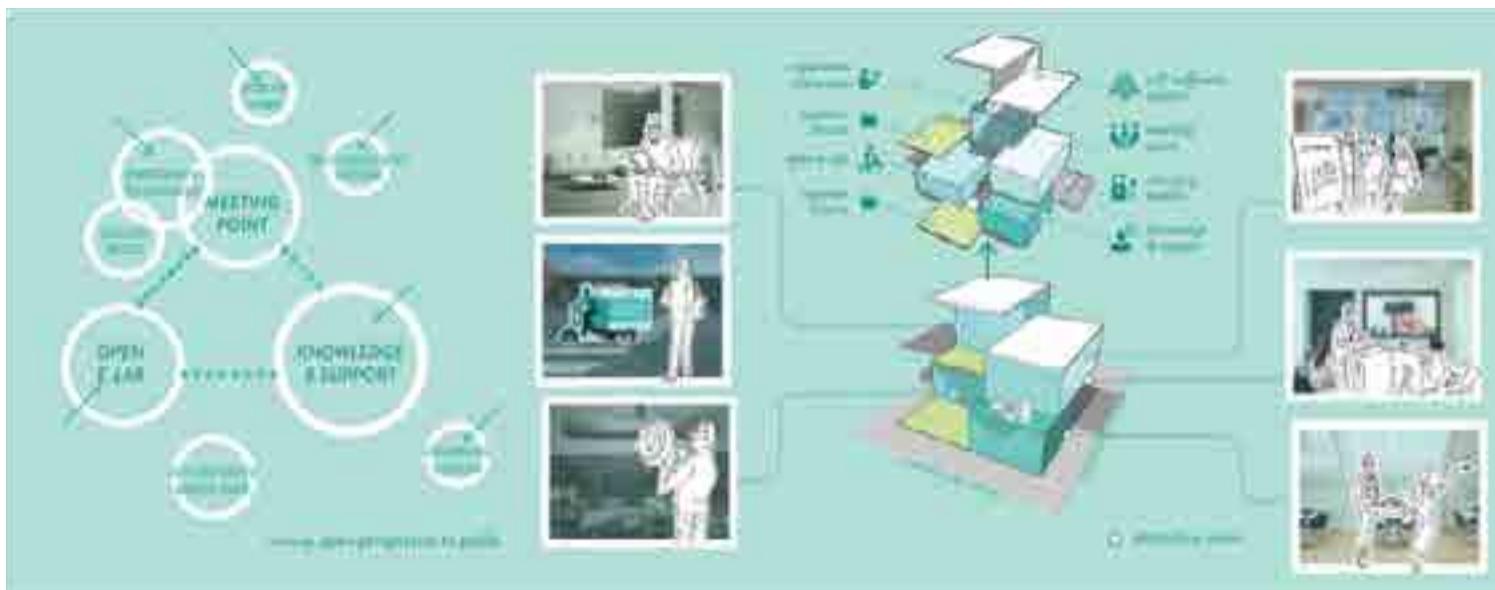


Fig 12.7 Concept Layout. Personal photograph by authors. 2017.

To sum up, Bao Hub is to community what needle is to acupuncture process. Jégou took this as a metaphor to emphasize that activating local projects and connecting invisible relationships are effective ways to fulfil social transition. (Jégou, 2011). Bao Hub has connected different stakeholders to work on clean energy projects in both private and public ways. In this process, residents are active and take charge of their energy management. They are also engaged in conversation with companies and enthusiasts. We propose that this project is not treated as a one-off engagement to only serve a specific community or group of people. In the near future, this has possibilities to include an external interface to collaborate with other projects or movements, in order to help people transit into a sustainable lifestyle.

12.5 > CONCLUSION

Community is more like an ecosystem. Creating synergy by attending to the concerns of different users and stakeholders is central to the successful implementation of community projects. The challenges of community transition cannot be resolved with a single solution or service, but only through systematic collaboration. The future community is not the future in a singular and linear sense, but futures in plural and non-linear terms. This plurality of futures also brings the redefined dimension of design into the situated social-material practices from different backgrounds to imagine the futures lives of human beings.

Through the cases above, acupuncture can be seen as a key to discovering and contributing to community-based system solutions. The crucial part is the ‘needle’, which is the system service solution designed for solving potential problems in the community through using social innovation design methods. Two cases that we described above are all corresponding to the framework of acupuncture. The design activities generalized from the case studies as follows:

- Investigating on-going projects in terms of the issues of community transition and getting framework on how to stimulate different specific points and connect them;
- Finding the pain points in existing services and researching the residents’ behaviour and needs towards that;

- Engaging local stakeholders to participate in the dialogue of community transition;
 - Identifying other local services and connecting them to build a new strategy network in synergy;
 - Building the ‘needle’ as a permanent, self-stand projects to implement large-scale transition.
-

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Institution

University of the Arts
London, London College
of Communication

Country

United Kingdom

Keywords

seahorse; poubellisme;
automata; time

13. HIPPOCAMPUS-CHABLON

Author: Sara Ekenger

Abstract: In my shed time stops. Nothing is impossible, precarious perhaps, but Possible. I assemble, alter, re-appropriate and re-discover. I salvage, recycle, resurrect and re-animate. I play. I turn discarded items into moving artworks, automata, animated 3D paintings and puppets. My work is out of time, at times painstakingly slow, an illusion – of agency, of worthlessness, of fine art, of life. A form of Junk Art or “Poubellisme”, as coined by André Girod, who describes this as “the art of accommodating the garbage of the planet.”

Hippocampus-Chablon is a wall mounted automata, of an underwater seascape, featuring a seahorse, two crabs and a few mussels. The sea-creatures are a delicate assemblage of various mechanical parts and clockwork mechanisms from redundant office machines, welded or soldered together. When turning the crank, the seahorse swims, while one of the crabs appears to eat a mussel. Seahorses are fascinating creatures spanning 13 million years of adaptation, illustrating that reality really is stranger than fiction. They are living examples of impossible possibilities. Relaxed but never complacent. Hippocampus-Chablon reflects this, it is symbolic of a residuum of collective memory, lost time, controlled time, mechanization, obsolescence and resurgence. This is a short video of Hippocampus-Chablon in motion.

PROLOGUE > HIPPOCAMPUS-CHABLON“

Fig 13.1: Details of Hippocampus-Chablon sculpture. Personal photograph by author. 2017.

Armored, upright, waiting, watching
Coronet head, held proud, majestic
Elegant prehensile tail, at the ready
Stealth and camouflage, a synchronized clockwork – dancing
Patient, loyal, genteel and unique
Prehistoric, yet ever present, impossible yet true
So too, the crab
A warrior, scuttling sideways, alert
Exoskeleton protected, pincers sharp and strong – intimidate
Scavenger and hunter, moults, regenerates and carries on
Fabled creature of the stars and seas
Daring, nimble, fearsome and fun
Enchanting old and young
To seek, explore, be vigilant – to try
Both, as old as time, still spark hope and dreams
Of renaissance, adventure, romance, mystery and intrigue
Keeping curiosity alive

ABOUT HIPPOCAMPUS-CHABLON

Hippocampus-Chablon is a unique moving sculpture presented in film format – a poetic story. It is an illusion of agency, of worthlessness, of fine art, of life. It depicts a seahorse, two crabs and four mussels. The base of the sculpture is made of distressed, painted and varnished oak. The sculptural materials are a variety of metal elements from a range of clocks, a mechanical printing calculator, vintage tools and other found items, welded or soldered together. I chose these elements for their shape and aesthetic qualities as well as their functionality, transformed anew as components of a hand operated automaton.



Fig 13.2: Hippocampus-Chablon. animated by Sara Ekenger. Personal photograph by author. 2017.

Using discarded items to create something else is a form of resurgence. This wall mounted kinetic sculpture tries to illustrate a common strain in my work, which I describe as anachronistic – out of time. My choice of items and creatures plays with the notions of time and urgency. Turning the handle controls the speed of the seahorse's tail and the crab's claw, while the body of the seahorse sways – the effect suggests a cautious relationship between the seahorse and crab.



Fig 13.3 Hippocampus-Chablon. animated by Sara Ekenger. Personal photograph by author. 2017.

Meanwhile the seahorse and the crab both have deep symbolic significance. The seahorse stands for patience, persistence, and higher awareness – they remind us to slow down and take stock and that there is no need to change who we are. The crab represents protection, regeneration and transformation, their sideways movement a reminder that the best way forward might not be straight head – taking the time to explore may have greater rewards. Both the seahorse and the crab are symbols of good fortune, as are mussels. This moving sculpture shows them all together suggesting nothing is impossible, precarious perhaps, but Possible.

Seahorses, crabs and mussels are fascinating creatures. They have remained essentially the same for millions of years, yet thrive in an ever-changing environment, illustrating that reality really is stranger than fiction. They are living examples of impossible possibilities. They have acquired respect and global appreciation.

Hippocampus-Chablon is symbolic of a residuum of collective memory, lost time, controlled time, mechanization, obsolescence and resurgence.



Fig 13.4: Sculpture of the seahorse's head. Personal photograph by the author. 2017



Fig 13.5: Crab and Mussel Details. Personal photograph by author. 2017.

Institution

Pearl Academy, Delhi

Country

India

Keywords

re-use; handcrafted;
Indian aesthetics;
bespoke

14. PHOONDA: CRAFTING TASSELS TO RE-INVENT GARMENT MAKING

Authors: Sonika S Khar and Ashish Dhaka

Abstract: Creators render their individuality in the products that they handcraft; the process is always more romantic than the final outcome. Decoration, which has always been an Indian aesthetic, is the inspiration for this project that celebrates tassel (phoonda) or tasseling. Phoonda/tasseling gets a new avatar by way of being a technique to develop new garments. The idea is to use waste from textile/clothing industry to develop material by using the technique of tasseling at par with any other techniques like weaving, knitting, pattern making or draping.

The whole idea will be presented in the form of an installation showcasing the transformation of the industrial waste into 3D garment structures, which are decorative yet functional. The process involves making of bespoke garment forms for varied anatomical regions of the body resulting in no wastage. Due to the very nature of material procurement, each piece becomes individual in color, texture and feel celebrating the idea of ethical fashion. Along with the creative high, these garment forms will create a dialogue towards the impulsive compulsion which is mushrooming into fast fashion. It's a trigger to re-use, curate, revive, re-imagine and re-invent.

PROLOGUE

"This is a work of non-fiction involving reality. Names, characters and places must compel you to understand the contemporary issues so that we can see the tomorrow. If you are able to associate to any incidents of the story, it is not a mere coincidence rather the whole motto of the authors."

14.1 > A NOTE FROM CHINDI AND PHOONDA

Dear Consumer,

I am *Chindi* (Indian textile waste); neglected remains from the making of your garment(s). Your impulsive buying has led to too much consumption, hence increasing production of garments leading to overpopulation of my species. As a fabric, I might be an outcome of the lengthy process of weaving, printing or dy(e)ing but my value is lost as the garment pattern has been cut out from me. I may remain in a corner of a design workshop, an export house, a roadside tailor or stuffed in a gunny bag waiting to be picked for another use. And then again there is a long wait to get further upcycled into *durries* or stuffed mattress or some household accessories or even as a trim. I am not a recycled or a hands-down material that you can't use for making a first-hand product. So, it is imperative to use my potential and imagine the unexplored.

I belong to a country with a rich heritage where everything is decorated in abundance. You often see houses adorned with *torans* on the doorways and *rangolis* on the floors. From *bindi* on the forehead to *bichua* on the toe; there is nothing that they leave bare. *Phoonda*, my little healthier sibling also has been used as a tassel on the garment, a trim on pouches/bags, hand held fans and blankets. Their usage has been limited to decorate the edges of a garment/accessory or ends of a string. So, tasseling has been reimaged to be used primarily as a garment making technique. The attempt is to make garments; the same can also be scaled up to make bigger products like home furnishing or scaled down to make products like accessories.

Weaving and knitting are universally known fabric construction techniques, which may or may not cut further into patterns and developed into products. But this time *Phoonda* is challenging me and is expecting to build further, not only into mere decoration, but a complete product. I am embodying the heart and soul of the garment encompassing the raw material to the technique going all the way till the end product. I have been sorted from heaps of the cut fabrics and torn into long and thin strips followed by twisting and knotting. I and my friends have been procured from varied places thus resulting in individuality of color, texture, form etc.

This is where the true beauty lies I cannot be replicated (in aesthetic appearance) or mass produced (depends on availability) and can easily be dismantled to be used elsewhere as I am not stitched or glued. I have been crafted by multiple hands which have rendered their individuality in each component.



Fig 14.1: Detailed view of the jacket. Personal photograph by author. 2017.



Fig 14.2: Intertwined tassel skirt. Personal photograph by author. 2017.



Fig 14.3: Neck adornment. Personal photograph by author. 2017.

It's time to lookback and dig deeper into our roots to or re-make, re-invent, re-imagine second life of textile waste. We need to stop over-consumption so as to reduce production; we need to think more rationally to adopt methods of garment making that involve minimal wastage.

Yours,
Chindi and Phoonda

GLOSSARY

- Bichua: Toe-ring worn by married women
- Bindi: Round shape, adorned by women on the forehead
- Durries: Pit-loom handwoven carpets
- Phoonda: Tassel
- Rangolis: Floor decorations made with flowers or natural colours
- Torans: Decorations to cover the doorways

Institution

University of
Johannesburg

Country

South Africa

Keywords

employee well-being;
holistic design approach;
workplace and activity
zones

15. A DESIGN-LED WELL-BEING APPROACH FOR WORK ENVIRONMENTS

Authors: *Rolecia Janse van Rensburg and Amanda Breytenbach*

Abstract: In contemporary office environments, employee well-being is considered a critical pathway for companies to achieve creativity and innovation resulting in a highly successful workforce (de Benoist, 2014). Designers can make a valuable contribution towards a creative and innovative work environment by incorporating a holistic employee well-being approach. Although there has been an increase awareness in recent years, in countries such as North America, towards companies implementing wellness programmes, this paper reflects on the results gathered through observing and interacting with two case studies in South Africa. The results critically reflect on the well-being approach, activity areas and feedback from employees to determine how a holistic design approach towards well-being has been introduced within the case studies. Through the results obtained, this paper presents recommended guidelines to designers that embrace well-being strategies within the design approach.

The study's results can positively affect future employee well-being by establishing that employee engagement and increased physical activity is caused by regular movement in and towards pause areas focused on food and hydration. Employee well-being is negatively affected by increased sedentary postures during office hours. A design-led approach, that focusses on mobility and movement between activity zones, looks towards a future of workplace design with employee well-being as a key element.

15.1 > INTRODUCTION: OFFICE ENVIRONMENTS IN SOUTH AFRICA AND “PRESENTEEISM”

This paper presents an outline of research conducted for a research study that focused on the position of design-led employee well-being with a particular focus on the contemporary office environment in South Africa in relation to international well-being standards. The study investigated two case studies that demonstrate the implementation of design theories and principles towards well-being. This investigation was prompted by the observation made by Peter Townshend, Managing Director of Know More South Africa (Know More), that the implementation of designing for staff satisfaction and workplace effectiveness is deficient in South Africa (as cited by Workplace Design 2013). Townshend states that organisations are hesitant to implement workplace well-being strategies presented by Know More due to costs involved. He asserts that if these design-led well-being implementations are undertaken, the organisations will experience increased productivity, lower absenteeism and lower staff turnover.

The positive advantages of design-led well-being in corporate environments presented by Townsend, is supported by international studies and surveys. The Britain’s Healthiest Company Survey (2015) identified that healthier employees were more productive due to the effects of healthy workplaces on employees. Their study shows an equivalent of 30 days more productive working hours for healthy employees in relation to others with absenteeism and “presenteeism”, equaling to 23 days per employee per year due to lost productive output.

“Presenteeism” refers to sick employees attending a work day, but lacking efficient productivity due to ill health. An employee coming to work while unwell is instigated by the limited allowance towards sick leave and family responsibility leave, according to Workplace Design for Well-being (2015, 3). The total cost of lost productivity due to presenteeism amongst employees in the United States of America (USA) has estimated damages of up to \$250 billion annually. Presenteeism poses a potentially significant damper on a company’s financial well-being and productivity and often results in higher costs to the company than medical or absenteeism costs. Cultivating a healthy work environment, therefore, creates a culture that fosters healthy productive employees (Workplace Design for Well-being 2015, 3).

According to Townshend (2015, 52), Know More has conducted the Know More Workplace Indicator survey aimed towards the South African workforce. This investigation gathered statistical information about how employees use their workplace, perform certain tasks in which spaces, how satisfied the employees are with their spaces, and how supportive they feel these spaces are in assisting their productivity and work output. Townshend argues that South Africa’s labour productivity is reported to be the lowest in 46 years and it is an opportune time to survey the South African workplace as “an effective work environment makes people happy and happier people work better”.

This paper will therefore present feedback into the investigation conducted to determine the current position of design-led well-being. Although the findings relate to the current

status of design-led well-being in South Africa, we propose that the information should set a platform from which we build knowledge of employee well-being for design fields such as interior design and architecture. The feedback is therefore presented with the aim to reflect on findings in order to postulate a projection into future that can assist in describing a design-led well-being approach to the designers.

15.2 > WELL-BEING IN THE WORKPLACE

The concept of well-being within the workplace setting is not new. It was first introduced by British psychologists John D Cook, Susan J Hepworth, Toby D Wall and Peter B Warr (as cited by Warr 1990, 194). The concept of well-being, as defined by Cook et al, relate to a number of job-related facets identified as involving satisfaction, alienation from work, job attachment, job tension, depression, burnout, involvement and job morale.

Building on this definition, human ecologist Professor Stephen Boyden (1971) published a research article on his findings between what he describes as “survival needs” and “well-being needs”. Survival needs relate directly to the environmental aspects that affect human health, such as clean water, clean air void of toxins, and effective rejuvenating rest and sleep. Well-being needs contrast these basic needs regarding their contribution towards fulfilment, quality of life and psychological health. These include elements such as opportunities to engage in spontaneous social encounters, freedom to move from solitary work to group interaction, opportunities to participate in a full spectrum of activities including creativity and exploration and regular exercise. Furthermore, exposure to comfortable noise levels related to those within natural environments, meaningful change and sensory variability, and an attractive visual environment (Heerwagen,1993).

According to Creighton (2014), there is an increased awareness at organisational levels to offer wellness and well-being programmes to employees. This is due to the negative financial impact on a company’s bottom-line following employee health-related issues resulting in lost productivity and work output. Creighton (2014) states that this increased awareness towards well-being and wellness is notable in countries where companies provide healthcare to their employees, such as North America. In countries where the government provides medical care, such as Europe, there is less concern for employee well-being at an organisational level. Therefore, in a country like South Africa, where larger corporate companies provide private medical care and where productivity is at its lowest in 46 year, a heightened concern towards employee health and well-being is necessary.

15.3 > CONTEMPORARY OFFICE ENVIRONMENTS IN SOUTH AFRICA: CASE STUDIES

The cases included in this paper were identified as suitable contemporary office designs considering employee well-being within the South African context, after reviewing published articles and consulting designers involved with these particular workplace

implementations. The following criteria were established based on the findings from the literature review to ensure these case studies substantiate the research study:

- A contemporary office environment - completed between 2010 and 2016 - to establish that the office environment is current; and;
- An office environment where the concept of well-being has been considered by both the organisation, interior designers and architect involved – as confirmed by the selected designers.

Below is a brief explanatory overview of the selected case studies.

Afrihost, Johannesburg

Afrihost (AFH) is an Internet Service Provider established in 2005 and moved into their current premises at 376 Rivonia Boulevard in Sandton in August 2014, according to Andries Lessing, an in-house interior designer at AFH (2017). Lessing (2017) states that when considering the design of the interior fit-out for the new AFH premises, staff well-being was a key consideration. Elements incorporated include natural lighting, abundant indoor plants, a free gym facility as well as a canteen offering free meals to all staff members (Lessing 2017).

PricewaterhouseCoopers, Cape Town

The accounting firm, PricewaterhouseCoopers (PwC) moved into their new iconic waterfront offices in July 2016. The building promotes the staff to engage in a healthy work lifestyle by encouraging utilisation of the running and cycling trails within the Waterfront precinct. The interior office space provides various work areas, as well as a breakaway area in the form of a restaurant on the fifth floor aimed at creating a stimulating environment where employees meet, relax and exchange ideas.

Case study: Interviews and limitations

One-on-one semi-structured interviews were undertaken among participants within each case study allowing for an open-ended structure. Participants were selected according to a purposive sampling method according to their position in the company and their anticipated access to knowledge about the purpose of this study. In total, twenty three participants were interviewed, which included the interior designer or project architect. Some limitations that might impact on the findings, were identified prior to the interviews. Due to the concept of office well-being being relatively new within South Africa, information about this phenomenon is limited among the employees, which limits the extent and depth of understanding in this regard. Subjectivity in relation to wellness and health condition can also have possible impact on findings. This limitation of subjective well-being resulted in various responses from interview participants when asked to define well-being making their interpretation of the term somewhat challenging. However, these limitations do not have crippling effects on the success of the findings due to the qualitative nature of this research investigation. The lived experience, as perceived by the participating interviewees, reflects on their understanding of their workplace well-being

and self-observed frequency of physical activity. These findings were therefore adequate in supporting the conclusions of this study.

15.4 > FINDINGS AND DISCUSSION

The following findings were identified through performing a qualitative data analysis of the transcribed interviews.

Responsibility of the designer to implement design-led well-being

A number of responsibilities and accountabilities were identified in the study in relation to the interior design or project team. Firstly, in both case studies it was the responsibility of the interior designer to understand the design principles that influence the employees' well-being within the workplace and to ensure that these principles were implemented in the design. Secondly, companies are uninformed of the benefits of employee well-being and it is the responsibility of the interior designer to advise the clients of these benefits. Thirdly, due to the increase in sedentary behavior due to the extensive use of seated computer workstation, it is crucial for interior designers to understand the importance of designing spaces that encourage employees to move more frequently, to counter the adverse effects of sedentary postures on both physical health and employee well-being (Remmers, 2013). The feedback indicated that the introduction of various work zones within PwC, including areas for informal open meeting tables, multiple enclosed meeting rooms, individual phone booths and varied seating options within the canteen, has contributed to a change in employee behaviour. The combination of organisational policy and design-led well-being interventions within PwC has resulted in increased physical movement for employee well-being.

Responsibility of the organisation towards employee well-being

The findings identified that organisations open to global market competition are more likely to consider design towards employee well-being due to the pressures of continuous market change (Rembach, 2017). This experience is evident within PwC where the concern towards staff satisfaction and employee well-being is driven globally by a company culture (Lategan, 2017). Although being compelled by concern towards employee well-being worldwide, PwC is concerned with embracing local culture and being faithful to the city where they are positioned.

Within AFH and PwC, culture and policy towards employee work flexibility and well-being are vital aspects of the businesses and is organisationally driven. When PwC moved into the Central Business District (CBD) of Cape Town, employees and management were very concerned about the effect of traffic on their travelling time and how this could influence their work-life balance. PwC then introduced flexi-hours to ensure that employees manage their travelling time and, therefore, avoid peak traffic where possible. Similarly, the policy and corporate culture within AFH allow employees to work flexi-hours. This creates a reduction in stress within the work environment and gives employees the choice of when and where to work. Flexi-hours enable employees to have an improved work-life balance.

Allowing staff to move freely and choose where and when to work increases physical activity towards active design, resulting in increased employee well-being (Schneider, 2014). Gensler's US Workplace Survey (2017 Design Forecast: Designing for Everyday Impact) concluded that future offices should consider diversifying beyond owned desk systems, to allow employees to work in different workspaces. By empowering employees to choose where and when to work, results show that they experience higher connectivity, greater purpose, and meaning within their work. By moving between work zones, unscheduled contact between employees increases, resulting in decreased employee stress levels, reduced staff turnover, social connectivity and cohesion among employees, directly impacting employee well-being (Health, Well-being and Productivity, 2014), (Well-being: A Bottom Line Issue, 2014).

Ergonomics and agile design towards employee well-being

Within PwC, the interviewees utilising owned desk space reported that their most productive work output took place at their work desk. Although being provided with options to work remotely between various work zones, interviewees indicated that desk spaces offered the most suitable and ergonomically comfortable areas to assist in their work output. Ergonomics was a major factor of consideration within PwC, and each office chair was purposefully adjusted to suit the individual's body type with employees being trained by ergonomists. Where employees had unassigned desks – hot-desking – interviewees reported feeling a lack of ownership and belonging. They said that they worked remotely more frequently.

Similarly, within AFH, although workspace ergonomics had not been the primary area of concern from a design point of view, interviewees reported higher levels of remote and agile working. These employees allegedly felt that the company culture allowed for flexible working outputs that suited their work style and work output. Similarly, those employees within AF that did not have assigned seating reported a lack of ergonomic comfort due to screen placement and smaller sizes in workspaces. Only interviewees within the design and marketing departments recounted working more efficiently from their desk space. This was due to the provision of two large screens at each of these participants' desk space. They, therefore, feel that remote and agile working would limit their work output due to the inadequacy of a small laptop screen.

Acoustics, privacy and personality types

A common factor of concern noted by participants within open-plan offices was that of acoustic privacy. Within both case studies, employees complained about the noise generation and the affected level of distraction experienced due to noise output. The vast majority of PwC employees complained about the noise generated by open-plan informal meeting areas located near working desks, while others expressed concerns about noise created by fellow employees taking both business and private phone calls while remaining at their desks. Two participants at PwC pointed to the importance of considering personality types regarding open-plan office layouts. Both mentioned how they perceived that individuals with differing work preferences and personalities had differing work outputs within a similar work

design situation. Oseland and Hodsman (2015, 20) point to clustering employees together in terms of personality profiling. Introverted, neurotic and conscientious personality types function better in areas that allow for quiet working. Whereas, extroverts perform better within environments that facilitate stimulating and loud areas.

Effect of natural light and outside views on employee well-being

Well-being among employees increases within work environments exposed to aspects of nature and daylight that receive ample natural light. Interview participants within both PwC and AFH reported adequate exposure to natural light and views of nature with enthusiasm. PwC participants related the adequate exposure to natural light within the workspace to add to an uplifting workspace. AFH interviewees refer to being able to view nature from both their workstations as well as from in-department coffee stations. During breaks employees at AF report visiting the cafeteria, which opens out onto a deck and lawn area, where two employees described reclining on the grass during lunch breaks.

Impact of thermal control on employee well-being

In these case studies, negative comments were expressed by the majority of participants in relation to the inconsistency in functionality, as well as a lack of individual control over the air conditioning temperature output. Operable windows for natural ventilation is considered essential. Adequate and efficient air conditioning output for the various cultures as well as genders within the open-plan seating arrangements were also requested. A female participant within PwC reflects on this temperature variability by stating that in instances where she would complain about the air conditioner being too cold, her male colleagues would disagree. Four out of ten participants reflected negatively on the lack of temperature control within PwC, finding the temperature undesirable and too cold for their preference.

Increased physical movement towards employee well-being

Two participants within PwC referred to the increased usage of a centralised staircase due to the stairs being exposed, central and visible. This points to aspects of active design and creating stairs to be utilised more regularly as indicated by Nicoll (2006, 46). By considering an appealing staircase design or finish, users are encouraged to use the staircase due to intrigue of structure and finish, artwork, attractive views and enticing colours (Active Design Guidelines, 2010). Furthermore, two out of 11 participants at PwC reported utilising the staircase more frequently due to a fitness application that they were making use of on their cellular telephone. This “app” resulted in benefits to these participants, due to it linking to incentive programmes. A study undertaken in Spain by Puig-Ribera et al (2015) among university students, implemented a programme called ‘Walk@Work’, where participants had access to a web-based initiative and monetary incentive to move more regularly during the day physically.

15.5 CONCLUSION: THE PRACTICE OF DESIGN LED APPROACHES TO EMPLOYEE WELL-BEING

Design towards employee well-being has become an increasing concern in international office design, due to the benefits of increased employee productivity, engagement resulting in increased bottom-line. The two case studies indicate that where the concern towards employee satisfaction and well-being have been driven from an organisational level,

implementations towards ensuring a healthy and comfortable work environment has proven successful among employees. It is therefore of great importance for organisations to realise the effect that company culture, policy and concern towards employee well-being has on worker morale, output and ultimately, company bottom-line.

Various aspects have been identified in the study, that can make a positive contribution to including design-led well-being in the design process and also to identify concerns and challenges that negatively impacts on well-being factors within the corporate office environment.

Design-led well-being is a topic with enormous parameters and requires knowledgeable implementation and application by designers. Due to the research studies towards employee well-being gaining momentum in realisation, there is constant development and testing of theories. It is of utmost importance that time and effort be invested by interior designers and architects to investigate further and study the effects and parameters of designing towards employee well-being.

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Institution

Pearl Academy

Country

India

Keywordsgaddi tribe; pastoralism;
organic wool; handmade

16. WANDERING SEAMS

Author: Seema Singh

Abstract: The Future as envisioned by the author will be of a slow pace. As more and more consumers make choices to adopt a nature based lifestyle, fashion too will be driven by handmade eco-friendly products. We will consciously choose ethical and slow processes to produce goods that promote cohesion of producer and designer and to the culture of people behind the production of raw materials.

The semi-pastoralist Gaddi tribe of Chamba district makes “Pattu” fabric of pure wool sourced from Gaddi sheep. The whole process is eco-friendly, using traditional hand spinning and weaving technique. The wool is organic as the entire process is chemical free. As natural resources of Himalayas deplete due to raised human activities and modernization, the tribe’s lifestyle too is diluting, and one day in near future we might lose this fabric.

As a design experimentation, ecru colored Pattu was given natural feel with dyes like Madder (Manjishta), pomegranate peel and Myrobalan (Harda). Wool was crocheted to add innovative seam details to the simple silhouettes of jacket and skirt. The flat seams using faggotting technique resulted in light-weight, reversible and handmade winter wear options.

ABOUT THE CONCEPT

Future is not moving forward and forgetting your past. Future, for the artist, is moving ahead with a personal meaning derived from past experiences. Future is not to be feared, future is to be faced as a confident passenger.



Fig 16.1: Patti Thread holder. Personal photograph by author. 2017.

Consumers, the world over, are choosing slow and ethically produced goods. Fashion is seeing a resurgence of what we lost a few hundred years ago. Ethnic and antique looks are guiding fashion. Organic and natural is seen as new luxury by a typical consumer.

To bind the two extremes of human lives, we need to construct bridges. Consumer is looking for information as to how the goods were produced, the nature of raw materials used and the supply mechanism. Some villages in India are still producing goods in traditional ways - unaffected by perils of modernization.

THE GADDI TRIBE

One such village of Gaddi tribe is Bharmour in Chamba District of Himalayan Mountains. Gaddis are shepherds and lead a semi-nomadic life. Due to very low temperatures during winter season, menfolk take their flock of sheep (called as Gaddi sheep) and move to plains. The fleece is used to make a thick blanket type woolen fabric with handspun yarn on Charkha and handwoven techniques. It is then felted to produce a water resistant and long-lasting fabric called as "Patti". The material is for self-consumption purpose and no chemicals are used at any stage, except soap in the felting process.



Fig 16.2: Natural colors of Gaddi wool, spindle and woven Pattu. Personal photograph by author. 2017.



Fig 16.3 Jacket details with hand crochet. Personal photograph by author. 2017.

Commercial production of wool in industrialized set-up involves a lot of chemical treatment harmful to humans and marine life. Gaddi wool is organic with medical benefits and almost zero carbon footprint. Sheep grazes on alpine meadows of high altitude passing the benefits of herbs to fleece. It comes in natural white, black and brownish colors.

NOTES ON THE INSTALLATION

Designing process required a conviction in healing powers of nature – both for mind and body. The Pattu was turned into 100% handmade winter-wear garments. Wandering nature of nomads was depicted through shifting the nature of seams. Seam allowance is zero and a flat seam was produced using crochet and faggotting technique. The jacket is reversible with no lining and paneled skirt is joined with Marken Island faggotting stitches. Some other products were developed with naturally dyed felt fabric.



Fig 16.4: Faggotting Techniques of Marken Island on Pattu seams. Personal photograph by author. 2017.

The handmade process of making garment is a tribute to harmonious lifestyle of Gaddis and their cultural existence overcoming hardships of mountain life in Himalayas. It is a reminder to us that simplicity of traditional handwork leads to a natural beauty – an option that many shall dare to adopt.

The installation is showcasing these garments and products along with raw materials used that were sourced from local Gaddi villagers. Visuals in backdrop document the process of fleecing, carding, making yarn on Charkha, spinning yarn with hand spindle, handloom and weaving, and manual felting process – all done with love by family members.



Fig 16.5: Pattu Jacket. Personal photograph by author. 2017.



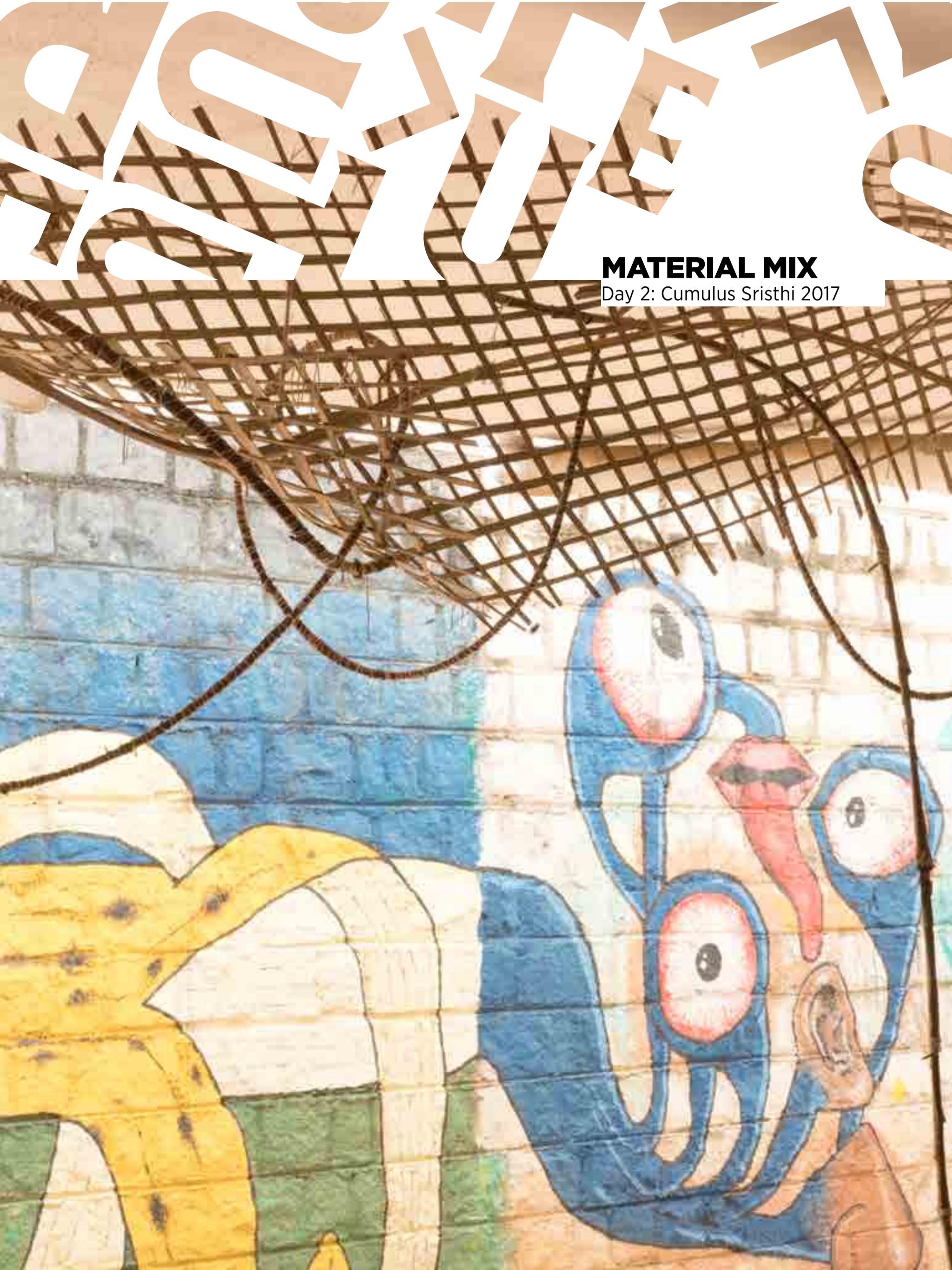
Fig 16.6: Pattu Jacket on model. Personal photograph by author. 2017.

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MATERIAL MIX

Day 2: Cumulus Sristhi 2017





SECTION #3

THE FUTURES FROM

Institution

Department of
Architecture and Built
Environment, LTH,
Lund University

Country

Sweden

Keywords

design innovation; solar
collector technology;
gender and power
relations; ambition

17. A LETTER TO THE VILLAGE OF THE YELLOW TYRE

Author: Lars-Henrik Ståhl

Abstract: If you drive along the road “one” between Inharrame and Inhambane in southern Mozambique, you will on a specific place spot a yellow painted car tyre next to the road. Turn here to a smaller path, and you will after some minutes arrive to an area where some positive and engaged farmers live. Since a year, they are taking part in a research/innovation project that consists of investigating, adapting and combining solar collector technology that produces heat with newly developed membrane pouches. These are made for drying and utilising fruit that would otherwise be spoiled. However, a successful technology implementation requires the collaboration of an interdisciplinary team of designers, food scientists, engineers and social scientists. The project also focuses on unequal power and gender relations that are crucial factors for the situation among farmers in Mozambique. This video documentation is as such a design project about the “power of ambition” that communicates how problematic conditions turns into something successful. The project also addresses multiple design issues in a specific context.



Fig 17.1: The yellow tyre, next to Road One. Personal photograph by author. 2017.

PROLOGUE

In June this year (2017), I had the pleasure to join the research team visiting the villages of Inharrame and Inhambane in southern Mozambique to make a documenting video about a project that addresses multiple design issues. Regarded as a design project, the documenting video contains several components that we usually expect from the concept “design” on a general level.

ABOUT THE VIDEO

The video documents new ways of food production in southern Mozambique, especially investigating, adapting and combining solar collector technology that produces heat with newly developed membrane pouches.



Fig 17.2: Preparation of the membrane bags, filled with juice. Personal photograph by author. 2017



Fig 17.3: Handling of the press juicing machine. Personal photograph by author. 2017.



Fig 17.4: Preparation of the membrane bags, filled with juice. Personal photograph by author. 2017

In all its parts, the video deals with positions and considerations, i.e. how should the filmed material be compiled? This type of considerations also touch upon ethical values; what must, or must not, be shown in the video. Further, documenting videos include aesthetical judgements that sometimes risk taking possession over the ambition of authentic documentations. The unique quality of a video is its immateriality, its mediating power to inform people and even change the society, without being a thing or a constellation of things in a concrete world.

OUTCOME AND IMPACT OF THE VIDEO

My video, with the title *A letter to the Village of the Yellow Tyre*, will have a three-folded impact when it comes to communicating the research project about new ways of food production in southern Mozambique.



Fig 17.5: Inharrime, southern Mozambique. Personal photograph by author. 2017.

1. First, it disseminates the research findings to professionals as well as non-professional audiences. It gives an important overview of what research can be in developing countries, which is sometimes difficult to comprehend.
 2. Secondly, it provides insights into the practices of interdisciplinary work between different scientific cultures.
 3. Last but not least, the video contributes to intercultural communication by informing the general public about the farmers' lives and their livelihoods in rural Mozambique.
-

Institution

Design Academy
Eindhoven

Affiliated to

STBY, TU Delft

Country

The Netherlands

Keywords

speculative futures; visual design research; care; film

18. MYFUTURES: IMAGINING SPECULATIVE CARE AND SUPPORT FUTURES IN THE NETHERLANDS

Authors: *Bas Raijmakers, Renee Scheepers and Froukje Sleeswijk Visser*

Abstract: In many Western societies, decisions about leaving home and spending your last years in a care home are often taken suddenly. Immediate health issues force family, friends and neighbours who offer informal support to ask for immediate formal support. Such urgent situations do not lead to the best solutions.

MyFutures is a 2-year academic-public-private project to create services and tools that take the future thinking and making skills of designers and put them in the hands of the people taking future care and support decisions.

We use speculative design and film to think beyond the immediate, using imaginable future care and support options in the Netherlands as our material. This will allow people who need care and their (in)formal caregivers to get familiar with many more options and the power of creativity as sources for bespoke future solutions. Our approach states that the future is plural, and should not be predicted but imagined in many ways to be prepared for what may come. MyFutures translates this designer-ly way of thinking and working to the daily reality of people in need of care, and their caregivers.

18.1 > INTRODUCTION: THE MYFUTURES INTERVENTION

In recent decades, in North-Western European societies, the state used to guarantee full support to older people and those with chronic diseases concerning the care that was needed, including where and how to live - in an old age home for instance. However, in current North-Western European societies the state no longer makes these choices for you, nor does it always provide standard services including housing. Nowadays, older people or those with chronic diseases need to decide on where and how to live in the future themselves, including how formal and informal support can be organised. Family and friends often play an important role at this moment in life.

The MyFutures project was set up to investigate and intervene in these situations. It is set up as a Research-Through- Design project (Stappers and Giaccardi 2017) aiming to develop tools and support for people to design their own futures. Led by two academic institutions, Technical University Delft and Design Academy Eindhoven, the project brings together more than ten partners including the cities of Eindhoven, Rotterdam and The Hague, two Health Insurance companies, care organisations and four creative agencies. The key premise of the project is that designers have tools and skills that allow them to explore multiple ideas, solutions and futures, as an integral part of doing design, see e.g. Dorst (2015), and these skills may be valuable to people in general who need to take decisions on their future too. We included speculative design and design fiction (Dunne and Raby 2013) in the project to add techniques that help to imagine further ahead than most people do in everyday life. The aim is to come to empower individuals to more broadly explore their possible futures, think about them, and act toward them.

The MyFutures project consists of a combination of research, education and case studies. In the first half of the year, we have built the scaffolds of the framework on literature, interviews with experts on the topic and everyday people and workshops with our partners. As a result, specific moments in people's lives were identified where people seem to have a need to discuss their thoughts, feelings, expectations with others. We learned that 'in discussion with others' is an opportunity where it is rather natural for people to open up and reflect on people's own thoughts, feelings and wishes. Three of these everyday moments were selected to investigate in further detail through case studies. The first case zooms in on the first time when making a care plan with professionals is needed. The second case zooms in on the moments of family meetings. The third case zooms in on socialising moments. This last case is where we are using film in our design research. One finding in our research was that social needs are a dominant factor in thinking about and organising personal futures. People can feel lonelier as they grow older, and they can feel it is no longer worthwhile to invest in new relationships because time has become short. How can we stretch this thinking towards more open futures?

We use speculative design and film to support this stretching and think beyond the immediate, using imaginable future care and support options as our material, from robots and exoskeletons, to growing new organs and living well beyond 100 years. How would a future with these kinds of options look like? Our approach states that the future is plural, and should not be predicted but imagined in many ways to be prepared for what may come. MyFutures builds on ways that designers use to think about and work with futures, and aims to eventually translate these into

tools and activities that older people and their caregivers can use to design their own futures from the perspective of new possibilities, rather than shrinking options. Science is a good source for inspiration if one wants to expand ones options, because science has expanded how we can live and what we can do over many past decades already.

18.2 > SCIENCE FICTION: POSSIBLE FUTURES IN THE NOW

How can one bring the science of today that is the basis for what we can do in our futures, to people already now? Science fiction film has since its start (arguably the film ‘A Trip to the Moon’ (*Le voyage dans la lune*) by Georges Méliès, 1902) done exactly that, by fuelling the imagination of large audiences. The genre is a great example of how a society as a whole and many people in it can dream about possible futures, both good and bad. It is important here that two seemingly opposites (science and fiction) are connected into a coherent story that is perhaps not likely but can be seen as plausible, at least for the duration of the film. Much science fiction works on the principle of ‘suspension of disbelief,’ a call upon its audiences that is also used by designers to imagine futures or alternatives to the current situation. A relevant example in this context is the film ‘Uninvited Guests’ by design research studio Superflux (2015) where the science of the Quantified Self and Internet of Things, already introduced in society today, is imagined to progress towards monitoring systems that keep an eye on the health of older people, indicating the healthiest lifestyles to them personally. In the film, an older man living by himself is using several monitoring systems like a fork that measures the healthiness of the food he eats, a cane that checks how much he walks and a bed that monitors when he goes to sleep and wakes up. He is not interested in the numbers these provide, but some of his family and carers are, and they keep sending him messages that tell him what to do more, or less, and when to go to bed. He is clearly not interested and seems to rather be left alone. Soon enough he starts to find ways to be left alone by fooling the sensors. He asks the lad from next door to take the walking stick with him for a while, in exchange of a can of beer, for instance, and puts piles of books on his bed when his supposed bedtime arrives. He ignores the compliments the system and his family and carers send in return. They are less frequent and less irritating than the previous reminders to do more and better. The film helps to understand what monitoring and mentoring services may be possible soon, and encourages debate around what is desirable. At the same time the film suggests that people will use Quantified Self and Internet of Things technologies creatively in unanticipated and unintended ways. This encourages viewers to think about how they would like to use these systems to their own benefits, and avoid their negative effects.

18.3 > ETHNO-FICTION: DESIGN RESEARCH AND FILMMAKING

Ethno-fiction is much less known than science fiction but also relevant to the work we do. Ethnography is very widely used in design research, but not in combination with fiction. In the late 1950s, Ethnographer Jean Rouch developed the idea of what was later called “ethno-fiction” (Stoller, 1992, p. 143) to emphasise that in ethnography fiction is as important as facts. According to Rouch, “[t]he world in which we live is a twilight zone, an area of light and dark, truth and falsehood, reality and fiction” (Grimshaw, 2001, p. 117). Working in West-Africa with the Songhay and the Dogon (both oral cultures), but also in Paris, he focused on the mix of stories and facts in everyday life, and he learned that fiction and stories teach us things about the human condition

that no rational cultural analysis based on distant observation can achieve. To Rouch, this does not mean that factual filmmaking should be left completely in favour of fiction. Rather, he argues, we should use both; fiction techniques like storytelling, improvising, performing and acting must be incorporated in the working methods of ethnographers and documentary filmmakers. He explores these ideas extensively in his own films, for instance *The Human Pyramid* (*La pyramide humaine*, 1959) in which he sets up a fictional story about relationships between black and white young people in colonial Africa, exploring teenage love, jealousy and racism at the same time. At the start of the film he gets a group of students in Ivory Coast together to make a film about how relationships between black and white young people can exist without racism. He proposes to them to use ethno-fiction and invites them all to contribute to the scenario which they will write during the making of the film. The outcome is not preset. Rouch warns them that someone will have to play the racist and others victims of racism, and that they have to stick to this role, like villains in other films do. "So everything is staged?" asks one of the students. "What do you mean by staged?" Rouch replies, "I create an experience." For Rouch, the camera does not capture reality, it creates reality – or ciné-reality as he calls it (Stoller 1992, p. 193). He knew his protagonists would change their normal behaviour in front of the camera. But that does not destroy what he wants to film. It creates what he wants to film: a dialogue between him as an observer, the protagonists and even the imagined viewer of the film because both he and his protagonists think about how the story can be told best.

18.4 > ETHNO-SCIENCE FICTION: FILMING THE ELDERLY

Taking inspiration from both science fiction and ethno-fiction, we create films in the MyFutures project that combine both approaches and thus might be called ethno-science fiction films. We combine two different sources of film material. On the one hand, we use interviews with scientists about their work, exploring technologies, the human mind and body, as well as social and cultural aspects of being older. These were originally recorded for the TV-series 'The Mind of the Universe' by VPRO public television in the Netherlands, who made the raw footage of the entire series available as an Open Source Science TV project (VPRO 2017), for the public to edit their own films, making use of the Creative Commons Attribution-ShareAlike 4.0 International license. Secondly, we film with older people scenes from their daily lives that somehow connect to some of the stories the scientists tell. In editing, we then combine the two to create ethno-science fiction stories that allow for multiple interpretations. One example is called *Pascale Fung and Det*, a two-minute film in which scientist Pascale Fung explains how robots will enter into our lives and that we will have to collaborate with them: It is necessary for the robots to interpret what we mean, and this obviously goes way beyond taking what we say literally. She also mentions exoskeletons as a particular type of robot that will help us walk. While Pascale Fung tells her story, at times we see Det, a woman in her eighties who walks outside her home in her garden with a rollator walker. She ends at a garden chair that she puts in the right position before lounging in the sun. Then we cut back to see Pascale Fung again who ends with a statement about how robots will not only enhance our physical abilities but also our mental abilities, allowing us to not only do more but also know more and understand more. These two minutes of film give rise to a wide range of options and possibilities (service robots, exoskeletons, knowing more instead of forgetting when you get older), that on the one hand sound rather futuristic (collaborate with

robots instead of robots as slaves), but on the other are directly connected to what exists now in older people's lives (equipment that helps people to walk, the internet that gives access to ever more knowledge).



Fig 18.1: Det in the MyFutures film. Personal photograph by authors. 2017.

We designed this film with three characteristics of ethno-science fiction films in mind. Firstly, the film needs to be grounded in the reality of older people in some way, to provide anchor points for viewers to connect the film to their own lives. We see an opportunity here to collaborate with people, just like Jean Rouch does with his ethno-fiction when he creates the story with his protagonists. The older people we involve in our design research are invited to decide with us what parts of their lives can be connected to the stories of the scientists. Secondly, we use film as a language that everyone understands easily. The interview with an expert, the observation of an action, and the cutaway technique that creates a connection between the two, are all part of a film language that people understand without effort. It is a simple way to create speculative connections that are accessible to everyone. It encourages us to dream about possible futures, both good and bad, just like science fiction does. Thirdly, ethnoscience fiction is aimed at creating spaces for speculation, where our thinking about the future can be stretched and conversations with people directly involved can be had. The



Fig 18.2: Pascale Fung in the MyFutures film. Personal photograph by authors. 2017.

films must provoke personal conversations about possible futures. Here, we see connections with the use of film in participatory design, and can build on these to intervene in the conversations that already take place between professionals, formal and informal carers, and the people needing the care.

18.5 > FUTURE WORK: INSIGHTS AND APPROACHES TO FUTURES

Current conversations between care professionals and people needing care and their informal carers in the Netherlands consider the future life of an older person in need of care, to assess how different support options may result in different ways of living and consequently how his or her future life may look like. However, in reality the focus is on finding a solution for problems that exist now. The future, let alone multiple futures, are rarely considered. Besides the need to solve an immediate problem, the argument used is also that “as an old person you have no future”, as an 89-year old participant in our initial round of interviews told us. We also were repeatedly told that “it does not make any sense to think about the future because you don’t know what will happen anyway.” And: “You could fall ill anytime and then all your plans are suddenly useless.” Older people seem to live a permanent lottery. They take life as it comes. This insight made us reconsider the way we approach futures in our project. We have learned from people like Liz Sanders (2017) and design research studios like Summn

(2017) that the futures should be played rather than planned. Scenario planning may seem attractive but it defeats the purpose if you want to choose for a particular scenario that you then want to work towards. Instead, uncertainty and coincidence should be taken much more seriously and your possible futures are about how well you are prepared to respond to these once they happen. Often these unplanned events are expected to be negative, when illness strikes for instance, but they can be positive too when people near to you get suddenly more time to spend with you for instance, or when some money is inherited. Where Liz Sanders has explored this approach to futures using physical space, objects and interaction, we are exploring how we can play the futures using film. Liz Sanders proposes that “in addition to planning the future, we should be playing in the future. The playing would involve enacting and pretending and using the body to explore future scenarios: not just planning. That would give a lot more ways for people to dream about the future.” (Sanders, 2017. p. 32) With ethno-science fiction films we aim to contribute to this effort and take it into new areas and directions, to allow more people to play with their futures. Film is a great medium for this, because as McLuhan already pointed out it is a highly participatory media, where empathic engagement has to be invested to make sense of the material (McLuhan 1964). The participation that film as a medium makes possible is very different from engaging with written or diagrammatic representations such as scientific papers, formatted by a long and delicate process of professionalisation (Latour 1990). Participation through filmmaking is a way of manipulating material that can handle the ‘flow’ of real life interactions without the detour of putting it in writing (Buur et al. 2000, p. 340-341). Adding the fictional element makes the ethno-science fiction films speculative and playful because it explores situations that might exist. This is a basic design skill and attitude that we aim to bring to everyone at moments they need to consider their futures.

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Institution

Srishti Institute of Art
Design and Technology

Country

India

Keywords

collaborative community;
composting;
urban farming; edible
landscapes

19. URBAN HARVEST RUMINATIONS: A CASE FOR CITY DWELLERS

Author: Agnishikha Choudhuri

Abstract: Legacy and prevailing notions about city-dwelling are positioned in stark contrast to those of a pastoral existence. In order to have jobs, culture, 24 hour electricity and consumer goods we must pay in greenery, clean air, quiet and community. We buy food but do not grow it. We discard with impunity. A wasteful and disconnected urban existence is both the price and the measure of progress. Privileging individualism has led to a growing isolation and the very term 'community' has become worn, synonymous with activism and alternative lifestyles. Yet, a growing body of research celebrates dense urbanity. By concentrating development through vertical construction and shared resources, cities can be the sustainable solution for future civilization. To realize this, however, we need to transform our relationship to our urban environment—from surviving it to celebrating it. How can we recreate our relationship with community, earth, growth and regeneration, amidst our complex lives? Is this the avenue to resolving wicked problems of dense urban life? This paper is an initial exploration of existing paradigms about urban community and participation with a view to identifying the key qualities that can drive this kind of change.

19.1 > FIRST LET ME PUT OUT THERE, MY POSITION

Cities are the future for the human population. Whether you love your urban den or not, crave your pastoral acre of sylvan paradise or prefer the restless concrete jungle, they are the most sustainable/environmentally conservative way for us to manage and care for massive populations, share resources and services like water, electricity, waste management and food. Contrary to our socialized responses, the wasteful city is not half as wasteful as people spreading out into single family homes to enjoy clean air and grow vegetables in the suburbs. While on the face of it, we are all merely surviving the garbage on the streets, daily assaults by noise and traffic, air pollution, the disparity of economics, the struggle to commute and be happy; in reality, we have taken a step towards sustainable living by residing in a city (Meyer, 2013). This way we concentrate development and construction in dense zones, develop upwards into high-rises and prevent larger and larger tracts of arable rural land and precious forest cover from being consumed by urban sprawl and our need to have our McMansion or private farm. It's a simple conversation about density. For example, when a single-family home occupies a plot of land, it requires the base infrastructure for plumbing, electricity and waste management as does a multi-storey apartment block on the same footprint. The first might service 4 people while the latter with some multiples for floors can service 100. The basic infrastructure is non-negotiable.

While this may ease our conscience, the life of city-dwellers in India is still fraught with a cornucopia of stressors. Whether wealthy, privileged, homeless or marginalised, we all share the air and noise pollution, the traffic, the garbage assaulting our senses, the lack of shared public space. Our cities, as we have them now are not ready for the future. As the urban/rural balance continues to tip, as more people enter our cities in search of livelihoods and upward mobility, we need to create new paradigms for existence.

19.2 > THE DREAM:

This is a documentation of dreaming about a future and walking the dream. This is about discovering whether and how the average Joe, read me, can ignite significant and growing change...live a dream.

So the dream...

What if our garbage-lined streets and streams were instead edible landscapes? What if you could see herbs and vegetables in traffic islands? What if people tended to tomato and brinjal plants while waiting at the bus stop for their daily commute? Or if you could get your frond of curry leaves for dinner just as you were getting your bus? What if society gardens were full of edible plants that its members helped to grow? What if there were community harvest festivals where near-strangers occasionally got together to share food they grew together? What if today's urban children knew and loved what it felt like to grow a vegetable; who knew that they would always be able to grow something to eat or find a fellow urban gardener, even if they were broke and alone in the city? What if all our growing medium was our food waste – the very mess we threw in the bin? What if it never got onto a garbage

truck, but stayed and became the rich compost we need for great vegetables, over time increasing topsoil across the city and making it prone to be a wild place again?

19.3 > WHO AM I TO TALK OF THIS?

I was born in an Indian city and have lived in cities my whole life (apart from the 5 years spent studying in the U.S. in a college town with a population of 20,000...which also counts as a city, but felt like a wooded wilderness to me.) I spent my childhood living in one of three apartments on the 13th floor of a 22-storey apartment block in Mumbai. Our building was in fact so early a multistorey that it was called Skyscraper, a word that has since entered the urban dictionary as a common noun for high rise apartment buildings.

Growing up, I interacted with my next door neighbours because they had a daughter of similar age and we played together for a couple of years, before drifting into different friendships later. The other family was much more private and we were cordial while waiting for the lift but had no other significant contact. None of our family had any close friends in the building or society. There was no one with whom my mother dropped in for morning tea and gossip or shared shopping trips. Coming from the close-knit life of army cantonment it might have been difficult for my parents to be happy in the city. I on the other hand, thrived. As the youngest child, my friends were family and cousins. Once I began school, I most often met my friends outside, biking on the street or playing in the children's park downstairs. In those days, our city was deemed so safe that I caught buses and travelled alone from the time I was eight. I had encountered no disconnect, coexisting with strangers in my city life, even as a young child. Even today It is an attitude I have carried with me.

19.4 > PARADOXICAL NATURE OF URBAN INTERACTIONS:

Intensely private about who may actually enter my home, yet I can strike up conversations with strangers with ease. It is the paradoxical nature of urban interactions; we guard our precious private space so much that we keep our neighbours at bay because we cannot ignore the press of jostling humanity with whom we coexist in our daily navigations of home to work to home. It is entirely normal to share the lift each morning and evening with the same people for years, to know the scuffs on clothes they wear and repeat but never say more than 'hello'.

In the 80s, our very modern building had garbage shaft. On each floor, on the stairwell was a metal door about three feet high by two feet wide into which people could throw their waste, all of it. While waiting for the lift one could often hear objects crashing and tinkling down the 22 floors. Every so often, there would be notices to people to requesting they not throw unpacked broken glass and large objects. But in the nature of humans there is something irresistible about abusing anonymity. Old televisions, crockery, broken furniture, just about anything that could fit, went down the shaft. For a short time, an illegal abortion clinic also disposed of late-term fetuses thusly, till someone complained and they were arrested. I learnt that the way to keep your home clean was to make the garbage disappear. I learnt that anonymity was freedom.

19.5 > HERE IS MY INSIGHT AND WHY MY HISTORY IS VALID:

I am pure urban, a city-dweller inside and out. I love being in a city, the convenience of facilities, public transport, good roads, many languages, street food, museums, well-stocked stationery stores, home delivery, gourmet and organic food stores, street lights, high speed internet, 24-hour electricity. Do I crave my little zero-waste organic farm with a view of the hills? Of course. Will I get there? Probably not. It's a brave dream but I'm not ready to give up all this. What I do want however, is a clean, green public space without garbage and the pervasive smell of rot.

I have grown over the years from an anonymous urban, who knew I could throw my fluorescent tubes and batteries away because who would find out...to caring that they be disposed responsibly; from never caring about the garbage (unless it was in my path) to upholding segregation of wet and dry waste. I currently live on the 10th floor and get 10 hours of sunlight on my terrace to grow vegetables and we just harvested our first compost. We do this not from a strong sense of ecological consciousness, but rather because our tastes have evolved to favour the flavor of sun-ripened vegetables. In addition, we want our two-year old (an immersed in technology Generation Alpha) to experience how plants grow and that sun and mud are fun and that bugs are fine. What lies in my lazy city bones that this gives me so much pleasure? We believe city dwellers are apathetic citizens. They really don't want to take on anything that means more work. How can we break this in a small way? We want to emotionally touch this person in a small way.

19.6 > EVOLVING A CASE FOR URBAN FARMING?

So over the course of my urban existence, my outlook has transitioned from a naïve lack of awareness, to avoidance of dirt, to being an outraged citizen with a grouse about the dirty streets, the waste of resources and the irresponsibility of municipal authorities to an intellectual interest in the notion of sustainable urban development. My personal forays into an urban vegetable garden are actions only a few years old, but an evolution of many years of thinking about this. So far I had only two modes to interpret my urban spaces: apathy and outrage. I am a city dweller and I'm not and will never be an activist, one of those enthusiastic people who get up early on a Sunday morning to clean up a dirty corner of the neighbourhood and give it a new look. And while I admire those people and even more, the ones who organized the event, I do not want to be them.

This is not intended as a call to action. This is not a paper about how we need to move to urban farming to make cities more sustainable to be food-independent. We already know these things and have known for decades. Everybody is talking about it and there are those extraordinary people who have transformed whole neighborhoods through their tireless action. The stories of success abound, but they are isolated islands among a sea of failures. One need only walk or drive in an Indian city to understand this.

19.7 > URBAN FARMING: CITY DWELLING AND RENEWAL

Growing food ties us to the soil and regeneration in inimitable ways. Sharing the growing of food in its turn creates linkages between person and place. My recent harvest of compost

filled me with profound satisfaction. The disgusting, maggot-ridden, malodorous mess that I had only recently regretted bringing into my apartment, had transformed into a dry, black loam with a distinct fragrance of earth. This was real magic, when matter transformed, and as I poured the compost into the pot where the tomato saplings were being replanted, I closed the loop I had begun four months ago. What I had discarded had become food. I wondered where else a city dweller could have a causal relationship with renewal. The days are almost gone when we could exchange our old newspapers for a couple of steel vessels with the kabariwala (scrap-merchant) who came to our door. Public awareness campaigns have coined terms like ‘waste to wealth’ but under this veneer one can smell the desperation of yet another public service campaign underlying rotting food waste. We have a problem so massive on our hands that it cannot be solved by civic authorities. It requires us, the apathetic citizen (Pune Municipal Corporation, 2017-25 Plan, pg.18) to become proactive in consort with those among whom we live.

We all baulk at initiating action. As busy and self-involved as we are, there is no escaping that we are only postponing the inevitable by our inaction. Yet the majority of us are willing to hide in the cloaks of anonymity, the ability to discard with impunity, to take token actions like segregating our waste or carrying reusable shopping bags. Many of us are paralysed by the immensity of the task. What do I aim to impact? My planet, my country, my city, my neighbourhood; it is so much easier to contend only with our own internal dialogues. Urban folk from many countries, talk about how their housing society/neighborhood would never allow the mess of composting or the replacement of water-intensive landscaping what we must confront. The act of submitting this paper has caused me to take certain actions. My aim was to consciously digress from the time-honoured paths of academic writing, to avoid quantitative data and secondary research for the elucidation of actual experience. This is an account of my process and experiments with community. It is just beginning. And I request your participation in this thought experiment.

Institution

Pearl Academy

Country

India

Keywords

jewelry making;
abundance and making;
technology in jewelry
making; organic and
inorganic

20. RE-INVENTING FOR ABUNDANCE: A CONCEPT NOTE

Author: Shitesh Jha

Abstract: The sub-continent of India has used various organic and inorganic materials abundantly available in the immediate environment to create different forms of ornamentation. The highly valued craft jewelry stored in museums, today serves as inspiration for craftsmen and designers, using modern technology and rare materials to reinvent them. In the Indian folk culture, jewelry was not so much about expensive and rare materials, but had more to do with the cultural significance of the material, the properties of the material and its abundance in the immediate environment.

What is necessary, for us today, is to look towards how we can balance the old and the new. How can we utilize the abundant wisdom gained over thousands of years coupled with rapidly growing forms of technology that are lavishly available to us today? This new way of seeing, a marriage between technology and craftsmanship, opens up many opportunities in the area of jewelry design with an eye on continuing the ties with the cultural context. This approach therefore leads us to a mindset of abundance rather than anxiety and opens doors for the use of new techniques like electroforming, laser work and computer aided design and manufacturing etc.

I propose to talk about various materials that were traditionally used to create jewelry in India, keeping in mind their specific properties and significance. My concept note explores the upcoming technologies that have recently been adapted to suit the needs of jewelry making and tries to discover new possibilities.

ABOUT THE CONCEPT

Abundant nature fuels our need for ornamentation, whilst providing materials to play, mould and experiment with. From traditional ways of using grass and flowers to make jewelry to today's times when modern jewelry is manufactured using state of the art technology, can we envisage a collaboration between the old and the new? How can we create the right mix between traditional means and methods of practicing craft to produce handmade marvels and the scope to experiment designers and manufacturers evince in the field of jewelry/adornment due to emergent technologies?

The old and the new: What's next?

While there is a huge scope to mix new technologies with traditional practices of making jewelry, will this collaboration help develop and preserve our heritage and environment? Through this retrospective, I propose that the answer is yes. When thoughtfully done, this collaboration between old and new can help us to preserve our resources, create the right balance in design and allows for effective and intelligent use of materials.

Material forms in jewelry making: Traditional pathways

1. *Kusha* (darbha grass) (*Desmostachya bipinnata*)



Fig. 20.1: Kusha grass ring used in Hindu rituals and ceremonies.

2. Flowers as Ornament



Fig. 20.2: Bride to be, adorned with jewelry made of flowers, FnP flagship store, Accessed October 29, 2017, <http://www.fnpflagship.com/floral-jewelry/>



Figure 20.3: Tamil Nadu, India. Gold Necklace with eighty stylized Arabian jasmine flower buds, each set with a ruby, and central back clasp in the form of a peacock.

Total Length 32.5 in.
(82.5cm); unit length 2 in.
(5cm), weight 348 g
Collection Barbier-Mueller
Museum, Geneva (2504-104)
Oppi Untracht, Traditional
Jewelry of India (New York:
Thames & Hudson, 2008), 34

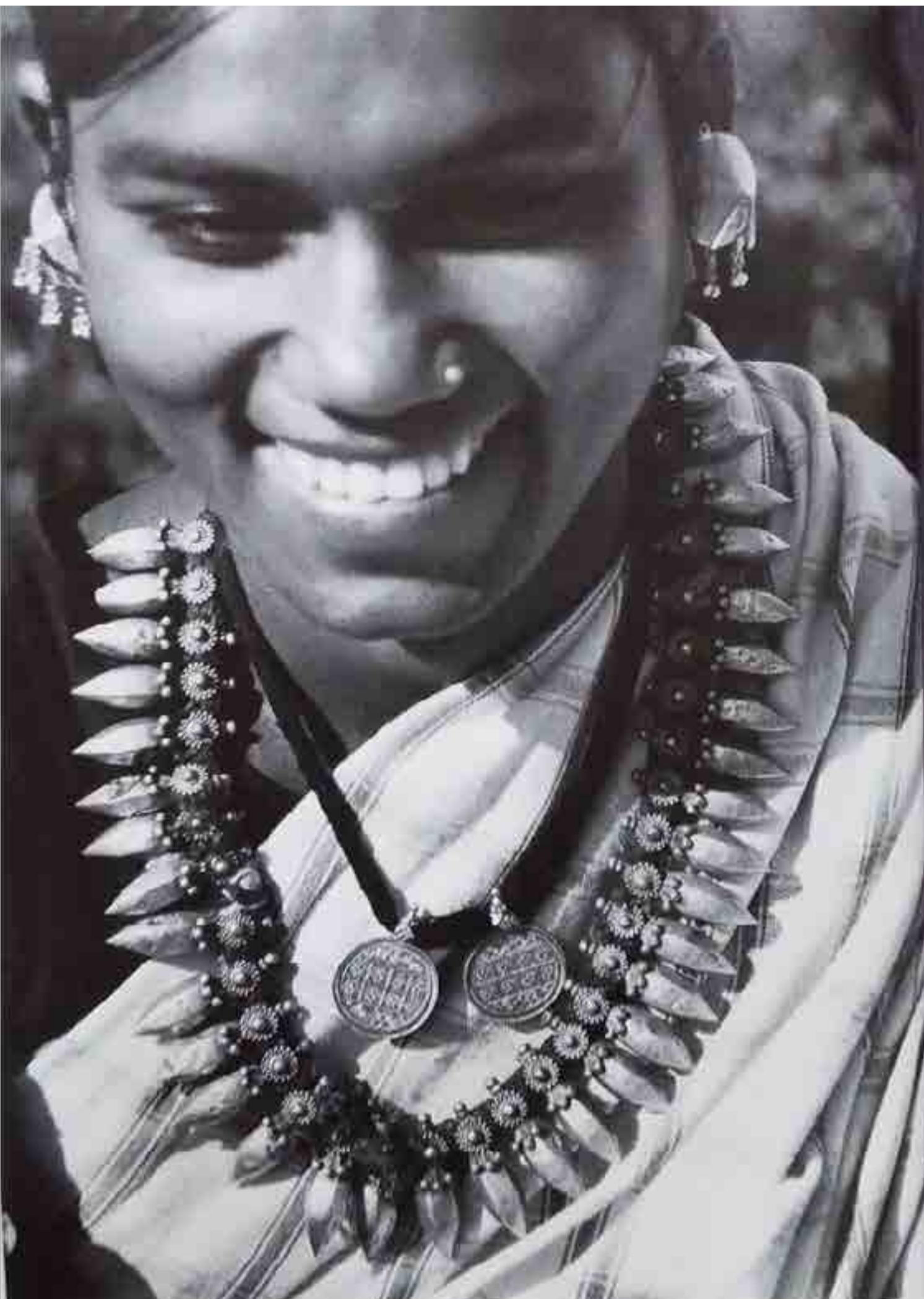


Figure 20.4: Madhya Pradesh, India. Silver Necklace (*champakali har*). A classic pan-Indian design, its units represent the fragrant buds of evergreen champa tree, given as an offering to Shiva and other deities. It exemplifies the adoption of auspicious flowers for Jewelry design because they are believed to possess the power of repelling evil spirits. Oppi Untracht, *Traditional Jewelry of India* (New York: Thames & Hudson, 2008), 34

3. Seeds as ornament



Figure 20.5: Tamil Nadu, India, 19th Century. Gold Necklace (*rudrakshmalai*, or *linga padakka muthu malai*)
Length overall 31 1/2 in. (80 cm); height of pendant 6 7/8 in. (17.5 cm); weight 315g Collection Mis, Brussels.
Oppi Untracht, *Traditional Jewelry of India* (New York: Thames & Hudson, 2008), 39

4. Wood



Figure 20.6: Vrindavan, India

Chandan ki mala with 108 beads

Brijwale, Accessed October 29, 2017

<http://brijwale.com/shop/shop/jap-mala/white-chandan-ki-mala/>

5. Animal ornaments

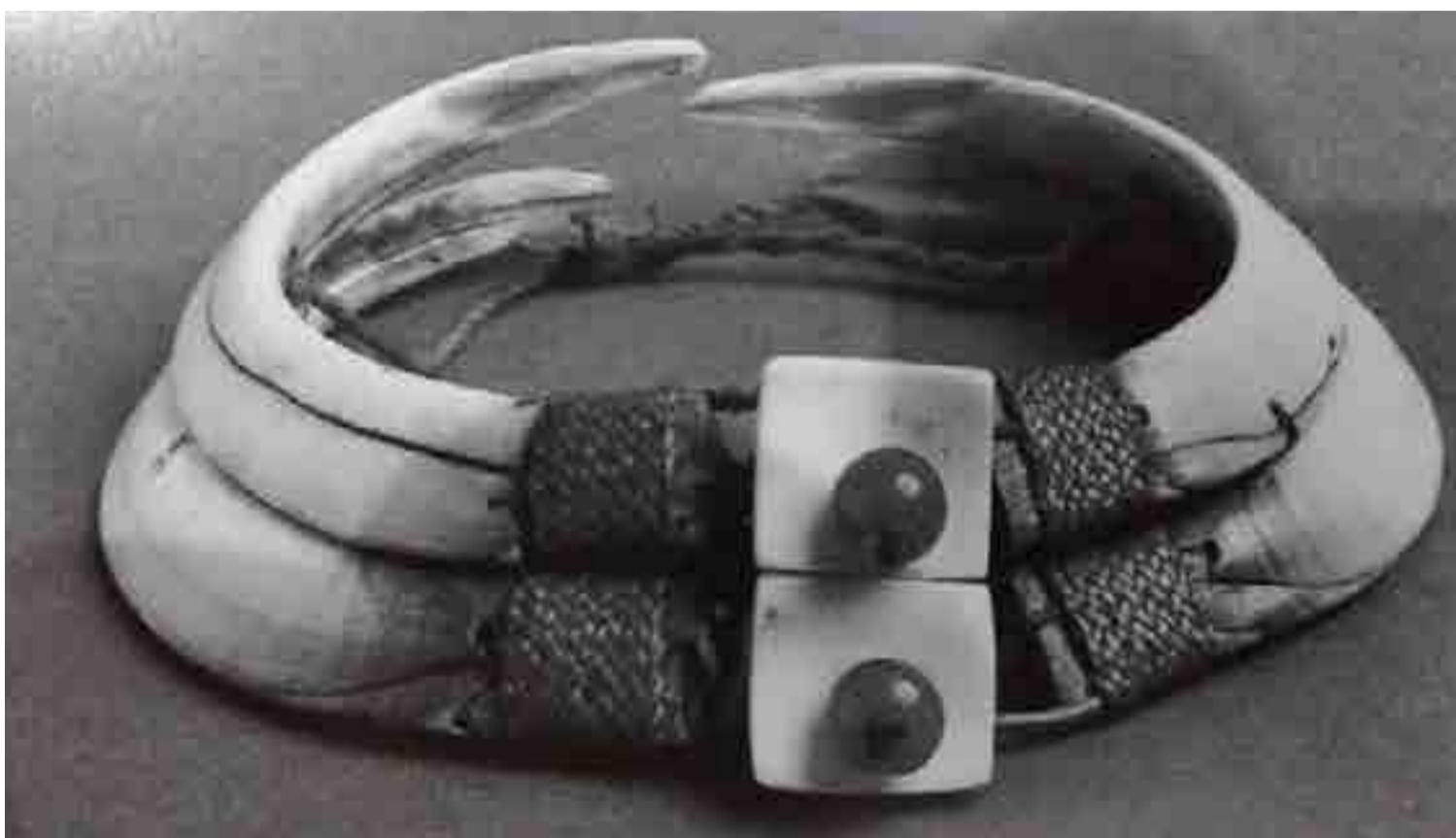


Figure 20.7: Nagaland, India. Lotha Naga necklet (*soho*) of two pairs of matched boar's tusks with carnelian beads set in a square of conch shell and canework terminals. Collection Museum of Mankind, London (1929.4-15.26). Oppi Untracht, *Traditional Jewelry of India* (New York: Thames & Hudson, 2008), 58



Figure 20.8: Mathura, Uttar Pradesh, India. Peacock feather ornaments (*mor pankh sringar*), ornamented with silver wire (*zari*), used to decorate small images of Hindu deities, especially those of Krishna. Length 2 to 5 in. (5 to 12 cm). Oppi Untracht, *Traditional Jewelry of India* (New York: Thames & Hudson, 2008), 46

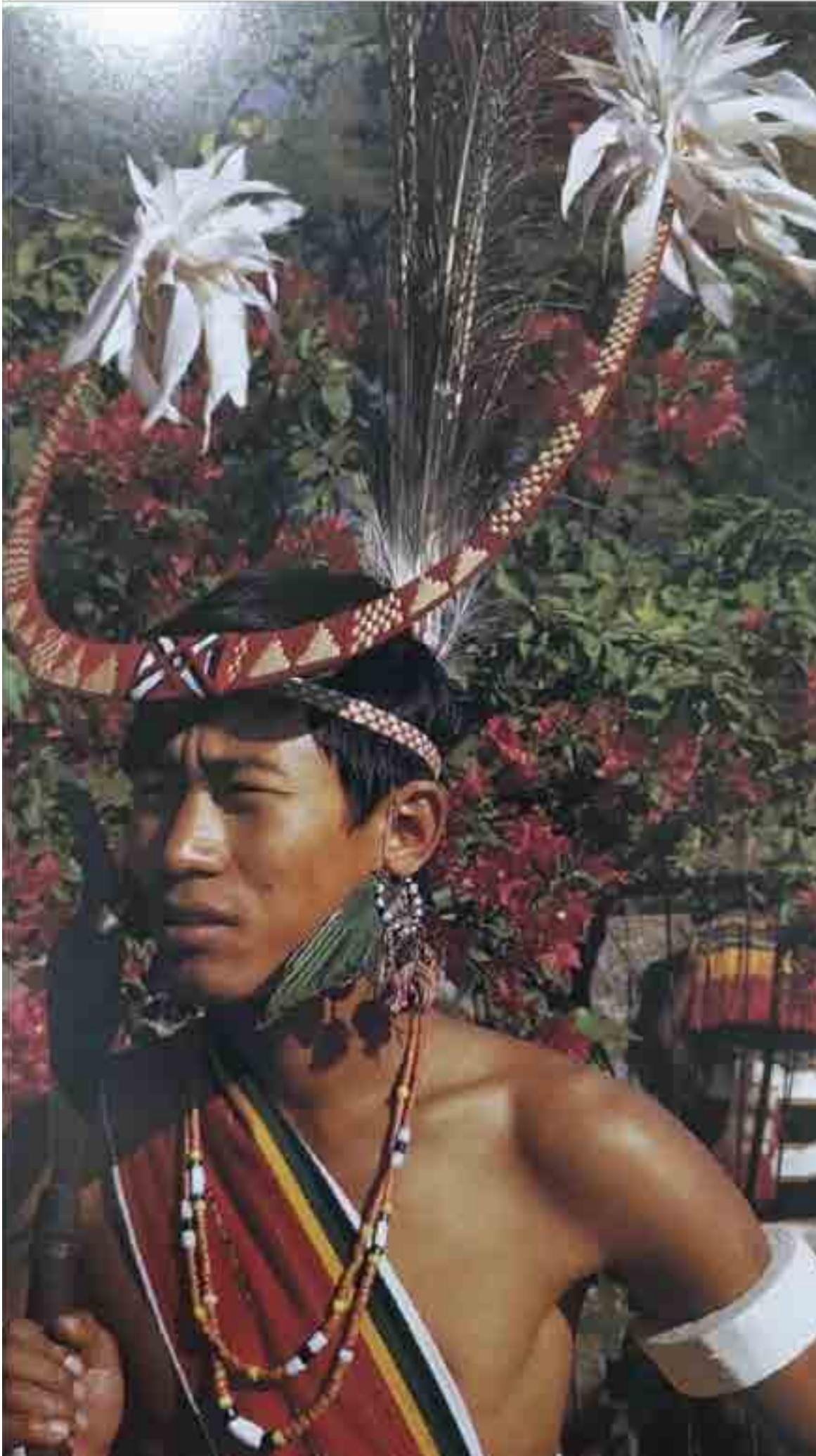


Figure 20.9:
Tuensang District,
Nagaland, India
Konyak Naga
wearing ear
ornaments of the
expanded, brilliant
blue feathered
wings of the Indian
roller or blue jay,
whose blue feathers
appear only in
flight. The horn-
shaped headdress
is tipped with a
cluster of white
cock tail feathers.
Oppi Untracht,
*Traditional Jewelry
of India* (New York:
Thames & Hudson,
2008), 59

Material forms in jewelry making: Traditional pathways

1. Thewa Jewelry



Figure 20.10: Partabgarh, rajasthan, India. 19th Century. Gold-Thewa work parure. Courtesy Sotheby's, New York. Oppi Untracht, Traditional Jewelry of India (New York: Thames & Hudson, 2008), 300

2. Acrylic Jewelry

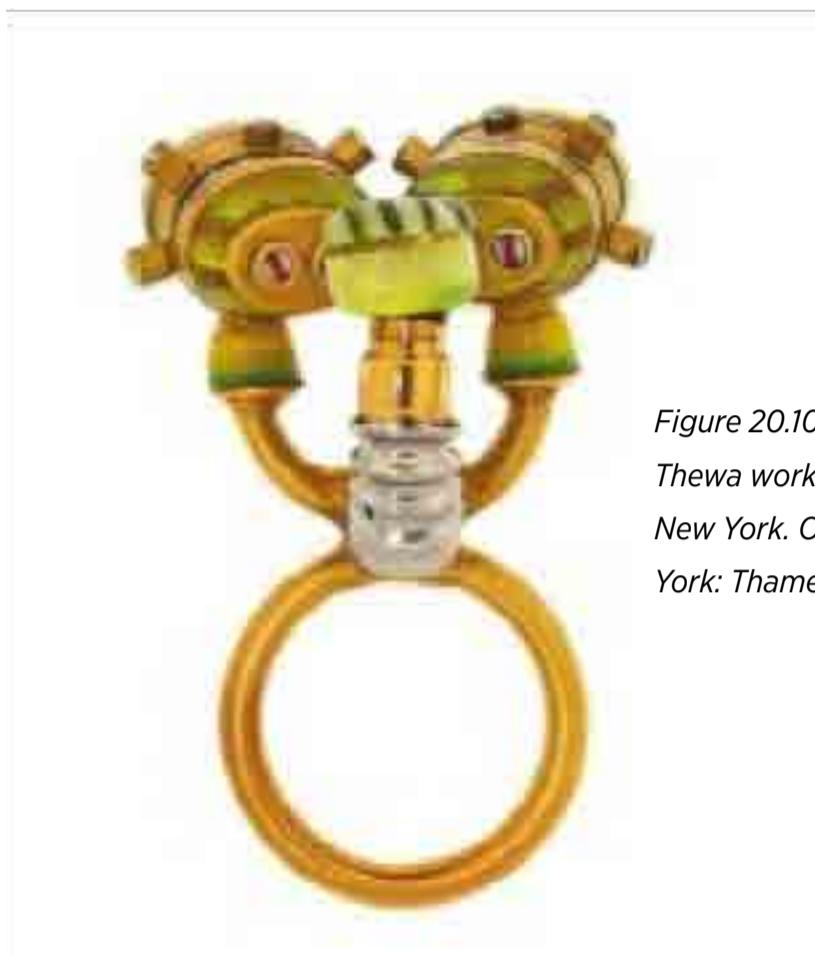


Figure 20.10: Partabgarh, rajasthan, India. 19th Century. Gold-Thewa work parure. Courtesy Sotheby's, New York. Oppi Untracht, *Traditional Jewelry of India* (New York: Thames & Hudson, 2008), 300

Smart Jewelry: Wearable technology



Figure 20.12: Tago Arc bracelet by L!ber8 Technology, Massachusetts, US
The ultra-thin curved screen displays the selected pattern on the mobile application.

New technologies and materials in Jewelry

1. Electroforming:



Figure 20.13: Stanley Lechtzin, *Torque*, 1972

A torque was a metal collar or neck chain worn by the Gauls, Germans, and Britons. The name comes from the Latin for “twist,” which is what must be done to the piece to wear it.

Materials: Polyester resin, silver plate, and 24k gold.

Dimension: 14 x 7 1/4 x 6 1/2 in. (35.6 x 18.4 x 16.5 cm), Accessed October 29, 2017

<https://americanart.si.edu/artwork/torque-33498>



Figure 20.14: Gold Virtuosi prize-winning design made by electroforming

2. Laser technology
3. Micro-Alloyed 24-carat Golds



Figure 20.15: Allison Mooney, Illinois, United States. Crop Circle, Aztec and Mayan pendants, and other mystical land art like the Nazca lines. Accessed October 29, 2017
<https://www.ponoko.com/blog/design-ideas/100-lasercut-jewelry-designers/>

Spangold Shape Memory Alloys



Figure 20.16: A highly magnified picture of the effect – an array of needle-shaped surface ripples that gives the spangle effect. Again, this material is only just being taken up by designers and manufacturers in a limited way. The jewelry design possibilities can be enhanced by selectively polishing away the spangle. Accessed October 29, 2017.

<https://www.ganoksin.com/article/technologys-relevance-to-jewelry-design/>

Other Technologies

Anticlastic designs in metal



Figure 20.17: A diamond in the moment of tension
The Niessing Ring®, The precious stone is held in the ring band solely by the power of tension, without a setting. Accessed October 29, 2017
<http://niessing.com/en/niessingring/>

Titanium: The new abundant material for Jewelry



Figure 20.18: Titanium Ring
 Accessed October 29, 2017
<http://www.ringjewelry.co.uk/blog/titanium-jewelry-facts>

CONCLUSION

New technology can inspire the creation of innovative jewelry and design requirement can propel the invention of new technology. Thus, there is no one way connection, the abundance of one leads to abundance of another. Going back to the old habits of using abundantly available materials can help better utilization of resources. Developing artistic ability with an eye on culture, context and technology can enhance the quality and value of jewelry we produce.

However, we should be cautious of the way we use our natural resources. Some old practices have rightly been put to rest as they cause huge losses to us as a society. Therefore, instead of using animal products which are life threatening or lead to killing of animals; we should switch to more eco-friendly alternatives like clay and ceramics.

With the growing acceptance of non-precious metals and materials in Jewellery, we should focus on improving the quality of our design and manufacturing with the use of new technology and abundantly available materials. Learning to use new technology for combining materials or developing smart jewelry can greatly enhance the quality and aesthetics of the adornment we produce.

The learning is that we have abundance of materials, technology and expertise with the backing of a rich cultural heritage. The only thing we need is to learn from our history, adapt to the changing needs of the society and let our imagination shape an abundant future.

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FnP flagship store.

<http://www.fnpflagship.com/floral-jewelry/>

Ganoskin, Technology's Relevance to Jewelry Design

<https://www.ganoksin.com/article/technologys-relevance-to-jewelry-design/>

L!ber8 Technology, one bracelet – endless designs

<https://www.liber8tech.com/>

Niessing niessing ring®the magic of a great idea

<http://niessing.com/en/niessingring/>

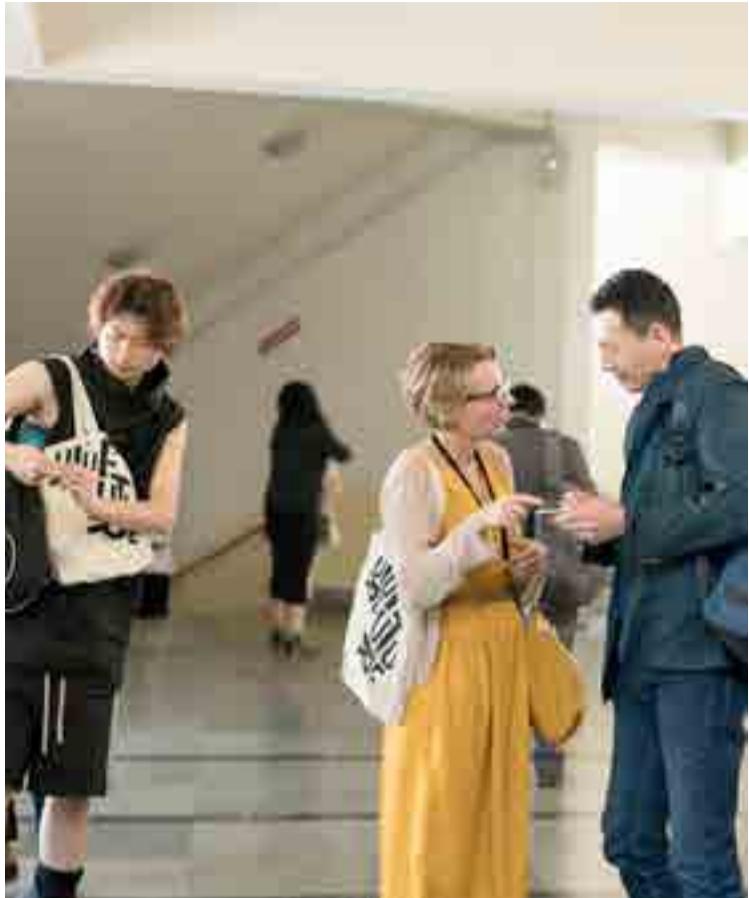
Ringjewelry, Titanium jewellery facts. 5 Titanium facts that will surprise you

<http://www.ringjewelry.co.uk/blog/titanium-jewelry-facts>

Torque, Smithsonian American Art Museum

<https://americanart.si.edu/artwork/torque-33498>

Untracht, Oppi. Traditional Jewelry of India. New York: Thames & Hudson, 2008.



DAY 1:

@ JN Tata Auditorium
Cumulus Sristhi 2017



Institution

College of Architecture,
Art and Design, American
University of Sharjah

Country

United Arab Emirates

Keywords

urban space;
domesticated landscape;
urban interiors

21. URBAN SQUATTERS AND LIMINAL (PUBLIC) SPACE IN THE UAE

Authors: Juan Roldán, Itzel Cruz Megchun and Malak El Ghuel

Abstract: The UAE and its emirates, as other urban cities, can be studied as the product of the functional systems that generate its architecture and therefore of urban spaces. Indeed, the UAE go beyond urban designs that host building environments, since they are also part of the recollection of human behaviors that assist on reshaping spaces lodged with history, cultural and social meaning. The structures of these settlements open new problems and possibilities to the study of the city plan, it imposes the study of urban facts according to their essential motives: the built environment and the in-between.

The study area of our case study is focused in the liminal spaces of the cities in the UAE and the activities deployed within them.

The submitted video documentary explains a project (Nomadic Shadow), in which the shadow becomes a catalyst for sport practices.

Although these kinds of practices could be understood as a piece of a temporary city, this is probably the most permanent part of the city landscape. This Instant City (built environment + shading device) descends to activate the sleeping town through trading and exchange, filling the liminal built environment with their rituals.

“Moving elements in a city, and in particular the people and their activities, are as important as the stationary physical parts. We are not simply observers of this spectacle, but are ourselves a part of it, on the stage with other participants.”

-Kevin Lynch, *The Image of the City 2*

21.1 > THE PRE-DEFINED TEMPORARY CITY: SPONTANEOUS BEHAVIOURS, UNEXPECTED USERS

The city has been traditionally studied from a static point of view, paying attention to its built environment and its historical traces. Classical maps like *La Nouva Topografia di Roma Comasco* by Giambattista Nolli¹ (ca. 1692-1756) go beyond the archetypical distinction between public and private spaces, taking his survey into some public interiors like churches or public spaces. Even in this case, it’s the built form the only graphic representation on a map using the poché cut to depict the solid parts, therefore the *non-poché* parts of map will be the accessible urban space of the city. It is only recently that attempts of a holistic depiction on the complexity of the urban realm have been able to be conveyed thanks to technologies like GIS, in which several layers of information can be overlapped and related among them.

The XX century has been the time when the city has been understood as built environment + human behavior. The crisis of Modernism and the radical built manifestos of Le Corbusier have put in crisis the idea of an Architecture that does not care about the dweller beyond certain ergonomic aspects. The idea of the city made for the car and its crisis during the 50s and 60s, makes that some disciplines start studying the city, their inhabitants as well as their rituals and actions. It’s now the moment of Gordon Cullen (*The Concise Townscape*, 1971), where the perspective of study changes. The city is now understood as a sequence of images (*townscapes*), in a more similar way to our human perception, therefore the city can be designed in an improved manner. The understanding of the human rituals is also studied with film and photography as new ways of mapping the city like the case of the film studies by William H. White on “*The Social Life of Small Urban Spaces*”, where thanks to filming techniques the urban spaces is analyzed to see its flaws and the most important part: the real usage of the urban space by the people.

Recent studies go beyond and define the understanding of the city as the comprehension of the built environment and it’s interiority (Sennet 2014). The urban phenomena have to be understood with the pre-defined city (closed system by R. Sennet) and the spontaneous behaviors, with the unsolicited designer and the unexpected user: the temporary city. The city, and more specifically its ground floor (Hermida 2011) is where built form and users find consensus depending of the regulation, the opportunities (of inhabitation) and capabilities of the user of the appropriation (temporary or permanent) of the city.

Recent studies by Richard Sennet² try to understand the city in a more holistic manner: as the balance between the fixed fabric tissue –an over determined type of city also called closed city, – and the elements that remain open to interpretation. This is what Jane Jacobs would define

as Smart Street (*The Death and Life of Great American Cities*, 1961): a dissonant and no coherent urban realm, with a high level of overlap between ethnicities and functions where people discuss, collide and at the end of the day reinvent the city.

21.2 > THE MIDDLE EAST: LIMINAL SPACE

Some specific aspects of the Middle East have to do with this perception of the city as an open system. The fact that local population owns a country, being a 12% of the population creates a distortion of what could be understood as public space, being this vacant or unoccupied space a better definition. This social and spatial -specific- situation acts as a starting point for our research.

From 2014, Dr. Prof. Itzel Cruz Megchun and myself have been conducting a series of studies, interviews and site analysis of several locations in UAE (Dubai, Sharjah and Ajman mainly) of specific behaviors of migrant groups of populations in relationship with the public realm

21.3 > APPROPRIATION OF THE LIMINAL CITY: DOMESTICATED LANDSCAPES

Nomadic Shadow is a project by Juan Roldán Martín, Beatriz Itzel Cruz Megchun and Malak El Ghuel, researched and exhibited in the exhibition Change, Coordinates + someone Else³.



Fig 21.1: Nomadic Shadow Slide. Personal photograph by author. 2017.

"Nomadic shadow is an intervention that aims to facilitates the dialog between inhabitants and dwellers to borrow an existing infrastructure. The design will let to mediate the natural flow of inhabitants, rituals and routines. This intervention aims to catalyze how people use the city while shaping the urban semiotic of the city."

Nomadic Shadow. Change, Coordinates + Someone Else.

The video shows a first segment of analysis of these liminal spaces or *Terrain Vague*⁴. Several interviews were conducted as a way of understanding individual and group dynamics in relationship with the sites. Some spots have been used by groups of migrant people to play cricket over 15 years. Most of these matches happen on the day-off day: Friday morning and Saturdays. Hierarchical structures happen as a way of deploying these activities and appropriate the vacant space of the city. Some of these activities happen in a *Terrain Vague*, undefined, public as unoccupied but that, at the end of the day, belongs to someone. The consistency of some these activities on a weekly basis, generates in a way, certain sense of belonging for a part of the society who will never be able to be part of the country as there is no normalized process of naturalization and the access to the land (property) happens in most of the cases in the form of leasing, leaving a little percentage of the land as a free-hold type of real state system.



Fig 21.2: Video Stills. Nomadic Shadow. Personal photographs by author. 2017.



Fig 21.3. Cricket in Terrain Vague. Personal photograph by author. 2017.

The second part of the video explains a project, an idea (or installation) in which the shadow becomes a catalyst for these kind of sport practices.

"The project was focused on a plot of land beside Al-Qasba area in Sharjah (UAE) to focus on the voids created by the place-space. One pattern that was unveiled relates to the formality agreed between users and neighbors. They have a social and tacit agreement about the use of the location, since the players borrow it and transform it to undertake their ritual for four hours. This space is claimed by users and residents that do not have the means, capabilities, or interest in designing a formal space of practice. Memberships are obtained through sporadic discovery of the group, or word of mouth or personal invitation. Members claim their space and command level through seniority and consensus."⁵

A nomadic and changing shadow creates a stationary shadow (marking the 22 yard cricket pitch and the outer circle), marking and facilitating the activity beyond the normal schedule and extending the match in the morning.

The final part of the video analyzes the area of Hamriyah (Sharjah). A former military training plot of land (helicopters training) which has been transformed and appropriated by these sport activities.



Fig 21.4: Appropriation of liminal spaces. Personal photographs by author. 2017.

Over 32 cricket pitches recycling old military helipads. This final large scale interventions establish a new level on the appropriation of liminal spaces in UAE via sport activities. From the point of view of the built environment, the topography is now modified, limits are established, new infrastructure has been added like seating areas, shading devices, storage elements, installation of trash containers, lightings equipment and electric generators...

The added value in Hamriyah has to do with a mixed formula which is not entirely bottom-up as a way of *squatting* the urban space nor a top-bottom operation. It is a formula where both parts (public entities as land owners and final users) share a common goal of taking advantage of the liminal space. Land owners get a benefit via leasing and users have an amazing plot of

land at their disposal. The use of the land is not entirely tyrannical as it has again not tacit but real agreements on the land management. According to non-written agreements, the users with right of playing cricket on this land have, at the same time, the obligation of attending certain duties like trash collection and plowing the fields.

After defining specific aspects of the cities in the UAE, explaining the duality between built environment and liminal city, between closed and open city, we are able to consider this kind of liminal activity as rituals which fill the gaps, establishing different levels appropriation of the in between depending on the consensus agreed among users and built environment.

This is the part of the city that remains, reconfiguring its activities and its footprint according to an ever-changing and shifting city planning. This urban appropriation, are the one that descends -on a weekly basis- to activate the sleeping town through sport activities and social exchange, filling the liminal built environment with their objects and rituals.

21.4 > CONCLUSION > INSTANT CITIES

We can then conclude that these kinds of interventions and rituals, these Instant Cities⁶, have the following characteristics:

- They become temporary elements in space, not meaning to last, with a consistent and with a cyclic pattern
- They are an *a-functional* architectural device
- It is a designed event, with no architectural element involved as permanent structure
- They complete a portion of the liminal space of the city

Although it could be understood as a piece of a temporary city, as another sport activity, this is actually the part of the city that remains, reconfiguring its activities and its footprint independently of an ever-changing and shifting city planning.

This Instant City is the part of the city hidden to the eyes of Giambattista Nolli or Bernard Rudofsky⁷, but is the real city made by the people for the people. This is making cities without architects.

The city that by appropriation (illegal or not), as Ugo La Pietra would say, becomes your own home⁸, through the domestication of the public realm, of the vacant space.

The city is now a domesticated landscape, a tamed nature.

1. Nolli, G. *La Nouva Topografia di Roma Comasco* (ca. 1692-1756) is one of the most classical historical maps of Rome, going beyond the archetypical distinction between public and private spaces, taking his survey and mapping of the built environment into some public interiors like churches or public spaces.
2. “Inviting the user of space to become more a designer and articulator.” Richard Sennett.

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Variations: The Systematic Design of Supports. Amsterdam: Samson Uitgeverij

3. Exhibited as part of the exhibition Change, Coordinates + Someone Else curated by Mobius Design Studio and exhibited at 1971 Design Space, The Flag Island. Sharjah. March 2017.

"It has been this year's DH participants' mission to investigate the conditions of a location and a group of people, "an X", then propose design-driven solutions that address an existing short-coming or uncover hidden potentials that could perhaps support, improve the quality of life, or give voice to their X. This has been nothing short of a challenge; starting points are often elusive, especially if the process requires engaging with others outside one's circle; be it governmental entities, communities that do not share the same language, or individuals that are skeptical of one's motivations. A good place to start, however, is by defining the problem, and employing different research methods to learn as much as possible about one's subject matter.

Design House 2017 continues to ask difficult questions about the city of Sharjah and its residents, provoking reactions by opening channels of feedback to the exhibited proposals. The audience is invited to reflect and share their thoughts and opinions about the validity of the problems/solutions with the designers who continue to develop their research over the duration of the exhibition. This more open format is intended to assist designers in refining their parameters of change based on direct responses from members of the community, and hopes to lead the audience to start questioning their role in igniting change and how they can be part of this investment in people and in place." Mobius Design Studio

4. "Coined by Ignasi de Solà-Morales is interested in the form of absence in the contemporary metropolis. This interest focuses on abandoned areas, on obsolete and unproductive spaces and buildings, often undefined and without specific limits, places to which he applies the French term *terrain vague*. Regarding the generalized tendency to "reincorporate" these places to the productive logic of the city by transforming them into reconstructed spaces, Solà-Morales insists on the value of their state of ruin and lack of productivity. Only in this way can these strange urban spaces manifest themselves as spaces of freedom that are an alternative to the lucrative reality prevailing in the late capitalist city. They represent an anonymous reality." Source: <http://atributosurbanos.es/en/terms/terrain-vague/>
5. From the catalogue Change, Coordinates + Someone Else. Nomadic Shadow. By Itzel Cruz Megchun, Juan Roldan and Juan Roldán. March 2017.
6. Instant Cities is a topic project by Archigram. This group was composed by the architects Warren Chalk, Peter Cook, Dennis Crompton, David Greene, Ron Herron and Michael Webb. This collective initiative proposed several radical (at that time) elements of architecture using the technology as the left motif of their core values.

Among their projects, there are projects like a human-scale Living Pod (an inflatable and portable capsule), but you can also find urban interventions like the Walking City. Besides these technological examples there is one which relies less in the utopian high-tech and thinks about the way or re-utilize existing technology like zeppelins, projection and sound systems; this is the case of the Instant City by Peter Cook: "an airship containing all the cultural and education resources of a metropolis which could land in remote areas giving inhabitants a taste of city life".

This sort of collection of floating devices would deploy their technology on a (so called) sleeping city in order to activate it through different types of activities. The Instant City eventually would leave, leaving a re-activated city.

7. Rudofsky, B. *Architecture Without Architects*, MoMA, 1964. His book widened the concept of Architect beyond the "nonpedigreed architecture", analyzing traditional, vernacular and authorless architecture.
8. "Living is to feel at home everywhere" The Reappropriation of the City. Ugo la Pietra, Pompidou Arts Centre, 1977.

Institution

Srishti Institute of Art
Design and Technology

Country

India

Keywords

drawing; dense urban
landscapes; everyday;
abundance; obsolescence

22. DIFFUSED DENSITIES

Author: Pooja Kaul

Abstract: Indian metropolitan cities are characterized by overwhelming densities of populations. I propose to explore the notion of such abundance through observations in the everyday and diffuse its overwhelming density through a large-scale drawing based installation. The specific arrangement of the installation will have to be guided by a chosen site and the images will be drawn from around the location.

The experience of walking through and around these drawn transparencies, sometimes overlapping sometimes separating should allow multiple entry-points, and allow navigating through the ‘dense’ as a fascinating experience and thus diffuse its suffocating opacity.



Fig 22.1: Diffused Densities. Personal photograph by author. 2017.

"Abundance - a rational, programmed abundance and planned obsolescence - replacing shortage in the first world; destructive colonization of the third world and finally of nature itself. . . The prevalence of signs; omnipresent war and violence; revolutions which follow one after another only to be cut short or to turn back against themselves . . . The everyday, established and consolidated, remains a sole surviving common sense referent and point of reference."

-Lefebvre, Levich¹

ABOUT THE CONCEPT

Indian metropolitan cities are characterized by overwhelming densities of populations - human or of other species, amicable or hostile communities; structures - built or underway, lived or abandoned, sale-able, functional, heritage or obsolete; and behaviours - social or unsocial, mundane or spectacular.

I propose to explore the notion of such abundance through observations in the everyday and diffuse its overwhelming density through a large-scale drawing based installation on layered and transparent fabric.

NOTES ON INSTALLATION

The specific arrangement of the installation will have to be guided by a chosen site and the images will be drawn from around the location (structures, traces, human behaviours and patterns of other overlapping phenomena).

The experience of walking through and around these drawn transparencies, sometimes overlapping sometimes separating should allow multiple entry-points. and allow navigating through the 'dense' as a fascinating experience and thus diffuse its suffocating opacity."

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TANGLED FUTURES

Day 2: Cumulus Sristhi 2017





SECTION #4

FUTURES WITHIN

PART A

CLASSROOMS

& MUSEUMS

Institution

College of Design
and Innovation, Tongji
University

Country

China

Keywords

museum experience
design; phenomenological
observations; shared
experience; customized
experience

23. EXPERIENCE DESIGN ANALYSIS: A SHANGHAI MUSEUM PERSPECTIVE

Authors: Chen Fan and Qian Li

Abstract: As places to provide knowledge, leisure and edutainment with visitors, museums are intended to connect with user experience. However, accompanied with the development of high technology, with which experience of human being, especially emotions, are gradually disjointed. What's more, museums which belong to the same type are isolated with each other. Nowadays, out of the serious loss of visitors, promoting more interactive cultural activities and fulfilling the imagination and the feeling of abundance in cultural institutions are more essential. Therefore, this paper takes Shanghai Museum(SHM) and Cleveland Museum of Art(CMA) as objects of study, in order to find out the shared experience between two museums.

The methodologies used in this research procedure are phenomenological observation, Issue Mapping, antithetical couplet study and reference to literatures. In the discussion part, the paper mainly focuses on the customized experience study based on Issue Mapping. The paper concludes with the observation that the museum is not offering customized tools which can satisfy the multiple needs of visitors. Time availability, knowledge background, expectations, space identification and narration are factors influencing the visitors' engagement, which are not being considered yet.

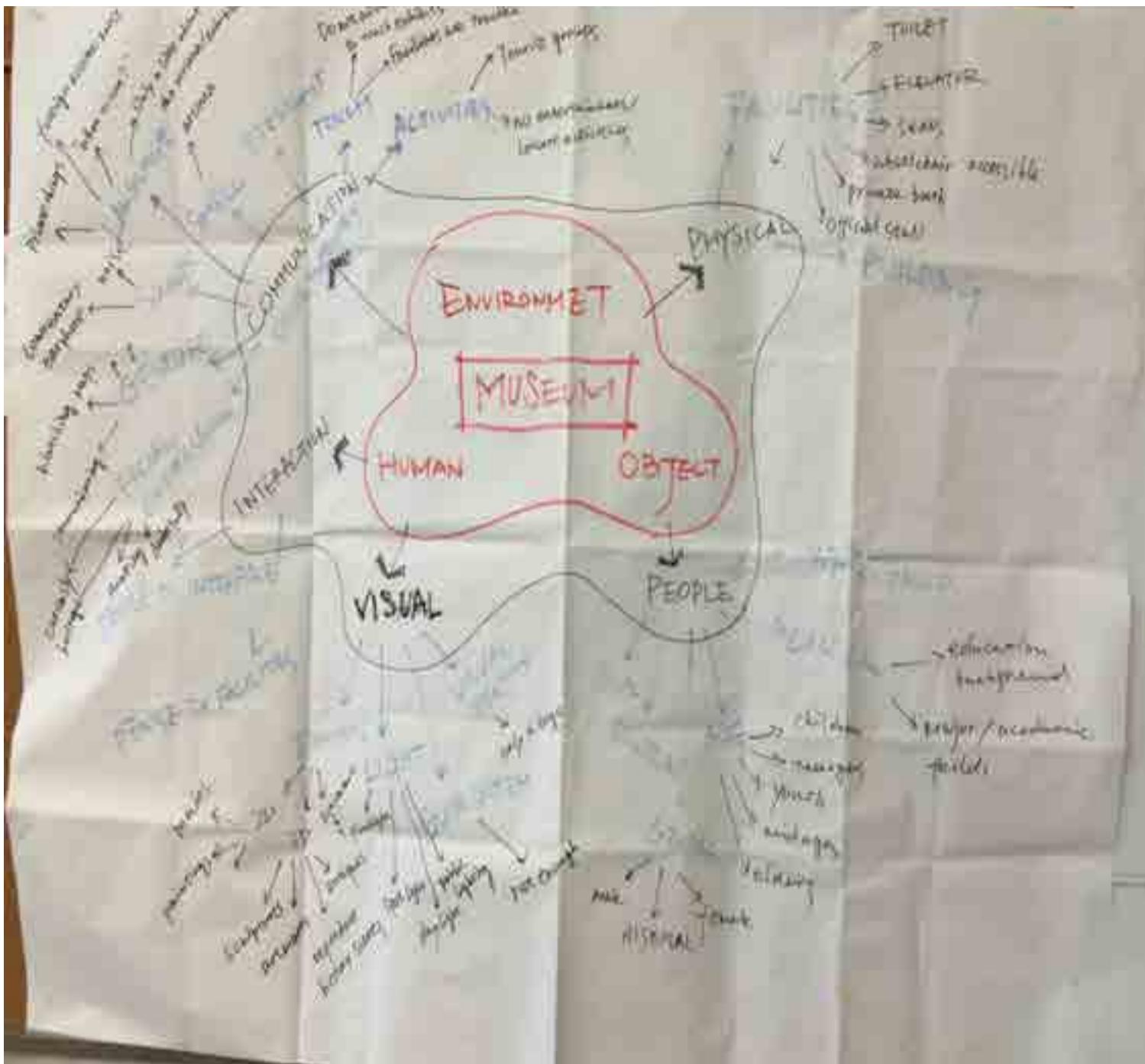


Fig 23.1: Concept Map of Shanghai Museum. Personal photograph by author, 2017.

23.1 > INTRODUCTION: THE SHANGHAI MUSEUM AND THE CLEVELAND MUSEUM OF ART

As a museum of ancient Chinese art, Shanghai Museum possesses a collection of over 1,000,000 objects, about 120,000 of which are precious national-graded works of art. Its rich and high-quality collection of ancient Chinese bronze, ceramics, painting and calligraphy is specially celebrated in the world. In concept, the Shanghai Museum is a space which facilitates experiences and tells stories in order to stir curiosity, emotions and memories.

In order to be one of the world's most exclusive museum and Ohio's significant cultural institution, Cleveland Museum of Art continues to bring edutainment and great art works to the public in accordance with high aesthetic, intellectual, and professional standards since its establishment in 1913.

This paper is going to explore how customized experiences can be generated in museums, taking these two museums as case studies. The paper will then present the processes of

discussion and conclusion during the observation research and analysis of Shanghai Museum. Phenomenological Observation, an experience design observation tool, is thus engaged in this project. In conclusion, it was found that the museum is not offering customized tools to address the variety of needs that visitors have.

23.2 > LITERATURE REVIEW

Chieh-Wen Sheng and Ming-Chia Chen (2010)¹ proposed an argument that visitor studies compromising studies of experience and expectations of visitors are crucial for museums in terms of development, management and nurturing. The purpose of their paper was intended to analyze the experience expectations of museum audience. The main research method of the paper was using texts analysis of comments edited by visitors. Experience expectations questionnaires of museum audience were also used to analyze and develop research results. Five kinds of experience expectations were extracted by analyzing factors after collecting 425 valid returns of a survey, which involved easiness and fun, cultural entertainment, personal identification, historical reminiscences and escapism. In addition, this paper analyzed the audience's preferences for visiting museums according to questionnaire results. At the end of the paper, the authors have proposed some suggestions based on research results. In general, the writers's purpose is clear and the process of thinking is deep and exclusive. However, the types of methodology used in this research are limited. Though demographic analysis was used to explain the results, it is hard to cover most situation occurs in museums. Because the experience expectation is a changing process during visiting a certain exhibition, researchers should trace this kind of changeable situation to receive more real-time evidence but static ones. Furthermore, interview should be added into the research process.

John McCarthy and Luigina Ciolfi (2008)² argued that a dialogical approach to place, people and technology in museums can help renovate engagement between visitors and physical environment. This access has been adapted and developed in response to for a focus on locative experience in interaction design field. In the authors' perspective, this kind of approach emphasizes the key role played by a wide range of relationships in experience and suggests a set of dimensions of experience that help in their interpretations of museum experience: open, relational, narrative, sense making and spatiotemporal. Marcello Carrozzino and Massimo Bergamasco (2009)³ put forward the idea that contemporary museums are much more than places which are devoted to being a space of exhibition of collection and artworks; however, they have transported their figures into a remixed placement considered as a privileged means for interaction and playing a central role in making academic meaning more accessible to mass ordinary audience. They then presented the idea that eye-catching interaction paradigms and updated technology may help when exhibitors are going to make visitors engaged with their exhibition. Immersive Virtual Reality is probably one of the most appealing and potentially effective technologies to serve this purpose, yet, according to the writers' observation and investigation, immersive installations in museums are still quite uncommon to find nowadays. The authors raised a classification of VR installations based on their 10 years' experience in this field, and following an in-depth survey about these technologies and their use in cultural contexts, particularly pointed to cultural heritage applications, based on their features in terms of immersion and interaction.

On the basis of this kind of classification, aiming to offer a tool for framing VR systems which would hopefully suggest indications related to expenditure, usability and quality of the sensorial experience they analyzed a series of live examples, in which they pointed strengths and weak points. In the last part of the paper, writers summarized the current state and the trend of this domain in the near future, identifying the major issues that prevent these technologies from being actually widespread, and also outlined suggestions and proposals for a more pervasive and effective use of Immersive VR for cultural purposes.

In Behavior in Public Places (1963)⁴ , Erving Goffman focuses on daily public interactions of people, especially between strangers. Episode 10 mainly explains the writer's idea of civic inattention, the structure of face engagements, accessibility and leave-taking rights. As well as this, three procedures - initiation, maintenance and leave taking, exist no matter where you visit, and during these procedures interaction between people to people appears differently. The separated details of our daily inattention consist of our whole experience during engagement in a certain placement. Every time we have an encounter with a special person or situation, we are always accompanied by three kinds of experience according to John Dewey (1934)⁵ : aesthetic experience, intellectual experience and practical experience. Aesthetic experience reflects senses of smell, hearing, haptic and so on, it is related to our emotions; intellectual experience matches our ideas and goals in mind, it is connected with signs and symbols; and practical experience is something like pure action, also overt doings.

23.3 > DISCUSSION

METHOD INTRODUCTION

Observation Background: The Phenomenological observations at Shanghai Museum took 18 hours and was divided into 5 observers on different days and at different times. The Observation process proceeded on April 8th, for 7 hours, April 11th for 8 hours and April 4th for 5 hours which covered different weather, events, activities, weekdays and weekends as well. In order to maintain objective research, the observers finished the observation without any subjective judgment. The data and detail was carefully and completely recorded in text, sound and videos. Here the observers used Issue Mapping as an observation and induction tool.

Introduction of Issue Mapping: Issue Mapping starts with pure record from observers. The complete Issue Mapping process includes 5 steps: Description, Interpretation, Analysis, Conclusion and Issue. Description is the pure data cleared from observers, screened and classified with the Observation Purpose. The researcher used Interpretation Step to interpret pure data and add imagination on data. In Analysis Step, the researcher should analysis the reason and the logic in Interpretation Step. The analysis should combine environment, people and objects. The Conclusion comes after the analysis. It combines the elements from analysis and gives out a positive statement. The Issue Step is the key point of Issue Mapping process. It is the end of Observation.



Fig 23.2: Issue Mapping. Personal photograph by author. 2017.

PURPOSE

Concept Statement: In this project, the concept of museum was the first to be put forward. A concept map was used to help for the primary brain storming session. The museum was divided into different layers based on Environment, Objects and Human. It is combined with visual environment, physical environment, people and communication (different kinds of interactions). In conclusion, the museum is a space that facilitates experiences and tells stories in order to stir curiosity, emotions and memories. The space is combined with the Physical Environment and Virtual Environment. The experiences facilitated by the museum can be Aesthetic, Practical and Intellectual as well. The museum stirs different experiences in different periods: curiosity before the visit, emotions during the visit and memories after the visit.

Observation Purpose: The purpose of observation is to understand the original motivation of people and the potential desires behind conscious behaviours. Based on the museum concept, the observation expectation is focused on interaction.



Fig 23.3: Observation Process. Personal photograph by author, 2017.

OBSERVATION AND ISSUE MAPPING PROCESS

Information Quality and Quantity: The first conclusion of observation is about information quality and quantity. Descriptions such as the following sentences are observed:

1. A man is using the touch screen at basement floor near to the stairs.
2. Visitors spending more time reading the short description (Name, period, date) than looking at the object itself.

We can find that the man using touch screen seems confused because the language of the computer system is Chinese. Non-Chinese visitors do not understand what was written. Also, the introductory text is either not totally read or ignored. It is because people will visit the exhibition without having proper or complete context on what is shown, meaning they would not be able to follow the storyline and their experience will be superficial. In conclusion, aesthetic quality and quantity of the information is inadequate for the different needs of the visitors (time availability, knowledge background and expectations).

Children's Perspective: The second conclusion comes from the observation of children's perspective. Descriptions such as the following sentences are observed:

1. A boy is watching other people's phone screens.
2. Kid is playing with the audio guide, dropping it to the floor and dragging it. He is not looking at the artefacts: when standing in front of them, he can only see a wall.

From the above descriptions, we found the boy was not interested with the content on the screen. The boy prefers watching his mother's phone than looking around the museum because this space is boring for him. The museum is lacking attraction and entertainment activities for children. The artefacts displayed cater to an adult point of view, making it impossible for kids to view the artefacts from their point of view (only when they are carried on the arms of an adult). Kids are therefore not interested and try to amuse themselves with the most attractive objects they have access to. In conclusion, the museum is not providing a customized experience for kids. It might antagonise them as future visitors.

DIGITAL TOOLS

The third conclusion is focused on the digital tools layer. Descriptions such as the following sentences are observed:

1. At the courtyard next to the information stand are two panels. Some visitors (Chinese and foreigners) are standing in front of the screen reading the content. On the left side is a wooden panel with information regarding the floors. The title reads "Shanghai Museum" and some Chinese visitors are taking pictures with the sign.
2. Multiple groups of people from different ages listening to the audio guide are seen on the first floors. On the last floors, visitors are holding their audio guide devices on their hands or letting them hang from their arms and shoulders without using them.

In the first observations, people feel more attracted to the screen than to the analogue information panel. That is because digital is more attractive than analogue nowadays.

However, people will quickly lose attention if content is not relevant or overwhelming. The audio guide offers valuable information, but is not able to maintain the attention of the users during the whole museum visit. In conclusion, the digital tools in museum are almost useless: 3 touch screens are placed around the museum. This is not enough for the large number of visitors. Besides, the content is not engaging and interactive enough.

CONCLUSION

Based on the above discussions, Shanghai Museum is lacking customized visitor experience. The museum is not offering customized tools that address the variety of needs that visitors have: time availability, knowledge background and expectations are factors influencing the visitors' engagement. These are not being considered by the museum. Based on the experience and expectation research from Chieh-Wen Sheng and Ming-Chia Chen (2010), the dialogical approach study from John McCarty and Luigina Ciolfi (2008), Immersive Virtual Reality research from Marcello Carrozzino and Massimo Bergamasco (2009), the Shanghai Museum should increase multiple high-technology access ways to engage different visitors by providing customized visiting experience including easiness and fun, cultural entertainment, personal identification, historical reminiscence and escapism.

23.4. SOLUTION

SOLUTION STATEMENT

Offering customized experience to visitors from virtual and realistic aspects is the main concept of solution. The design option connects visitors, museum environment and virtual activities, creating a strong connection between Shanghai Museum and Cleveland Museum. Creating a new system with exhibition layer, communal facility layer and virtual interactive layer between two museums, which can not only satisfy the needs of visitors' customized experience but also enhance the relationship between visitors of two cities, is the solution of this case based on analysis and research.

23.5 > CONCEPT

The design is called The Sleeping Keeper. ‘睡佛长睡，睡千年，长睡不醒；问者永 问，问百世，永问难明’. The sleeping Buddha is in his long sleep for thousands years and never wake up. The questioning person is forever asking for hundreds of centuries but never know the answers. This concept is picked up from an ancient Chinese couplet. The couplet describes an obscure philosophical concept of the behaviours from the questioner and the Buddha, which is a metaphor of relationship between seekers and life. We found this interesting literary expression shows unique imagination of two opposite roles, which is god and ordinary people and has a great reference value for designers dealing with the relationship between two museums.

23.6 > STRATEGY

FUNDAMENTAL ENVIRONMENT

In the Shanghai Museum, for example, our illusion system will separate the areas in the museum with matrix arrangement like points. These points can be divided into three levels, 1) existing collections, 2) activity areas and 3) virtual reality areas displaying information from

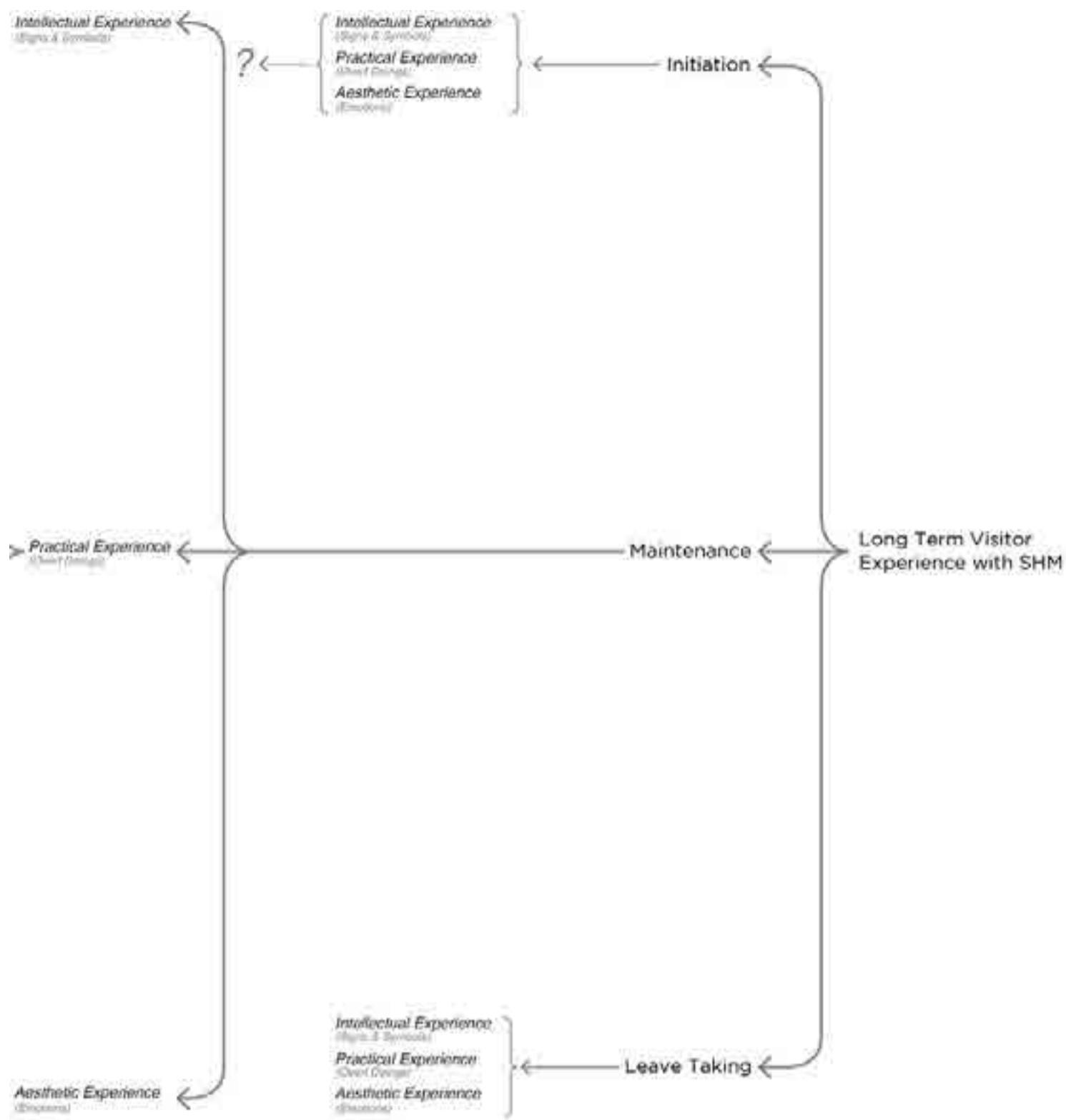


Fig 23.4: Visitor Experience. Personal photograph by author. 2017

Cleveland Museum. There is homogeneity and heterogeneity between these points. Connecting the points are different visiting circulations, which can be easily designed as customized visiting experience or participatory games. Of course, the communal facilities and functional spaces will also be designed as points settled in this system. These points are the controller of visiting experiences.

INTERACTIVE CUSTOMIZED ACTIVITIES

Between the two museums, we hope to connect the visitors to Shanghai and Cleveland through a gameplay. For example, we designed a treasure hunting game with two teams of participants at Cleveland Museum which has two different themes. The participants will leave

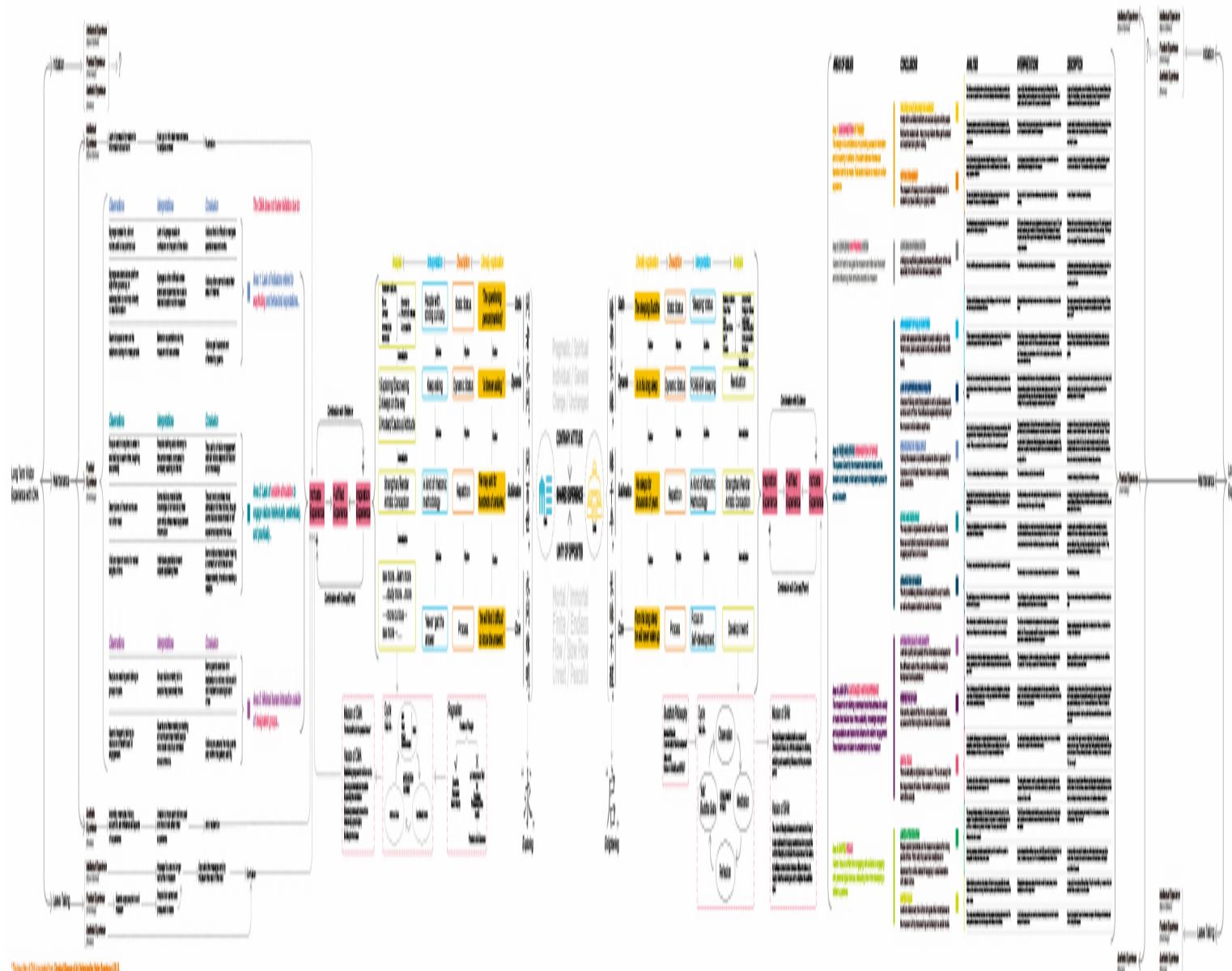


Fig 23.5: Mapping Experience Design. Personal photograph by author. 2017.

game score histories after they finish the games competing with the visitors in Cleveland. During the game process, the participants will firstly use the IPAD-like interactive device to obtain maps and exhibition information. If they choose the game mode, the system will keep asking questions. To answer these questions, the visitors have to find the information of exhibits while following the customized circulation. When they finish the game, they will not only leave their score, but also gain the information of the player in the other museum (if they left) and have the chance to become friends with each other. After the final completion of the game, the winner will get a little gift, encouraging them for the next visit.

In this process, due to the 12 hours-time difference between Shanghai and Cleveland, the Cleveland Museum is closed, while the Shanghai Museum of Art is open, just like the sleeping Buddha in the concept couplet. The visitors in Shanghai Museum gain the information unilaterally from Cleveland Museum by game playing and virtual reality displaying, which is similar to the seekers in the couplet. When the sun rises in Cleveland, the Shanghai Museum falls asleep, making a subtle balance between two cities and stimulating a strong imagination for visitors.

23.7. > CONCLUSION

Customized Experience Design is an indispensable part in the whole process of building and operating a museum. It had to be considered not only in the architecting procedures, but also in the management design. It can also exist in different types of museums. Customized Experience design thinking should have vitality and resilience and able to be changed by time, environment and people. In this case, the imagination and abundance of visitors are enhanced by Customized Experience Design, with which futuristic museums will serve the communities better.

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Institution

University of
Johannesburg

Country

South Africa

Keywords

participatory approaches
in design; urban spaces;
community

24. DESIGNING FOR THE MARGINALISED: UNDERSTANDING THE VALUE OF PARTICIPATORY DESIGN

Authors: Charista Boatwright and Amanda Breytenbach

Abstract: This letter aims to reimagine the future through reflecting on the past by comparing two internationally acclaimed buildings situated in two neighbouring townships in Port Elizabeth, South Africa. Through the comparison, the authors believe that architects and interior designers can change the future of marginalised South African communities by introducing and including participatory planning approaches. Therefore, designers need to respond to a diverse cultural landscape and actively seek design solutions through personal interactions and experiences. In contrast to this ambition, the case studies identified that an architect's personal ambition and design thinking approach could be misaligned with the needs of the community, which could create apprehension toward the design team. This paper shows that by extending design practices to include participatory approaches, communities are inclined to become self-reliant, which significantly improves the living standards of marginalised South Africans. The comparison offers insights and understanding into the deeper opposition between the design team's personal project ambition and the needs of the community and how through participatory design, sustainable and self-reliant community spaces can be created. Through this reflection, the paper aims to imagine the future of design by describing away forward through collaboration, discussion and shared responsibility between designers and communities.

24.1 > INTRODUCTION: UPLIFTMENT AND SPATIAL INTERVENTIONS

Community upliftment has become a significant focus for the South African government in a post-apartheid paradigm. This call for the upliftment of marginalised South Africans has been amplified by various South African designers and architects who believe that spatial interventions have the ability to safeguard community needs and by taking responsibility for community design, designers can champion human development (Vaikla 2014).

This increased focus on spatial interventions that are aimed at uplifting impoverished communities in South African townships, calls upon architects and designers to address poverty alleviation, and doing so, raising the quality of life for many township dwellers. Stock (2013) states that in Sub-Saharan countries, self-reliant communities can often make a positive contribution towards the alleviation of financial strain as well as create job opportunities. Stock (2013) further makes particular reference to the importance of the environment in shaping social chance in Sub-Saharan countries, but also stresses the importance of participatory design approaches in creating these environments. Thus, there is a unique opportunity for designers to become role players in the effort to assist in creating self-reliant communities. However, interviews conducted for this study uncovered various points of contempt between the design teams and the communities which they designed for, resulting in apprehension towards designers and architects.

This apprehension creates a profound tension between various role players and significantly hinders design solutions that could benefit township communities long-term. The paper draws upon the conversations of local community members, employees and designers to highlight how participatory design approaches can incite self-reliance with community members, as well as improve the understanding and relationships between design teams and community members. This paper investigates the community perception of design teams by investigating two different approaches to participatory design, giving insight into the efficacy of these two methods. Furthermore, the discussion presents the study's findings in the form of a series of conversations. The point of these conversations was to assess the effects of two specific spatial interventions in South African townships as well as the attitude of community members towards the design process and the designers, themselves.

Methodology: Qualitative methods were employed for this study which reside within an interpretivist paradigm, which is often used to describe dynamic situations (Badenhorst 2008). Various narratives in the form of conversations were held and documented, which provided the authors with the necessary information to investigate and understand the perceptions of two specific community groups, as well as knowledgeable informants and experts. These individuals were chosen using a purposive approach, with a particular interest in variability within the sample space, with the aim of providing valuable knowledge about the research sites. This investigation was conducted in the form of a multiple case study, in order to perform a comparison between the two research sites (Yin 2009). Thomas (2011,171) believes that interpretivist inquiries are conducive to the process of case study analyses and aids in governing the "process of constant comparisons". Various data collection methods

were employed that included semi-structured interviews, structured interviews, document studies, and observation, all of which were transcribed and coded accordingly to identify emerging themes from the conversations.

To identify these themes, first and second coding cycles were employed, and Saldaña (2013, 207) explains that first cycle coding familiarises researchers with the data, and the second coding cycle develops “a sense of categorical, thematic, conceptual, and/or theoretical organisation” within the coded data. The emergent themes were represented in a Microsoft Office Excel spreadsheet to visually group all the data from each participant. Thomas (2011) stresses the importance of the narrative in a case study and thus, the data will be presented as such.

24.2 > CASE STUDY 1: RED LOCATION MUSEUM

The Red Location Museum is a multiple award-winning building that is situated in the New Brighton township of Port Elizabeth, and is aimed at responding to the developmental needs of the New Brighton people via programmes and events to redress the surrounding community (Red Location Museum 2005). The building forms part of a precinct and would be one of many spatial interventions designed to serve the community of the Red Location district (Noero 2014). The building was initiated through a competition that was launched in 1998, but because of various factors, the first ground-breaking processes only occurred in January 2003, and the Museum was completed in 2005 (Capazorio 2005). It was operational for eight years before members of the community closed it down (Du Preez 2013). The Museum was said to be reopened in 2014 (Williams 2014): however, this never happened, and instead, the area, surrounding the Museum, became uninhabited and unsafe (De Kock 2016), whilst still being non-operational to date.

24.3 > CASE STUDY 2: UBUNTU CENTRE

The Ubuntu Centre is a multiple award-winning community centre which was completed in 2010 in the Zwide township of Port Elizabeth (Findley 2011). The building originated through the vision of two people, Malizole Gwaxula, a local teacher and community leader, as well as Jacob Lief, an American visionary who together established the Ubuntu Education Fund (UEF). The UEF was founded eleven years before the building currently known as the Ubuntu Centre was built. Together the founders wanted to address the poverty, disease and lack of education in the Zwide township and the surrounding areas. The building is situated in the same location as the original UEF site which is currently still in use. However, the original building did not possess enough resources to realise the vision of Gwaxula and Lief (Stoffberg 2015 136), and so the idea of a built intervention was born. The project was commissioned in 2006, and is still operational today, serving a community of 400 000 people within a seven kilometer radius (Qamngana 2016).

The architects from both research sites mention the importance of participatory design, and it is interesting to note the two contrasting approaches. The discussion of the following findings will show these differences as well as the successes of each approach.

24.4 > COMMUNITY ENGAGEMENT

To engage with the Red Location community, the design team of the Red Location Museum made use of a ‘project committee’ to act as an intermediary between the architect and the community members, to oversee the project and offer design inputs. However, Lebowitz (2008) mentions that a project committee is not always representative of an entire community, and often only adheres to the opinion of a small minority. Additionally, the vast majority of community members revealed during structured interviews that they did not know what the purpose of the museum was. Insightful commentary from community members about the expectation of the Red Location Museum, validated the inefficacy of the project committee, as only 29 per cent of the community members knew what the function of the museum would be, and how it could potentially benefit their lives.

In sharp contrast to the Red Location Museum, the architects of the Ubuntu Centre did not make use of a project committee or community leaders to inform the Zwide township dwellers regarding the function of the Ubuntu Centre. The staff members and architect of the Ubuntu Centre collectively took a door-to-door approach in determining the needs of the community, which ensured community members from all social tiers could offer opinions and express sentiments. All of the interviewees, questioned about the Ubuntu Centre, made mention of several critical strategies by staff members to inform the community about the function of the Centre. General perceptions that were tested amongst random community members of the Zwide township revealed that all but one (88 per cent) had the correct expectation of what the building’s function was before it was built, confirming the effectiveness of this approach. All of the interviewees believed that it is owing to the efforts made by the designers from the design team who actively tried to understand and respond the needs of the Zwide community.

24.5 > DEVELOPING DESIGN BRIEFS

Because of the communal nature of the African ethos (Meyer et al 1997), it is essential to include the community members as participants in the brief development phase. Bradlow et al (2011) suggest that the implementation of participatory approaches by which designers and community members collaborate to achieve a people-centred development will cause South African townships to be more predisposed to economic and social stability. In contrast to the Red Location Museum that derived its brief from a government appointed “acknowledged architect, recommended by the Institute of Architects” (Nelson Mandela Metropolitan Municipality 1998), the Ubuntu Centre’s designer derived his brief from the people in the community. The architect of the Ubuntu Centre made a clear and distinct effort to listen to the people and to integrate the viewpoints of the community in the design of the brief. It is also interesting to note the difference opinions of the architects towards communal input. The architect of the Red Location museum mentions: “I am not a great one for upfront community participation...I find the best way of getting people involved is to provoke. I make a proposition, present it and then kick it around” (as cited Mihaly 2014). This would be aligned with why

“...a project can take years to work its way through every group, and at every stage adjustment have got to be made” (as cited Mihaly 2014).

The architect of the Ubuntu Centre took a different approach and a staff member explains: “He never stopped talking to us” and Qamngana (2016) also mentions: “In every very aspect [the architect] was involved”. Gwaxula (Field Architecture 2011, 3) mentions that the architect did not start the design until he had examined all of the ideas that the community and staff members brought forward: “He never came in and said, ‘I think the building is going to look like this and that’, but he was sifting through all the ideas”. The Ubuntu Centre architect noted this bottom-up input by the community members as incredibly valuable in township development, and by addressing the needs of the people, and he believes that one can come to understand the importance of planning with participatory township paradigms.

24.6 > COMMUNAL CONSENT

Tensions regarding the inception of the Red Location Museum date back to the planning phase when residents expressed resistance towards the Museum by stating a clear preference for housing as opposed to the construction of a museum (Du Preez 2013). However, despite the resistance from the community, the construction phase started, and the Museum was finally completed in June 2005 against the wishes of the local community (Du Preez 2013, 2). Intriguingly, one of the participants commented on the resistance of the Red Location community towards the Museum:

The municipality did not ask the people what they wanted. Around their community there is poverty. Basics are needed. And here you are investing millions in a building. It doesn't matter where the investment came from, it does not matter that people gained approval to build the Museum, and it is not the point. The point is that you did not consult. The officials did not ask people what they wanted.

With regards to the Ubuntu Centre, Zonke (2016) believed that it was crucial to get communal consent: “Actually before we started the building... when we got the concept, we went to the community and got the buy-in”. Moreover, the architect mentions: “You know what was also very critical for a community centre like this to be successful, because you know a lot of people have tried this...but you see what was very important was to get the buy-in of the people” (as cited by Stoffberg 2015).

Zonke (2016) also recalls the “cultural celebration” that was organised before the soil was turned, to which the cultural leaders and the community were invited to celebrate and “bless” the site before the building commenced. We purchased a cow, and they actually slaughtered the cow, they prepared African beer and everything. They were also doing the talking, and it was a celebration. To be culturally appropriate we do not want to bring a building over here and we ignore what happens in the community. In terms of their culture and their way of life, you could put it that way...the way of life in the community.

The architect recalls the celebration:

"We had on the site and invited the whole community. It was amazing, and they even had... witch doctors and all sorts, and they did their rituals. They kind of blessed this place and everybody felt that they had a hand in doing it...it was just a very wonderful way of getting started and everybody bought into it.

- Field (as cited by Stoffberg 2015).

Zonke (2016) mentions that the celebrations encouraged ownership within in the community and won the trust of the community, which encourages the community members to have a long-term relationship with the building. He mentions that this is the reason why the community "looks after" the building, and therefore there have been no acts of violence against the staff members or vandalism to the Ubuntu Centre.

24.7 > COMPETITION AND AMBITION

An unexpected theme that emerged from the structured interview sessions was the notion of initiating spatial interventions, aimed at redressing poverty in South African townships, through competition briefs. All of the respondents exclaimed apprehension over the fact that architects focussed on winning a competition rather than serving the community with the building and one of the interviewees explain:

"Red Location was a competition for architects. Thus, the architect who came with the most beautiful design and could actually present and explain - he got the tender, his concept was taken...that encourages architects working against the community not involving the community, and that is where it actually lacks."

Similarly, respondents lamented that the Red Location Museum was aesthetically centred and emphasised the architecture and not the needs of the people and declared their disappointment in the design team in no uncertain terms. This attitude of no confidence in the design team fragments trust in the designer's ability to uphold public consent and to address the needs of the community via design.

24.8 > CONCLUSION: TOWARDS PARTICIPATORY DESIGN

This research has investigated the community perception of design teams by concentrating on narratives from affected community members, to show how participatory design planning can shape the spaces of the future. Many of the findings can inform the planning and design strategies of designers and architects who will be called upon to find the most beneficial solutions to mitigate destitution and promote self-sufficiency in South African townships.

The value of participatory design is not fully understood by designers and architects, despite the findings from various research papers. More attention should be given to inviting township community members in Southern Africa to be a part of the design process. This approach could provide a healthy platform for interaction between designers and people of marginalised areas

to champion resourceful and self-reliant communities. By bringing the lived experiences of these community members into all aspects of the design, communal feelings of apprehension towards design teams can be reduced.

The Ubuntu Centre is a worthy example of the benefits of a thorough understanding between a designer and a community and how this can lead to a successful intervention that promotes self-reliance and community development. Thus, design practices should invest ample time in researching the needs of the community. This research will prove to be valuable in the design process, as well as ensuring that the designers are well equipped to make relevant design decisions that will directly impact township communities. However, it should be noted that the Red Location Museum also made use of prior research, but this only took place after the design brief had been circulated and the winning designers had been announced. Thus, it becomes vital to address community requirements in the brief prior to the design to tackle relevant issues.

While the notion of design competitions is an easy way of collecting a gamut of design solutions, there is much to consider in the creation of a design brief. This process should not be seen as inconsequential, as it will become a major point of reference for interior designers and their spatial solutions. The task of setting up a design brief that addresses township development should be done by a person or team who is intricately involved with the said community, and who has a deep knowledge of the lived experience of the people of the area. Thus, in order for a design brief to be successful, the brief should be grounded in the needs of community members, and therefore participatory planning should also form part of the brief design. These findings are consistent with previous findings of Vaikla (2014) and suggest that designers should develop briefs alongside community members, as in the case of the Ubuntu Centre, to reap the real benefits of participatory planning. This is especially relevant in South Africa as the African ethos, according to Meyer et al (1997), is focussed on cooperation and collective responsibility, whereas westernised ethos places emphasis on competition, individualism and independence. It is also essential to ensure communal approval by not creating unrealistic or skewed expectations amongst a community living in poverty. This study indicated that frustration and broken promises resulted in the community members taking hostile action towards spatial interventions could last for several years. Unfortunately, in the case of the Red Location Museum, this has resulted in the expensive upkeep of an uninhabited and non-utilized space, costing the authorities significant amounts of money that could be put to more constructive use. The nonchalant manner in which designers often still approach participatory design, despite recommendations by various research findings, seems highly prevalent. However, perhaps this is due to the personal ambitions rampant in designers and architects, or even a natural reluctance to share spatial design possibilities. Our findings show extreme apprehension towards competition driven spatial interventions as all of the interviewees were of the opinion that the architects of the Red Location Museum competed with other architects to produce an iconic building, which made no positive contribution towards the Red Location neighbourhood. Designers and architects possess knowledge that can have a significant impact on the lives of those who are affected by these spatial interventions. A deep understanding of the diverse cultural landscape is therefore required in order to meet community and stakeholder requirements.

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Institution

Politecnico di Milano

Affiliated to

Department of Design

Country

Italy

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25. ENVISIONING THE FUTURE: REPORT ON A FIRST YEAR DESIGN-STUDIO PROJECT

Author: Luca Guerrini

Abstract: We can investigate interiors from many perspectives, such as: perception (Arnheim 1974, 1977), psychology (Hall 1966), poetics (Bachelard 1964), fiction (Perec 1998) and – obviously – the history of design. This letter is about how first year interior design students envision the future. This involves a four-month design-studio project, worked on by 60 students and guided by 5 teachers, at Politecnico di Milano in 2017.

Italian designers have always made use of models or mock-ups of interiors for predicting future lifestyles (e.g. the “rooms” at Triennale di Milano since 1936 or Andrea Branzi’s mirrored dioramas). Our students were made to use a similar approach, and design a 1:20 scale model of a 20 m² square room as part of a hypothetical exhibition about how we will live/work/shop in 2027.

To understand the features of space, preliminary work was done on mock-ups of the room. Substantial data were collected about future trends. Several hypotheses were scrutinised. We expected the students to move – in Henchey’s words – from possible (any future) to preferable futures (the best that can be); they moved from probable (most likely to happen) to plausible (that make sense) futures (Henchey 1978). What we found in this young generation is not only imagination and abundance, but also concreteness.

25.1 > INTRODUCTION: WHAT FUTURES? DESIGN AND FUTURES?

In a world that is rapidly changing, the issue of envisioning the future has become crucial. The speed of innovation, particularly in science and technology increases concern and anxiety which reverberates through dystopian scenarios of the future. In this respect, science-fiction plays a fundamental role depicting the gloomiest atmosphere on the horizon in films such as *Blade Runner* (1982), *Brazil* (1985), *Matrix* (1999) *Minority Report* (2002), *I Am Legend* (2007). Whether the topic is genetics, bio-engineering, artificial intelligence, or big-data processing, these mainstream products always show a world population overwhelmed by new technology and social control.

Design is by definition open to the future, confident in the power of technology, optimistic. Quoting Herbert Simon (1969, 55): “Everyone designs who devises courses of action aimed at changing existing situations into preferred ones”. When it comes to long-term perspectives, designers are more likely to envision utopian dreams, rather than dystopian nightmares. However, they usually rely on rational thinking and on concreteness for their visions, rather than appeal to emotions like fear and anxiety, as writers and film-makers have often done.

In the last ten years, an increasing number of design scholars have written books addressing the topic of the future from different perspectives. A short list of those who entitle their book with the word “future” comprises: Norman (2007); Fry (2008); Yelavich and Adams (2014); Ehn, Nilsson, and Topgaard (2014); Ito and Howe (2016); Ratti and Claudel (2016).

The future they envision is as exciting as contradictory. Thinking machines and big-data processing will substantially change our behaviour both at home (Norman) and in the city (Ratti and Claudel). Resilience is fundamental to facing these challenges, both individually and collectively. In this respect, design responsibility rises sharply: as a practice focused on innovation and newness it can really shape our future (Yelavich and Adams). Whether strengthening the dominant economic paradigm (Ito and Howe), or searching for more socially sustainable alternatives (Ehn, Nilsson, and Topgaard), design practice is increasingly becoming social, ethical, and political (Fry; Yelavich and Adams; Ehn, Nilsson, and Topgaard).

25.2 > DESIGN PROJECT: GENESIS

Younger generations addressing the discipline of design may not be aware of these crucial issues. At Politecnico di Milano in 2017, we started a research-teaching activity aiming at understanding how first year interior design students envision the future. This involves a four-month design-studio project, worked on by 60 students and guided by 5 teachers¹. It is an ongoing project we plan to repeat in the coming years.

Italian designers have always made use of models or mock-ups of interiors for predicting future lifestyles. The “rooms” at Triennale di Milano have been exhibited since 1936 (Franco Albini, *Room for a man*): they specifically focused on the development of domestic environment, and have become a constant reference of cultural debate about new trends and new lifestyles. The 14 environments, designed by Italian masters of design (Joe Colombo,

Ettore Sottsass, Archizoom, among others) for the exhibition *Italy: The New Domestic Landscape* (New York, 1972) displayed the inherent conflict between “good design” and “counterdesign” that characterised the cultural climate of the 1970s. Andrea Branzi’s mirrored dioramas have become a distinctive sign of this well-known Italian designer in projects such as *No-stop city* (1969), *Agronica* (1995), *Favela High-tech* (2000), *The new Charter of Athens* (2010). They show endless landscapes, full of goods, relics of the past, animals, greenery as a metaphor of contemporary/future human condition.

In recent years, large mock-ups have been used to interpret emerging topics, in exhibitions organised by the design magazine *Interni* in the courtyards of Ca’ Granda² in Milan. In the glittering atmosphere of the Fuorisalone, topics such as *Design Energy* (2009), *Feeding new ideas for the city* (2014), *A Dream for Tomorrow* (2015), *Material/immaterial* (2017), made the exhibition one major event. Our design studio is deeply rooted in this tradition: we believe that translating ideas into real spaces, makes the process more effective not only with respect to the message itself, but also as a learning methodology.

Martyn Evans states that “design is lacking [...] a structured method for conducting research that informs future-oriented design projects [...]. How [designers] go about researching, hypothesising, synthesising, and manifesting these futures is still very much an art not a science” (Evans 2014, 190-191). The use of concept cars, in the car industry and the role of trend setters in the fashion industry exemplify this condition. Designers’ expertise and intuition are crucial in both cases. Evans underlines the necessity of integrating those skills into “a replaceable research process” leading to reliable visons of the future, especially when they affect the development of new products and services.

At first sight, we could find similarities between interior mock-ups and concept cars. However, while concept cars are experiments to test consumers’ reactions and to inspire the market, interiors mock-ups, at least in Italian design practice, provide an overall perspective on the future: a philosophical and critical interpretation, rather than a market-oriented one.

25.3 > APPROACHES: CRITICAL AND PHILOSOPHICAL INTERPRETATIONS

Following this approach, the design-studio encouraged students to present provocative, controversial, and challenging viewpoints “to create a breadth of insights and spark debate” (Evans 2014, 199). In this respect, the use of intuition was crucial to the learning process, although more structured approaches were adopted, such as “trends forecasting”, “scenarios”, and “mood boards” to shape final proposals.

We can investigate interiors from many perspectives, such as: perception (Arnheim 1974, 1977), psychology (Hall 1966), poetics (Bachelard 1964), fiction (Perec 1998) and – obviously – the history of design. We wanted the complexity and interweaving of these references to emerge from a direct experience of space. Workshops of the School of Design at Politecnico are fully equipped to make models and prototypes. Particularly, the exhibition workshop provides the students with materials to build big mock-ups of interiors. Consequently, we set



Fig 25.1 Step (a): building a mock-up of a 20 m² square room. Personal photograph by author. 2017.

up a learning path in three steps: a) experiencing the space; b) understanding the space; c) testing the space.

Step (a) was building a mock-up of a 20 m² room shaped and coloured in different ways.³ First, students were asked to experience the rooms, to take pictures, to make sketches and short videos. They interviewed each other about the perception and the feeling of the space they had. They were encouraged to suggest activities or events appropriate to the features of space. Afterwards, chairs and a table were provided to check differences between an empty space and a furnished one. Students could freely arrange the furniture to simulate various uses, activities or events. The results of this experiment were then shared and discussed collectively.

Step (b) was making a 1:20 scale model of the room previously built at full-scale for getting a first-hand experience of scaling an object down (or up), usually adopted in any design process. In this case students had to choose one of the spaces (squared, round or rectangular) and find an appropriate subject to be exhibited in that room. People visiting an exhibition interact with space using all senses. In this respect a given space not only imposes constraints upon the design process but also offers opportunities to make the visit experience more enjoyable. Taking into account both constraints and opportunities, students were invited to design comprehensive proposals that were then presented and discussed collectively.

Step (c) focuses on envisioning the future. Our students were asked to re-design their 20 m² square room as part of a hypothetical exhibition about how we will live/work/shop in 2027.

25.4 > UNDERSTANDING LIVING (HOME), WORK AND SHOPPING

Home is a central issue of Interior design. Since its birth in the 1840s in Paris, *l'interieur* (the interior), place of dwelling of the “private individual”, is opposed to the place of work, *le comptoir* (the office) (Benjamin 1999, 19). Home becomes the “casing” for collecting the traces of private life, not only objects but also feelings, thought and personal beliefs of this new social subject. As the 20th century progresses, the concept slowly weakens, both in design theory and practice. Now that middle-class in Western countries seems to be disappearing and the younger generation increasingly experiences nomadic life-styles, the whole idea of home becomes questionable.

Working is a burning issue too. Twenty-five years ago, when Jeremy Rifkin (1995) envisioned *The End of Work* the vast majority of people were unaware of the problem. The combined effects of both globalization and digital innovation were largely still to come. Now they are actual facts reshaping job market conditions in most countries. Designers, as members of the “creative class” (Florida 2002), can actively contribute in shaping the “network society” we live by (Castells 1996).

Lastly shopping. A piece of conceptual artist Barbara Kruger, paraphrasing Descartes, states *I shop, therefore I am* (1987): although the limits of development are largely acknowledged (Meadows et al. 1972, 2005), consumerism is inextricably linked to Western lifestyle. Public awareness of sustainable development, however, has increased in the last decades. Moreover, at disciplinary level, research groups on “Design for social innovation” (Manzini 2015) are at the forefront in fostering sustainable consumer behaviour.

The challenge of the design-studio project was to present these crucial issues to a class of “digital natives”, who “have spent their entire lives surrounded by and using [all the] toys and tools of the digital age [and for whom] computer games, email, the Internet, cell phones and instant messaging are integral parts of their lives” (Prensky 2001, 1). Therefore, an appropriate approach needed to be found, not only to introduce the topics but also to organise data collecting and to direct the design process.

We put the time horizon at ten years for we wanted the students envisioning a near future: a condition they could think about as part of their life. Within this time frame, reliable information is available about crucial topics such as demographic trends, social composition, economic development, emerging technologies, environmental and climate change, particularly in Western countries, which limit the geographic extension of this exercise. On the one hand the design studio aimed at giving answer to concrete issues, already at hand in the present, on the other we expected the students to be bold in exploring innovating solutions.

The class was divided into three groups – about 20 students each – exploring the topics: living, working, shopping respectively. Desk research, especially on the internet, provided substantial data. Future trends were identified, discussed and assessed by the students themselves and with the contribution of assistants and teachers. Several hypotheses were scrutinised to provide a sufficient number of topics to be developed by smaller groups. Students were then divided in fifteen groups of three. Each group chose its assignment: seven of them developed proposals about living spaces, working and shopping ones were preferred by six groups respectively. Proposals were completed in one month. Required final outcomes were a 1:20 scale model of the space, technical drawings, a ppt. presentation and a video showing the envisioned scenario.

Although the teachers, particularly the author, pushed for a conceptual approach to the topic in the line of Italian masters of design, the students preferred focusing on concrete issues about living, working and shopping. Consequently, final proposals have been designed as real spaces to live in rather than as art installations putting the future into question.

25.5 > MAKING THE FUTURE REAL

Suppose this hypothetical exhibition took place, what picture of the future would it reveal? That of a field – we may say – open to exploration and to discovery, certainly not that of a dystopian nightmare. Many proposals may appear incredibly naïve or lacking technical competence, as they are the result of a first year design-studio, but they show that, despite concerns and anxieties, the future may be a nice place to live in.

With respect to living spaces, the proposals vary from minimalist micro-environments for solo nomadic workers to large co-housing solutions – the inner space multiplied by mirrored dioramas. The majority of dwellers are individuals or couples, for the students designed these spaces as part of their own future. Larger families are rarely taken into account. All the proposals focus on enhancing social interaction: it can be designing new rituals, such as that of sitting around a table according to their own culture; making use of digital devices or even naïvely shaping furniture to become cosy. Home environment is warm and colourful, all materials recalling nature are welcome, provided that they are environmentally sustainable. In this respect although dwellers' lifestyles are changing and becoming more global, Western home values still persist in young designers' minds.



Fig 25.2: Living 2027. Green house: an eco-friendly living room with hydroponic cultivation (Filipp Baldo, Martina Fregoni, Marco Muolo). Personal photograph by author. 2017.



Fig 25.3: Living 2027. A hull full of green: a greenhouse living room enhancing family interaction (Andrea Corallo, Stefano Vavassori, Andrea Cerini). Personal photograph by author. 2017.



Fig 25.4: Living 2027. Essenza: micro-living for nomadic workers (Alessia Orizio, Alessandro Meraviglia, Simone Savio). Personal photograph by author. 2017.

Working spaces are more problematic: on the one hand, it is hard to metabolise such a rapid change, on the other office design archetypes are difficult to remove. The majority of the students envision large co-working spaces as they are already experiencing these environments. They focus on usual office issues such as noise or lacking privacy but the outcomes rarely go beyond better designed tables, chairs or screens, the use of neutral colours and of soft lighting. Mixed-use environments (e.g. home-office and workshops) suggest more interesting solutions, for the students can integrate office design issues into a bigger framework which stimulates creativity. At any rate, none of the groups have designed working environments recalling the boring standardised atmospheres of the 20th century: although it raises concern, work will be abundant and enjoyable in their view.

As for the topic of shopping, students seem much more confident with it. They are expert consumers on the market both the real and the digital one. Consequently, their proposals are carefully targeted. Whatever they focus on: farm-to-table food, online shopping, book selling, or luxury goods, they address central issues that stimulate discussion. The challenge is to show the complexity behind these topics in a space – which is probably a limit of the exercise itself. Most of the design issues are procedural or operational, in fact they belong to Service design. Nonetheless the range of design proposals, rather than the outcomes, demonstrate that sustainable consumption captures and stimulate the students' imagination.



Fig 25.5: Working 2027. Reload: the office as an in-door garden (Christian Cassani, Mattia Corbetta, Maria Mascher, Elena Spinelli). Personal photograph by author. 2017.

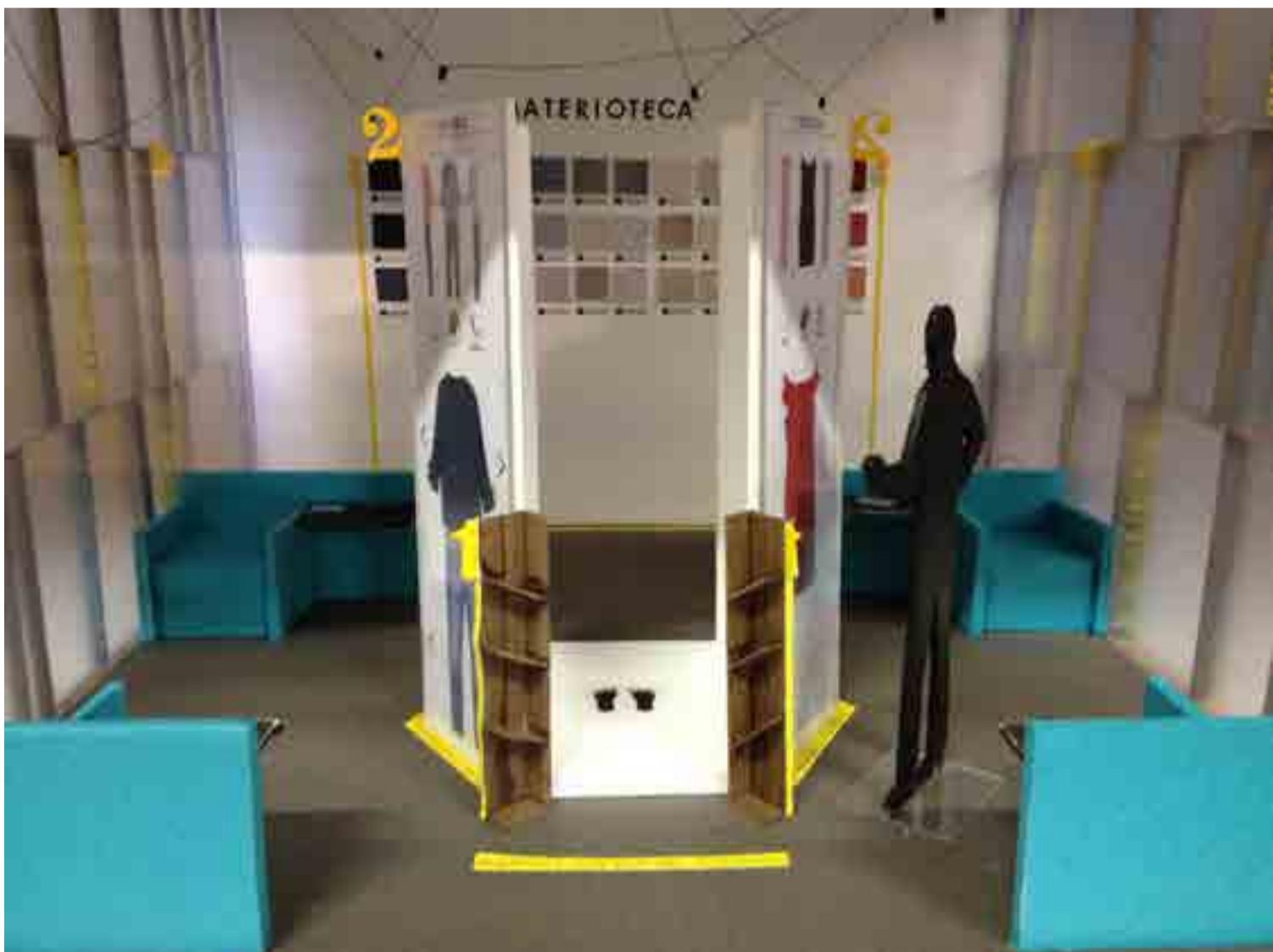


Fig 25.6: Working 2027. Tailor 2.0: a proposal for digital craftsmanship (Melanie Merizalde, Elisa Lazzarotto, Alessandra Tardanico, Giorgia Leone). Personal photograph by author. 2017.



Fig 25.7: Shopping 2027. Login: re-targeting or the hidden power of persuasion of the internet (Elisa Gazzola, Francesca Maggioni, Sonia Morosato). Personal photograph by author. 2017.



Fig 25.8: Shopping 2027. Buy/Eat/Enjoy Local: customised selling of farm-to-table food (Livia Accolla, Federica Piazzì, Valentina Torres Herrera). Personal photograph by author. 2017.



Fig 25.9: Shopping 2027. Luxury taste: selling strategies for luxury food (Luca Amoroso, Margherita Dallaiti, Giorgia Piacentini). Personal photograph by author. 2017.

25.6. CONCLUSIONS: DIGITAL AND NATURAL ENVIRONMENTS

There are two issues that cross all the design proposals regardless of the topic, that are bigger than any others. One is about the use of digital technology; the other is about the role of the natural environment. Their complexity certainly exceeds the limits of a design-studio project, nonetheless as far as envisioning the future is concerned, they lie behind the surface of any design proposal. With respect to the two issues students react contradictorily: the natural environment is naively represented by greenery or by any natural material they can use for designing the space. Nature not only has to be considered within the design process, but also must be perceived. Digital technology is part of their life, no matter if it is shown or hidden, it is there when needed. At home, in working spaces or in shops digital technology suggests new solutions that students can also prototype. It is already a tool at hand.

We expected the students to move – in Henchey's words – from possible (any future) to preferable futures (the best that can be); they moved from probable (most likely to happen) to plausible (that make sense) futures (Henchey 1978). What we found in this young generation is not only imagination and abundance but also concreteness.

1. The Design-studio is directed by the author, with the help of prof. Rodolfo Maffei (Art Historian), prof. Daniela Maurer (Product designer) and assisted by Alessandra Di Virgilio (Interior designer) and Valentina Bisi (Architect).
2. Ancient hospital of city, now hosting University of Milan, the building is a jewel of 15th century architecture designed by Filarete.
3. We analysed four shapes: square, round, rectangular 1 (5 x 4 m) and rectangular 2 (10 x 2 m), height is always 2,7 m. The perimeter of the room is made of rectangular boards 1 meter large and 2,7 meters high, painted white on one side and black on the other. We made experiments with totally white or black walls, and alternating the colour of walls or of the single boards along the perimeter.

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Institution

Arch Academy of Design

Affiliated to

University of Rajasthan

Country

India

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crafts

26. ARTISTIC EDUCATION IN MEDICINE

Author: *Malu Dias Brandao Prates*

Abstract: “The creative scientist needs an artistic imagination.” (Mark Plank 1999). This quote highlights the role of the arts and creativeness in the field of science. Arts with medicine seem to be two distinct modes of learning and practice. However, arts and crafts have played a part in the ideation and development of medical solutions. Imagination leads to innovation, and such a traditional field like the medicine can benefit from the interaction between these areas. This paper analyzes examples of artistic techniques being used as inspiration for improvements in the health field. The aim is to propose the inclusion of artistic education into the curriculum of medical schools. By practicing their artistic skills, medical students are more fully developed to have an innovative approach towards solutions to medical problems. The research collected posits different examples of physicians and scientists that took their groundbreaking ideas from their knowledge in arts and crafts. It intends to propose the use of arts and design education to medical students, and highlights the importance of the guidance from creative professionals to them.

26.1 > INTRODUCTION: THE CASE FOR ART IN MEDICINE

“The creative scientist needs an artistic imagination” (Planck, 2011). This quote highlights the role of the arts and creativity in the field of science. Although the field is rarely linked to art education, contemporary researchers are opening their eyes to the importance of the arts and design in the development of medicine. “Design has an inventive talent: This involves problem-solving and creativity... There does not seem to be a field where design is more necessary or useful than in medicine” (Holzer 2007).

In traditional medical schools, students are usually confined in classrooms, memorizing a large amount of content. The memorization of content is important, but critical thinking and analyzing the subject are factors that can make a great doctor. I noticed, for example, the bold decision of the physician and physiologist, Walter Alvarez. His son, Luis, was a science-inclined child, the kind of child who is usually sent to elite high schools. Instead, Luis was sent to an arts and crafts school, where he learned to work with wood and industrial design. The result? A Nobel Prize for physicist Luis Alvarez, years later. He attributed his success to an unusual ability to visualize and build almost any type of experimental apparatus he could imagine (Alvarez 1987). Gathering analytical and artistic skills together can improve the ability to lead to problem-solving thinking.

26.2 > WHY ARTISTIC EDUCATION

“Art is intrinsically ‘a device of experimentation’” (Dewey 2005: 54). Through the methods of the creative process and design, one can expand knowledge beyond anatomy books. Arts and design are mainly interdisciplinary areas. They basically involve all STEM fields (science, technology, engineering and math), and are vital to any product development. The improvement of medical solutions may be contained, in part, in the interaction between medicine and the arts. I considered that, despite diverse, the design methods (de Löbach, Archer, Bonfim, among others) present a similar structure:

-
- Problem: identification and definition of a project need / opportunity.
- Data collection: collection of theoretical and market information and, subsequently, analysis.
- Generation of alternatives: definition of concepts.
- Selection of alternatives: analysis, selection and testing of the best alternative.
- Product development: production.

The knowledge of this structure allows professionals and medical students to use artistic techniques to solve medical problems. The physician’s creativity should be directed so that both his experience with medicine and art are related and result in practical, useful and feasible solutions for his area. Fayga Ostrower defines the need to “create” as:

To create is to be able to relate accurately. Or better yet, creating is relating to adequacy. The limits referential allows in relationships to use the sense of proportion, if we evaluate the correctness in what is done. If for some reason we had to establish a single conditional qualification for what is creative, that qualification would be that of adequacy, it would not be innovation or originality. (Ostrower 1977, p.163)

The adequacy of the knowledge of the two areas can generate satisfactory results. Some medical and artistic professionals have developed projects with each other's support. Collaborations funded by the Wellcome Trust medical research charity and the Rhode Island / Brown University Design School course on the concept of Medical Risk Communication are two contemporary examples of artists, designers and physicians working together. However, it is not about doctors and artists working together, it is about converging the two talents into a multitasking professional. But to improve the medical field, one must abandon the left-brained scientist versus the stereotype of the right-brained artist. The more this stereotype is reinforced, the more polarized is the relationship between arts and medicine.

26.3 > THE DOCTOR-CRAFTSMAN

According to the Art Institute of Vancouver, being creative or artistic "does not mean you know how to draw or play an instrument. Being creative is a way of thinking, a way of seeing the world." The way "artists and designers reformulate the issues that can guide a project, rethink and redesign systems at its base "(Maeda 2013) could be an inspiration for physicians who wish to improve and develop their own practice.

Weaving and sewing skills and the raw material, for example, have been explored by many surgeons. Dr. Alexis Carrel is well known in the medical field as a prolific inventor. Not only did it open the way for organ transplants with the "infusion pump", but also invented a procedure that led to his Nobel Prize in 1910: the "vascular suture triangulation." The idea of the innovative sewing procedure was based not only on Carrel's profound ability as a surgeon, but on his tailoring and embroidery skills:

Lyon was the global center of the lacemaking industry. Carrel's mother owned a lace factory, where women produced fine lace, using tiny needles and fine silk threads. Carrel was familiar with the technique and was convinced that it could be applied to the suture of blood vessels. While completing his medical studies, he practiced embroidery with his mother until he became a proficient lacemaker. He graduated in 1900 and joined the department of anatomy of Lyon, where he obsessively conducted experiments on animals. He divided and repaired arteries and veins, using fine needles and lines. It achieved memorable, unique results that were published. (Levin 2015: 832)

The invention fit fine lace needles and silk embroidery yarn for use in delicate surgery. The triangulation technique has been perfected since 1900, being widely used in World War II, and is still used today.

The surgeon's knot used at today's surgical points is a simple variant of the reef / square knot, one of the key nodes for macrame textiles. Its effective ligation has been related to faster healing of wounds. The knot is used in hospitals as well as in clothing or jewelry.

In addition to stitches and knots, the color also attracted the attention of other doctors. Dr. Alexander Fleming used to manipulate different microorganisms in the microscope,

creating human forms or landscapes, using different colored organic materials. This very unique pastime has accidentally led to his greatest discovery: penicillin, the world's first antibiotic.

A more recent example, Franz Frequenthal, a Bolivian cardiologist, began to develop an occluder (device that assists in cardiac surgeries) in 2002, now patented under the name Nit Occlud. The product is similar to a tiny top hat and is used to block a hole in a patient's heart. Most standard occluders are made on an industrial scale - but the Frequenthal version is too small and intricate to be mass-produced. He then enlisted indigenous craftswomen from his country to knit them by hand. Its delicate weaving made with a high-tech nitinol wire (a nickel-titanium alloy) has saved hundreds of lives in one of South America's most economically challenged countries.

These stories are striking examples of how the interaction between arts and science can produce ideas that are functional, useful and / or aesthetic. Creativity is often repressed in "conventional fields." When talking about his design workshops for medical students, Dr. Bon Ku noted in an interview with Doctors Who Create website that "in the design curriculum there is very little traditional didactics and it is very practical and interactive. Unfortunately, in contrast, the traditional medical school curriculum consists of sitting in a classroom memorizing huge amounts of content " (Ku 2015). Doctors are rarely rewarded for their creativity in everyday life. But the results of a creative professional, regardless of their field, are often superior to conventional ones. In an article on The Conversation, the reviewer of Cognitive Psychology, David Pearson noted that:

"Psychologists recently conducted a comprehensive review of the extent to which Nobel Prize winners in the sciences, members of the Royal Society and US National Academy of Sciences and members of the US public reported engaging in artistic and craft activities. Members of the Royal Society were almost twice as likely to report engaging in artistic and craft activities than the general public. The prominent Nobel Prize scientists were nearly three times more likely to report such activities "(PEARSON 2016)

Many prominent scientists are involved in some artistic activity. This combination of skills usually produces innovative design solutions, such as those of Dr. Carrel and Dr. Fleming. As professionals in the arts field, it would be enriching to be able to teach our discipline in different fields, bringing design solutions to those who rarely leave the traditional education method.

According to Robert and Michele Root-Bernstein, "Harvard physicians at the University of Pennsylvania and other major medical centers are trained by actors to interact humanely with you as a patient and can learn to observe their symptoms more closely by teaching themselves how to draw, paint or photograph, or through art courses. "(Root-Bernstein 2009).

In addition to the example of the aforementioned Universities, some programs specifically focused on the teaching of handicraft techniques stand out:

In Canada, Dalhousie University in Halifax has maintained a medical humanities program since 1992. The program encourages medical students to participate in extracurricular activities such as weaving, choral singing and visual arts, with the goal of “developing empathy and creativity”. Similar options are available for medical students at the University of Alberta and the University of Toronto. (Barton 2015)

It is clear therefore that the interaction between medicine and the arts is being encouraged nowadays. The simple practice of working with hands in a trade can produce excellent results. Perhaps the chemical nature of the color blending or the repetitive math behind embroidery can drive thought to unexplored areas. Even if a person does not master the technique, knowledge of their practice and function alone can initiate the development of new ideas, such as those of Dr. Alexis Carrel in the 19th century or Dr. Freudenthal in the 21st century.

26.4 > OUR ROLE AS EDUCATORS

Keeping in mind the results History has showed, and the rising incentive of prominent universities, those involved in art and design education must revise their role as knowledge vehicles. We can make a difference by teaching our field to those who already aim to work in an agency or art gallery, that's for sure. But we have more reach and possibilities if we go beyond our comfortable, arts-grounded classrooms.

Design is praised for being interdisciplinary. So design teachers, professors and professionals can only improve the field when they take their knowledge to other students. In medical schools, design is rarely contemplated. We can afford to dream of empathic, creative and multitasking physicians if the ability to see the world through a creative, imagination-oriented lens is taken to medical students.

According to Fayga Ostrower:

A chemist can be creative in chemistry because he asks his questions in terms of chemistry and not perhaps in terms of alchemy. However if this chemist sees nothing more than chemistry, if all his interests and also life contents are summarized almost exclusively in problems of “specialist”, specializations within specialties, in fact he will experience a huge reduction as human potentialities. And no matter how great his talent and his efficiency, this reductionism can even deplete the sense of creativity he has in professional work. (Ostrower 1987, p.38)

Therefore, the path for a more comprehensive medicine may lay on the ability of its students to embrace their creativity. Through contact with crafts, design processes, art theory and observation (to cite a few activities), these soon-to-be professionals can benefit from the broad reach of possibilities this new field can offer- and we should be their guides and mentors in this tour.

From groundbreaking technologies to more relaxed and focused professionals, arts and design can encourage the medical field to embrace its many peculiarities and work with them in an innovative way. We can transform (and save) lives.

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Institution

Srishti Institute of Art,
Design and Technology

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India

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27. CURATING A MUSEUM OF THE 'SELF'

Author: Sudebi Thakurata

Abstract: The fear of uncertainty, loneliness, and imperfection create a sense of apprehension and anxiety. The illusion of permanence often governs behaviour affecting others' well-being. The curatorial work referred to in the paper is an attempt to design the purpose of life in the form of a museum of self, curating what the participants want to remember of their lives and how they want to be remembered, contemplating on impermanence situating themselves in an embodied experience. Drawing upon the aspects of emotional learning in the design for education, this paper makes visible the apparent shift in the perception of bodily death and decay amongst the participants and its theoretical implications.

The pedagogical design allowed the same person to be the curator in the present, of a collection of moments/objects/memories/insights of their past for a future audience, the future 'self' while also extending the definition of self 'beyond the individual': the past 'self' a collective of 'selves' from whom they have inherited the present, and the future 'self', a collective of 'selves', non-existent in the present. The design was an attempt to make sense of one's life, with the lens of death, the museum taking the form of a 'blog', a 'web log' of explorations of multiple media and material of their times.

27.1 > BACKGROUND

A significant challenge of 21st century educational settings is the need to serve diverse sets of students, where diversity spans across culture, context, experience, socio-economic backgrounds, ability, motivations for learning, learning styles and needs, which also include Socio-Emotional competencies. Learning does not happen in isolation for a learner, but in direct or indirect collaboration or interaction with others. In design education, this seems all the more important not just for the educator but for the learners as well, as the users of design, or the audience of a story, are diverse. This transforms emotions into facilitators or obstacles for engagement with the learning processes which, directly influences performance and the overall well-being. The connection between academic performances and social and emotional components has been the area of research by many. Contrasting viewpoints emerge as a part of this area of research, where the extent to which the promotion of Socio-Emotional skills actually can be correlated to the improvement of behavioural and academic outcomes, is questioned also (Durlak et.al. 2011).

Nonetheless, the idea of competence being described as abilities to 'generate and coordinate flexible, adaptive, responses to demands and to generate and capitalise on opportunities in the environment' (Waters, 1983 as cited in Durlak et.al. 2011, 406) and the description of Social Emotional Learning as the 'process of acquiring core competencies to recognise and manage emotions, set and achieve positive goals, appreciate the perspectives of others, establish and maintain positive relationships, make responsible decisions, and handle interpersonal situations constructively' calls for exploring various dimensions of socio-emotional and thereby behavioural aspects of and in learning. This can probably be substantiated with the recognition of the proximal goals of Social Emotional Learning programmes as the cultivation of five inter-related sets of cognitive, affective and behavioural competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision making (Durlak et.al. 2011, 406).

27.2 > HUMANISTIC PERSPECTIVE IN THE PEDAGOGY OF DESIGN

A significant part of the content or context of what is taught, involves understanding the behaviour of people. My focus on both content and the design of it have been in understanding the difference in experiences by different people in similar conditions. To be able to acknowledge, recognise, accept and attempt to understand the differential experiential perspective has been particularly interesting to me, as the idea of gaining empathy, a central aspect of design education, to me, does not necessarily mean an agreement with the idea but an acceptance of the existence of it.

Experience is a cover-all term for the various modes through which a person knows and constructs a reality. These modes range from the more direct and passive sense of smell, taste and touch, to active visual perception and the indirect mode of symbolisation... Emotion tints all human experience, including the high flights of thought (Tuan 1977, 8).

The element of symbols, integral to stories, naturally brings the idea of story as a pedagogical tool to address the socio-emotional-behavioural aspects of learning making possible the seamless journey between the self and the world which not just helps in understanding multiplicities of perspectives but also builds resilience which I have seen through my embodied experience as an educator and storyteller.

Socio-emotional-behavioural learning is context based and therefore the context of the society, the world, the individual and the setting in which learning is happening: are equally important aspects to be considered. In keeping with Dewey in 'Reconstruction in Philosophy' (1920), the preservation of the past experiences differentiates a human being from the lower animals. The idea of each occurrence in the world being charged with echoes and reminiscences of the past and each event as a reminder of other things for human beings make them remember, preserve and record the experiences. The recollection of the past does not happen because of itself but because of what it could add to the present. This theory of personal interest and memory having a deep connection implies the primary life of memory being emotional rather than intellectual and practical (Dewey 1920 as cited in Goodson et.al., 2011, 113). Narratives, hence, can act as pedagogic sites where the meaning making and meaning imparting power of the human experience can be traced. This work, primarily, has been designed using narratives as pedagogic sites and this essay is an attempt to trace the journey of an experimental design of a learning experience that had experiential perspectives of memory and orality as narratives, as key aspects in understanding the journey of the learners.

2.3 > DESIGNING THE EXPERIENCE

The curatorial work, is located within a unit designed and taught under the thematic umbrella of 'Body and Context' with the sub-theme of 'Body as Illusion', which is a part of the Foundation year programme at Srishti Institute of Art, Design and Technology, Bangalore. Learning activities, here, generally are designed through creation of an inquiry, by situating them in a certain context under broader themes which are fairly open-ended, flexible and fluid, capable of being interpreted through diverse and often seemingly contrasting perspectives. Body being an agent of knowledge construction, production and consumption, and being instrumental in recognising both possibilities and limitations of being able to experience the world, appeared to have the pedagogic potential for contemplation on our own behaviour, constantly reminding ourselves of and hence accepting the impermanence of this agency. Among the multiple aspects through which this exploration was designed, 'time' as a lens to view the 'self' seemed relevant, as the notion of impermanence is directly linked to time.

The medium of letter seemed to be almost an obvious choice, to journey between a 'monologic' dialogue and dialogic monologue. It also allowed to re-define the forms of letter in a social media driven, instant communication laden, lonely world where fear, anxiety, apprehension seem to be on the rise, deeper connection among selves being on the decline, with self-directed or corporation-driven media catering to exploitation of vulnerabilities and insecurities, while multiple indicators of a scary future loom large in systems.

But the question was also how does one perceive or even experience the ‘self’? Does our way of looking at our self and thus the world change when we realise the concept of ‘death’? The objective of my work was to never look at death in a negative, detached, fearful or even in an abstract way, but to contemplate on or celebrate life. To trigger these conversations, the students read articles from Buddhist philosophy, writings by Alan Lightman, Rilke, Richard Dawkins, Alan Watts, Sherwin Nuland, children’s literature such as German ‘Duck, Death and Tulip’, British ‘Sad Book’ , Japanese pop-up book ‘Little Tree’, Danish ‘Cry, Heart, But Never Break’, ‘Thea’s Tree’, ‘The Heart and the Bottle’ or ‘Magic Box’ and Bhutanese, contemplating on death five times a day, indicating a relationship of happiness with the contemplation of death, contrary to our assumptions of death being equal to sadness.

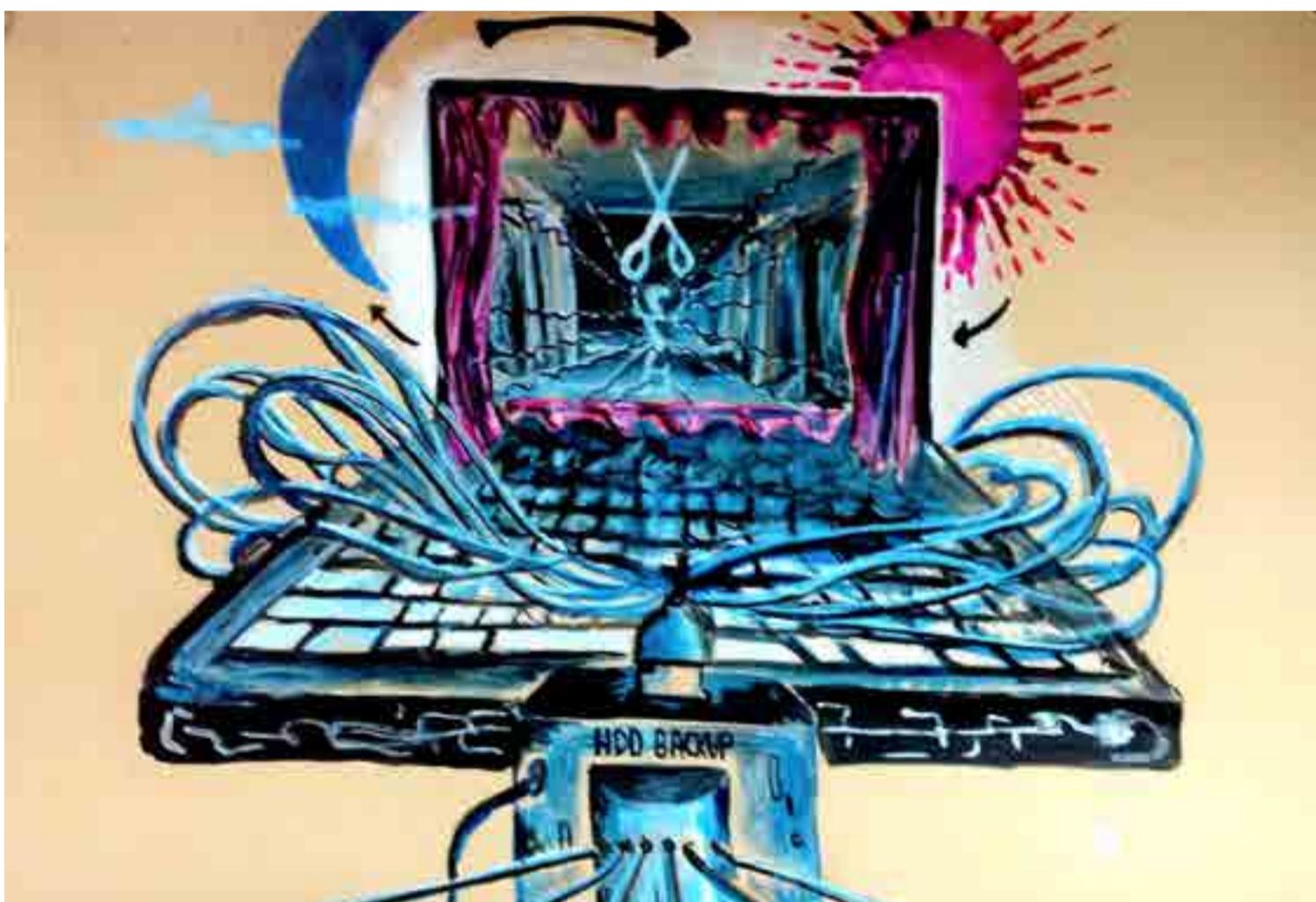


Figure 27.1 Me as a Museum. Personal photograph by author. 2017.

27.4 > DESIGN PROCESS

This unit was facilitated by immersing the students into different ways of lucid self-explorations which were embodied or lived memories from their lives involving discussions and brainstorming using learning tools such as idea walls, jigsaw readings and circles of conversations as well as ideation processes to identify their ‘muse’ for curation of memories in their own museums. Students analysed photography’s capacity to mediate between life and death and write a letter to the future following which they constructed frames through which they circumscribed the content and critiqued each other’s frames for their ability to communicate meaning.

The explorations then shifted from a direct, exact way of representing what is out there, which photography claims to do to the acts of representation to more symbolic ways. The students who claimed to have grown up with books, began to make books, curating their experiences and insights from their own lives, preserving the important and significant life lessons that they have acquired.



Fig 27.2. Museum of Me Blog. Personal photograph by author. 2017.



Fig 27.3: The Blog of my Life. Personal photograph by author. 2017

The last phase of this exploration was done through the digital medium, along the lines of the Godfather of Blogging and 'essays', Michael de Montaigne, who proposed the idea of essays as attempts to make sense of one's life. The fact that a lot of his explorations of the self were through explorations of death, made him extremely to this course. The design of the museum was indeed an attempt to make sense of one's life, with the lens of death, the museum taking the form of a 'blog', a 'web log' of explorations of multiple media and material of their times.

27.5 > USE OF ORAL NARRATIVES AS STORIES

The idea used in the pedagogic design was what is explained in the work done by Guajardo et.al. In the study, the significance of personal narratives as a source of Oral history is talked about, where the entire community serves as a text to be narrated and interpreted. The inquiry process is considered as an instrument for change and also the complex process involved in the ability to author oneself is recognised as one that yields great power. This also identifies the observed being a part of the observing process, where the act of putting oneself in the middle of the text shifts power dynamics. Reflection and dialogue are the two crucial factors in this entire process, where story becomes data, reform becomes 'reculturalisation', consumption of stories shifts to production of one's own literature, leading to creation of new knowledge while fostering new relationships, while strengthening one's identity and developing ownership. The power of this process lies in the positioning of story as an asset where stories range from personal to organisational to community and this asset can be capitalised towards making learners and teachers as active participants in learning. There were several aspects that come out as significant in terms of understanding the methodology. The need of a context in terms of socio-political-historical aspects, in which an educational setting is situated, is talked about which was in alignment with the Ecological Theory. The idea of human ecology is suggestive of the conception of environments to be inter-related at various contextual levels, from the micro to the macro-systems, where each level of context and the participants in those contexts have transactions that mutually affect each other (Neuman 1992, 203).

The work that emerged in phases during the teaching and learning of this unit, allowed me to observe the connection of socio-emotional-behavioural aspects of learning and narratives, and it was also instrumental in constructing the argument of narrative as pedagogy where the narrative inquiry, narrative design, narrative structures and devices were as important as the location of narratives and the inter-relationships amongst many stakeholders of the narratives themselves.

I used stories to help in understanding the 'self', in keeping with Schram's proposition of stories being powerful and beautiful means of teaching many things, including values, culture, traditions, through creative ways of introducing characters and places and an imaginative method of instilling hope and resourceful thinking (1994 as cited in Coulter et.al. 2007, 105). In this context, storytelling became important in instilling hope as one had to contemplate and thereby teach oneself about the inevitability of death, decay and impermanence.

In conjunction with the ecological theory of Brofenbrenner¹, Maslow's law of hierarchy² and also the social theory of learning, my intention as a teacher was to engage in transformative pedagogical work, with opportunities of telling/listening, deconstructing and learning from personal stories, which was the pivotal part of the discussed unit. Valuing the lived experience of every individual led to some kind of transformation, shown by the work and reflections emerging out of the process. I found this in resonance with a study showcasing five frameworks with respect to telling and sharing stories, identified by Carter and Doyle³, grounded in biographical and autobiographical perspectives (Coulter et.al. 2007, 107).

The absolute need for deliberative dialogue and inquiry as a part of the engagement while storytelling, sharing and interpreting, in order to eliminate misinterpretation and strengthen understanding made the process an act of cooperative learning, and interestingly, in this case, often the cooperation was between multiple layers of one's own self. The journey from the parts to the whole in the creation of the texts through different modes and media, in response to triggers and scenarios given to them, which culminated into the web-logs, happened through deconstructing and reconstructing of narratives by building relationships. This established a stronger relationship between the multiple stakeholders around the narratives, where often the stakeholders were just parts of the same individual, the past, present and the future of the 'self'.

The narratives available to us delimit our areas of choice. It is the narrative repertoire of our imagination that helps us distinguish the world we live in from the world we want to live in (Coulter et.al. 2007, 108).

The power of imagination, to overcome fear, insecurity and apprehension, was indeed proven to be strong, in not just escaping from reality by creating something that does not exist, but by cherishing reality by accepting, relishing and curating what existed, imagining a time and state, when that might be forgotten. One of the reflections that emerged amongst learners was being able to look at impermanence in a positive way, as an opportunity to celebrate the transient, the changes. Stories of one's self, became time-capsules, that instead of making them feel bad about the impermanence, made them feel empowered to be able to preserve what they want to remember, and more importantly how they want those to be remembered, by bringing in perspectives. The choice of telling, selecting and curating, created that sense of power. In my understanding, this is the value designers bring, according to Rust, by being able to imagine new scenarios and create a practical environment to experience by producing experimental artefacts (2004, 78).

27.6 > A SOCIO-CONSTRUCTIVIST PERSPECTIVE ON THE ROLE OF EMOTIONS

The fact that students' learning was perceived as a form of engagement enabling the actualisation of their identity through participation in activities situated in a context, connects to the idea of narratives where for the audience and the teller, 'who they are, what they value, what matters to them in what way' in a given situation 'is revealed to them through their emotions'. In Eynde et al's work, along with the idea of situatedness of



Fig 27.4: Screenshot of a Letter to the Future of Self 2. Personal photograph by author. 2017.

emotions, they also stress upon the meaning attached to the situation being dependent on the knowledge and beliefs one have about it⁴. This certainly has a direct influence on the personal evaluative cognitions or appraisals, which play a central role in the process of emotions. Stories, probably also create a situation where the identity of the teller and the audience directly interact with the context in which the telling takes place and hence the emotional experience is constituted by the co-ordinated feedback from all classes of the various systems with respect to a ‘component systems approach’.

The reason for me to connect narratives as an important methodology in addressing socio-emotional and therefore behavioural aspects of learning through this course, is that it allowed the construction of experience and thereby emotions and allowed for manipulation of the construct in itself where the initial conditions could be altered by the educator, which was me, by giving scenarios, allowing multiple interpretations and appraisal and addressing responses by the listener or at least allowing the listener to experience the possible consequences. This is in alignment with the idea of activity and meaning being the basic currency in the socio-constructivist approach of emotions, where emotions are not treated as isolated objects, independent and detachable from the individual and the context (2006, 197).

Stories can bring in contextual inquiry into the self and the surroundings which create difficulties in terms of Social and Emotional learning. The spiral and reflexive nature of narrative learning where the “I” in the narrative construct is the integration of subject and object, allows for shift of voices.

In keeping with the ideas of the web of life, expressed by Capra, of a new perception of reality, of understanding the world in a holistic, systemic way, the idea of the ‘ecological view’, social emotional behavioural aspects of learning also demand an ‘ecological’ view

embedded in deep ecology (Capra 1996, 5). Narratives in their construction and deconstruction has inquiry embedded in it which makes an ecological understanding of the self and the world, where narratives have the power to not just be a site but a mediator of creating the relevance by connecting the isolated parts, by being the missing piece.

1. Brofenbrenner argued that one must consider the entire ecological system in which growth occurs in order to understand human development where the ecological system comprised of five socially organised subsystems that help, support and guide human development, ranging from the microsystem to the macrosystem (1994, 37).
2. Maslow's theory of need hierarchy suggested that if people grew in an environment in which their needs are not met, it will be unlikely that they would function as well-adjusted or healthy individuals. Five types of needs, which can be divided into Deficiency needs and Growth needs were mentioned, in a hierarchical manner, which are to be considered to motivate an individual. (Kaur, 2013, 1063) These needs ranged from physiological needs to self-actualisation.
3. These are 'Curerre-an autobiographical method of generating and reading autobiographical texts' for understandings and meanings, 'Narrative Inquiry of personal practical knowledge' –where the researcher and participant mutually construct a narrative through collection of observations, journals, conversations and documents, 'Collaborative autobiography'-where autobiographies of past, present and predicted future experiences are developed in a group by blending perspectives, after examining patterns and themes of the autobiographies by the researcher and the participants, 'Personal histories' –where personal accounts are constructed by the participants and 'Critical perspectives on life stories' –where in the background of a larger political, ideological context the personal histories created by the participants are examined by the researcher.
4. (Eynde et al, 2006, 195).

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WHEELS TO THE FUTURE

Day 2: Cumulus Sristhi 2017



PART B

PROCESS/METHODS

& TOOLS

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Keywords

wellbeing; positive psychology; instrumental materialism; industrial design; slow design

28. DESIGNING METHODOLOGY: HOW TO MEASURE THE POSITIVE EFFECTS ON WELLBEING OF SLOWDOWN IN PRODUCT DESIGN

Authors: *Mario de Liguori and Francesco Zurlo*

Abstract: Speed is a must in contemporary life! Sometimes it seems to be the only path to self-realization. The faster you work, make money, buy goods or services in your life, the more you assume you are reaching happiness. On the contrary, euphoria due to speed works just temporarily, creating addiction like a drug. It increases the private and public consumption of resources, without necessarily guaranteeing long-term wellbeing. We need to consume better, investing on renewable resources, but also consuming less, slowing down our life at private and global scale; not only to protect environment, but also for better quality of life. Basing on wellbeing definition of Positive Psychology, resuming and overcoming the *Slow Design* theories, this research empirically investigates the relationship in product design, between slowing down and wellbeing. The main tools used are questionnaires specifically designed to measure how much slowness, in specifically selected number of products, is relevant feature to private and public wellbeing. The research envisions a ‘resurgent and an impossible’ speculative future in which the paradigm of speed in industrial production of goods will be replaced with a slow growth model, even economically viable, also thanks to new horizons and opportunities offered by smart manufacturing.

28.1 > ABOUT THE EFFECT OF SPEED AND SLOWDOWN ON WELLBEING

Is there a real connection between well-being and speed? How much does the rhythm of time influence our life? What kind of well-being do we actually need nowadays in advanced and ultra-speed countries? Could the slowing down really be the best solution to improve our speedy life? What can we do, as designers, to restore the right pace in people's life, and the one of environment? These are some questions, which have led the contents of this paper and the underling underlying research.

Sometimes speed is needed, sometimes it is just a symbol of power or ostensible well-being. Even running, thanks to modern technological tools, such as intelligent phones as well as faster and more gleaming cars, is transforming our life in a euphoric race. It gives us adrenaline, overcoming our physical limits giving us strong emotions and immediate pleasure, deceiving ourselves to be powerful and performing like the machines we use. There is probably no better way to introduce the topic of ecstasy induced by technological industrial products than quoting what Milan Kundera wrote in 1995:

“Speed is the form of ecstasy the technical revolution has bestowed on man. As opposed to a motorcyclist, the runner is always present in his body, forever required to think about his blisters, his exhaustion; when he runs he feels his weight, his age, more conscious than ever of himself and of his time of life. This all changes when man delegates the faculty of speed to a machine: from then on, his own body is outside the process, and he gives over to a speed that is non-corporeal, non-material, pure speed, speed itself, ecstasy speed.”

We have to consider the existence of several dimensions of well-being, which are not necessarily physical or aimed to the immediate and selfish accomplishment like that given by speed. Speed creates competition as well as social inequality because it is not equally accessible for everyone (Illich 1973) and nowadays we are going to see that happiness or well-being cannot come true without the wellness of the others and the environment.

Today we wrongly do an unhealthy mental association between well-being and speed. Velocity is certainly a status symbol. Sometimes it seems to be the only path to self-realization. The faster you work, make money, buy goods or services in your life, the more you assume you are reaching happiness. On the contrary, euphoria due to a speedy consumption works just temporarily, creating addiction like a drug. It often increases just the private and public wasting of resources, without necessarily guaranteeing long-term personal well-being, rather sometimes creating individual unhappiness.

Several studies alert us about that. We already know that, in the short term, a materialistic life (driven by buying and owning stuff faster and faster) could certainly give us temporary gratification but, beyond certain measure and time, there is a paradox, a “turning point”, after which goods and money create just addiction and slavery, pollution and personal (or social) unhappiness (Easterlin 1974). Some scholars have also lately fixed a measure of this turning point regarding one's salary, to around \$75,000 a year (Kahneman - Deaton 2010).

We need to consume better, investing on renewable resources, but probably we also need to consume less, slowing down our life on a private and global scale; not only to protect environment or social interests, but also for a better personal quality of life. We need firstly to understand now what really means “quality of life” today and thus, what is nowadays the real meaning of the “well-being” word in advanced economies.

28.2 > TIPS FROM POSITIVE PSYCHOLOGY.

Before further explaining the aim of the present paper, which is briefly the investigation about the relationship between slowing down and well-being in Product Design, maybe we first need to share a definition of what well-being really means nowadays in advanced and rich countries.

Once you ensured the survival, probably well-being regards more the area of mental and social health rather than that of the physical and private one. For this reason the research has found some help in psychology and social sciences. Particular aid in this direction arrives from Positive Psychologists, who are hardly and scientifically investigating in the last decades on what really well-being is in the so-called developed societies like those in which we are living today. They do that even comparing the well-being in relation to wealth and materiality, also investigating on the meaning of the objects (Csikszentmihalyi, M., & Rochberg Halton 1981) and their impact on our happiness.

These authors have found a new definition of well-being related to materiality and objects, called “Instrumental Materialism” (Csikszentmihalyi, R.Halton 1981).

They define with this terminology the possibility of a healthy and “good” materialism, consisting of using objects and other materialistic items in a more meaningful way.

The research of these scholars empirically made an investigation in the houses of people to understand which are the objects people live better with, objects which helps their existence to be really positive in private and social life.

They discovered that the most significant value of the objects for people is neither strictly related to their economical value or specific functionality, nor to that of status symbol (which has just a temporary value); instead it is strictly merged to the affection and memories these objects were capable to trigger, building personal value in the long-term, against the logic of speedy consumerism.

Properly within the relationship between material products and happiness, the present research has then positioned the responsibility of product and industrial design, which has to design the lifespan of objects in a fairer way. Another important theory of the Positive Psychology, specifically aimed to define what really well-being is, it is the PERMA model (Seligman 2001), outlined almost twenty years later the theory of Instrumental Materialism mentioned before.

PERMA model has been used, in this research, as theoretical framework adapted from Psychology to Product Design; it has also been used as interpretative model to design the

empirical part of the research, helping in formulating the contents for questionnaires better described later.

According to the P.E.R.M.A. definition of well-being, the “good life” (Inghilleri 2003), depends on a complex blend of elements, which all together contribute to create the conditions of real well-being for the self as well as for the environment and the society. Indeed, according to that theory, well-being cannot exist without taking into account the social and cosmic dimension. Shortly: I cannot be happy alone, released by the environmental and social context in which I live.

P.E.R.M.A. acronym stands in fact for: Positive emotion, Engagement, Meaning, Accomplishment. All these are ingredients of which the recipe of a new well-being has to be composed, according to the Positive Psychology. It assumes the idea that well-being is not just a selfish accomplishment result to achieve, but it comes true only whether related to other factors strictly linked to the well-being of environment and social dimension, which have to work in a dialectic way among them.

We briefly describe the meaning of each of the five components the PERMA model built with.

POSITIVE EMOTION (feeling good): the physical, sensory pleasure, the most aesthetic/hedonistic and sensitive one. It is the easiest well-being feeling to recognize. Physical and natural pleasure, such as eating, to have sex, sleeping, smiling and the other immediate and obvious connections to well-being.

ENGAGEMENT (finding the Flow): an immersive enjoyment from intellectual stimulation and creativity (E.g. playing an instrument, making sport, to be able to do something that absorbs you completely). This is a form of well-being, which generally leads you doing something very well, losing the perception of the time, because in doing that, you are really and completely absorbed in a sort of agonistic tranche.

This dimension of well-being is probably inspired by the previous studies of Positive Psychology about the Flow Theory (Csikszentmihalyi 1975).

RELATIONSHIPS (authentic connections): maybe the simplest to understand, it refers to those positive or happy experiences or tasks we necessarily need sharing with others (e.g. love, friendship, cooperation and team working in workplaces, sports, etc.).

MEANING (purposeful existence): there is happiness also in giving meaning to what you do of your everyday life, corroborating awareness and understanding of what your role is and usefulness in the world. Your (little or big) contribution to make it better, in each action you make everyday (e.g. a surgeon, who everyday gives meaning to his/her life in saving others’ life, or a volunteer who helps people in need).

ACCOMPLISHMENT (sense of achievement): on the path to the well-being a reasonable ambition is not certainly wrong! In life, you need also to face challenges, realistic goals to achieve, in order to feel actually accomplished. To be really happy sometimes we need to win into the unavoidable competition of life.

28.3 > RELATIONSHIP BETWEEN SLOWING DOWN AND WELLBEING IN DESIGN RESEARCH

Once well-being definition has been given, the main question of the research is properly to understand what “slowing down” means in design, and which is its connection to such a kind of well-being previously shown thanks to the PERMA definition.

Slowing down has been here proposed as the “resurgent and an impossible speculative future” required into the track of the letter. That vision of slowness would like to be the fair balance point between the utopian idea of a debatable or uncomfortable “degrowth” theory (Latouche 2008) and that of economic growth at any cost, which is still the current industrial paradigm based on speed and energy consumption, nowadays no sustainable anymore. Technologically speaking, probably we cannot come back to the past, but maybe we can go forward slower, taking a slower pace, the only one useful to build a better and thoughtful future.

This research envisions a “resurgent and an impossible speculative future” dreaming that the speed in industrial production of goods, will be replaced with a slower growth model, even economically viable, also thanks to new horizons and opportunities offered by smart manufacturing.

Abandoning the exploration among too general political theories and economic growth model, the research has more concentrated on what industrial and Product Design can do to track the path to well-being and which is the role of the slowing down dimension in this process.

Therefore, the present study has necessarily investigated on the previous work specifically done in design research on the topic of slowing down, finding in the *Slow Design* theory (Fuad-Luke 2002) the most explicit academic work around this specific topic.

Slow Design was born on the wake of the slow movements, first the Carlo Petrini’s movement named Slow Food, and the following ones like Slow Cities and others, who extended the idea of a “slow” and responsible consumption, to a general philosophy aimed to the quality of life in every field.

Slow Design also defines six principles (Strauss - F. Luke 2008) as useful guidelines to understand how really this theory should work, but they seem to be too general: they drift and dilute the value of *Slow Design* in huge fields of investigation such as design for sustainability or design for social innovation, and thus wasting its specificity which should be better exploring, from our point of view, the dimension of time.

Furthermore, many experimentation of *Slow Design* are often close to artistic or craftsmanship work very far from industrial production. They also have a democratic aim but lately they seemed to become something connected to luxury/expensive goods.

Anyway, in analyzing the strengths and weaknesses of *Slow Design* the present study want to go beyond it, identifying the key point of all the slowing down theories, properly in the pursuit of well-being. *Slow design* itself has in fact “(...) the goal of positive well-being for individuals, societies, environments, and economies (...)” (Erlhoff – Marshall 2008). In *Slow Design* studies, there are mostly two gaps the present study aims particularly to fill: (1) on the one hand, the scarcity of empirical evidence on slowness effectiveness for well-being, and, (2) on the other hand, the lack of specifications that meet economic and industrial requirements.

28.4 > QUALIFYING SLOWNESS IN THE INDUSTRIAL PRODUCT

The empirical work aims to design an unpublished methodology, able to measure how much slowness, in a selected number of products, is a relevant feature for private and public well-being.

Regardless of the objects chosen for the investigation, a general definition is needed about what we mean by slowness or speed in a product. The issue is quite articulated and a specific criterion has been designed in order to do it. Following are listed the 6 features to be taken into account, during this process of analysis:

1. Speed required to the user.

Psychophysical speed needed to use the product. How much speed or stress in terms of speed has required in using the product.

(E.g. speed required using a smartphone, or driving a motorbike or a car).

2. Speed of product performances

Speed in terms of product performances: how quickly does the product satisfy the user's need?

(E.g. the speed of a motorbike or car to move the users from a point to another one, or even a computer in carrying out the required operations by shortening the waiting times).

3. Marketing obsolescence

Product lifespan in terms of marketing. Model obsolescence, based on styling and fashionable features or programmed obsolescence as marketing strategy.

(E.g. garments or fashion accessories have a very fast life cycle on the market).

4. Technological obsolescence

Capability to survive quick technological changes.

(E.g. smartphones or PC have a very fast technological obsolescence. Objects like a bicycle instead - technologically speaking – haven't basically changed for 200 years, especially if compared to cars).

5. Materials decay

Life cycle related to the materials with which the product has been built, its physical ability to withstand the wear and tear of time and, consequently, its environmental impact.

(E.g. a chair made of metal or plastic, or other resistant material in comparison to those made of a more perishable material, such as for instance paper or other more biodegradable ones).

6. Semantic and memory obsolescence

Persistence on people's psychology. The object's ability to last in time, generating private or collective affection and memory.

(E.g. private photographs, grandmother's sideboard, the family paintings, the Piaggio Vespa, the Volkswagen Beatle, the Moka Bialetti, and other iconic industrial products).

7. Speed in production

Times needed to produce the object. Ratio between the production time and the consumption of the resources needed. Relative impact on the environment.

(E.g. industrial-fast production versus the crafted-slow one).

28.6 > RATING SLOWNESS IN INDUSTRIAL PRODUCTS

Questionnaire A: interviewing a qualitative sample of experts.

The empirical work aims to measure the slowness or speed in different selected product, according to the definition of slowness qualified in the paragraph above. To do so, the methodology intends to interview a panel from 5 to 10 experts in design (professors, PhD candidates or professionals) able to judge and recognize the features previously defined in the analysed products.

In the construction of the questionnaire, images of different objects will be selected beforehand, so they will be evaluated by the sample of experts, according to a scale ranging from VERY SLOW (mark 1) to VERY FAST (mark 5).

To evaluate these objects, we use the *Method of Semantic differential* (Osgood 1957) who generally stresses the polarity of two opposed features (in this case fast vs slow). The principle has been summarized in the following table.

VARIABLE TEMPORALE	“X” PRODUCT				
	SLOW		FAST		
1. SPEED REQUIRED TO THE USER	1	2	3	4	5
2. SPEED OF PRODUCT PERFORMANCES	1	2	3	4	5
3. MARKETING OBSELESCENCE	1	2	3	4	5
4. TECHNOLOGICAL OBSELESCENCE	1	2	3	4	5
5. MATERIAL DECAY	1	2	3	4	5
6. SEMANTIC AND MEMORY OBSELESCENCE	1	2	3	4	5
7. SPEED IN PRODUCTION	1	2	3	4	5

Table 28.1

ITEM NO.	REF. P.E.R.M.A. MODEL*	ITEM (STATEMENTS)	ITEM POLARITY	QUESTIONNAIRE ON LIKERT SCALE (TO NON-EXPERT SAMPLE)				
				1	2	3	4	5
I TOTALLY DISAGREE	I DISAGREE	I AM UNCERTAIN	I AGREE	I ABSOLUTELY AGREE				
1	P	I aesthetically like this kind of objects	(+)					
2	P	I don't feel physical or psychological pleasure or immediate fun at using it.	(-)					
3	E	At using it I completely loose the perception of the time	(+)					
4	E	I do not feel engaged, particularly concentrated, absorbed or creative at using it	(-)					
5	R	I like sharing with others the experience this object gives to me	(+)					
6	R	I would never give or lend this object to anyone. I don't like to share the experience this object gives to me	(-)					
7	M	In using this object I feel like doing something important and meaningful for my life and the collective one	(+)					
8	M	Producing, buying or using this object doesn't make sense at all	(-)					
9	A	I feel myself accomplished in buying or showing a particular brand or model of it	(+)					
10	A	This object is not a typical status symbol	(-)					

Table 28.2

28.7 > RATING THE WELLBEING PERCEPTION OF USERS ABOUT THE INVESTIGATED PRODUCTS

Questionnaire B: interviewing a quantitative sample of non-experts.

About well-being definition, the specific one of PERMA model from Positive Psychology, already illustrated in the previous paragraphs, has been used here.

The measurement of the wellbeing perceived from users into the objects, will be done through another questionnaire specifically designed to assess the attitudes of the respondents about

the selected objects. The latest have been catalogued thanks to the expert sample on the fast-slow scale, according to the methodology illustrated in the previous paragraph.

This second questionnaire will analyse practically the interviewees' feelings about these objects, relatively to the well-being they get from them.

This time the questionnaire is meant for a non-expert sample, made up of individual consumers whose specific profiling have still to be defined by number and type according to the research needs that will emerge, but also to economic and time resources needed to complete the study.

Individuals interviewed will be asked to analyse the selected objects without showing them the slowness/speed values that will emerge from expert analysis thanks to the first questionnaire.

The questionnaire will be organized on Likert's Scale (Likert 1932). The sample must either agree with or not with a set of ITEMS (statements) proposed on a scale from 1 (totally disagreement) to 5 (totally agreement).

These items, on which the interviewees will express consent or dissent, are generated using the interpretative model of P.E.R.M.A., mentioned several times before. Each single item underlies in fact some aspects of well-being synthesized in the 5 key components of which P.E.R.M.A is just the acronym, which stands for Positive Emotion, Engagement, Relationships, Meaning, Accomplishment.

In order to avoid suspicious into the interviewees, the tone of questions changes and each statement has been proposed both in positive (+) and negative (-) form.

The Table 28.2 would like to be just an example, which maybe better can show how the questionnaire should look like.

28.8 > DATA ANALYSIS

Once the questionnaires are completed, the scores from the positive (+) and the negative (-) items will be collected and evaluated separately.

As generally suggested by the Likert's method, in order to better read the data, the values resulting from the negative (-) responses will be reversed, translating them into the positive (+) scale, to make them homogeneous with the positive ones. Therefore, using the same scale of evaluation to each result (both positive and negative).

Example: if the average of the marks related to the negative (-) item N°2 ("I do not feel physical or psychological pleasure or immediate fun at using it") has the value 1, its equivalent translated on the positive scale (+) becomes 5. If it has 2 it becomes 4, if

has 3 it remains unchanged, if 4 it becomes 2, and finally 5 becomes 1. This calibration is made only to facilitate data reading, bringing them on a one-way positive scale ranging from +1 to +5.

28.9 > INTERPRETING THE DATA

Interpretation of the collected data will be largely oriented to the study of the correlation between data recorded in questionnaire A (slowness / velocity values of objects) and those found thanks to the questionnaire B (their effect on well-being).

The first, most immediate data interpretation will primarily be aimed to identify which type of objects respects more the values of well-being expressed by the PERMA model. Next step will be to identify the actual correlation between these objects and their value in terms of slowness or speed.

28.10 > CONCLUSIONS

The present study represents a methodological contribution to design research. It is an investigation about relationship between slowing down and well-being in Product Design. It is looking for the answer in the slowing down theories, starting from *Slow Design* of which the present study would like to recover and update the basic principles.

It is just a preliminary study, designed to be a useful base for the next empirical part of the research in collecting data. It is still halfway through the work, aimed at the moment just to define the methodological part of a whole research about slowness and well-being through the contribution of industrial design.

The proposal methodology uses some tool of human sciences and translates theories about well-being, from Positive Psychology adapting those to the industrial design field. Thanks to these theories, the research designs its unpublished tools such as questionnaires and interviews of which the results must be gathered, collected and interpreted in the next months to reach a real conclusion.

Still open issues

- To define the number and typology of objects to be submitted to the sample of respondents.
- To define the expert sample needed to the questionnaire A.
- To define the number and typology of the non-expert sample for the questionnaire B.

All of these 3 factors are under development and they will be calculated on the basis of research needs but also according to the available time and resources.

The study is currently looking for a more direct collaboration with specialists in Positive Psychology and research methodologists from human sciences who will enlarge the research team, helping in defining such contents and issues that are still open.

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Institution
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India

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29. SEEKING AMBITION: ROLE OF EDUCATORS IN CREATING ERA OF EXPERIENTIAL LEARNING

Author: *Niketa Chakrabarti*

“So teach us something worth knowing, bring us back what we’ve forgot, just do your best, we’ll do the rest, and learn until our brains all rot...”

Harry Potter in Sorcerer’s Stone

Abstract: Ambition is defined as “a strong desire to do or achieve something” It is also considered as a driving force alongside experiential and investigative learning in a self-directed manner which is a rather stimulating approach towards learning. Today’s hyper connected world urges this young learner to abandon ambitions and create the path of learning devoid of any ambitions. The paper is an attempt to showcase the challenges faced by learners of today. It probes how ambition that is sometimes misconstrued as a negative force can facilitate and overcome few of these challenges. It attempts to explore aspects in the learning process that call for pause and reflection and serve as a counter point that can balance speed and aggression. The project would focus on both student perspective and the teacher perspective and will also try to showcase how ambition can propel and facilitate experiential learning.

29.1 > DECODING AMBITION

Ambition is defined as an ardent desire for rank, fame, or power. It is a guiding force steering the human being to attain and achieve, a personal mission statement that elaborates a plan of action, an earnest desire to make a distinction of oneself from the others. It is also tireless and motivates an individual to keep up the momentum, the pace and alongside urges them to single handedly focus on the end prize. It is a self-directed tool that can be deployed to rise above mediocrity.

29.2 > UNDERSTANDING THE LEARNERS OF TODAY

Learners of today are Ambitious, confident, inquisitive and open to change and brazenly question the status quo. They define their own learning capacities enveloped in a connected, highly wired and digitised cocoon. They have their own unique characteristics. As their teachers and mentors, we must know and acknowledge their learning style and capabilities that make them different. The learner of today is a part of a digital ecosystem. She or he is much more independent than their previous generations. Today, cognitive thinking and learning process is not what it was a decade back. It is not immune to the sea of changes. An important aspect of learning as a process today is that there is lots of informal learning happening. The hyper connected era has enabled the learners of today to choose their own time and pace to acquire the desired learning. Deep diving in the world of new learners and learning process we realise that this uber cool generation has its own sets of challenges.

Three years back, Pearl Academy, a leading design and fashion institute with 25 years of rich legacy, conceptualized and has been hosting a series of “What’s Next” events since 2014. The event is a World Cafe’ style Confluence that brings together Global Educators, Industry, Government bodies and the Design fraternity to brainstorm change that explores the unknown and drives the difference that unravels the pulsating quest for What’s next in fields of Design and Fashion. I was fortunate to be a part of What’s Next - Future of Design Education edition held at Delhi in the month of December, three years ago. The confluence agenda was based on the need to study key issues in design education which are in constant change and need to be monitored and mapped into current and ongoing courses for the curriculum. It also acknowledged that Design education in India has matured to reach a point where it can imagine, contribute within a wider scope, and take on complex real world problems. The understanding that Design faculty needs to be introduced to a variety of teaching methods since they come from a variety of backgrounds was clear. There was a strong need to exhibit and share with the educators the new age tools and methods of teaching and give them a first-hand exposure to innovative techniques and best practices from around the globe .

A stimulating discussion and shared perspectives spread over three days helped in constructing an understanding around the learning environment, the learner and curriculum of the future. Here we take a look at the key highlights that emerged;

- The proliferation of the digital media and the ease that it offers has made learning become almost like following the path of least resistance. Whereas, learning should ideally take the path of resistance because it's the friction and resistance that enables learning.

- Learners today are seeking convenience. They are impatient and have a short attendance span. There is lack of trust as well as a consumerist attitude towards mentors and facilitators.
- They are much more independent than any previous generations and have a strong need to be heard. How might we prepare them to use their unique voice to address issues that concern them?
- The learning environment is becoming slippery. Often the mentors have a preconception that younger students can't accept complex things. They feel that they do not have exposure and are too young to comprehend and practice complex theories. Somewhere in the whole idea of making an easy system of education we have made it so easy that the challenge of learning has been compromised.
- Learning how to learn is part of the cognitive theory of learning. But most of our education is organised around behaviourist approach where we punish bad behaviour. This is essentially an Indian pattern. The behaviourist approach presents its set of challenges. It is the teacher telling what's important to know and necessary to learn now rather than later and so on. So the teacher determines the path which might pose a challenge for the learner to tread on.
- While the learners of future are dynamic and move around constantly the curriculum on the other hand is set in a mould. It is largely predefined by the academicians instead of the learners. We still handhold them a lot to make them better learners. In-fact our schools thrive in an environment where the curriculums get decided upon. However the truth of the matter is that the curriculum has to move beyond the classroom, beyond the rigid content we have also beyond the time constraints we have. A student might like to learn beyond that and maybe not, but do we have that flexibility in our curriculums
- Knowledge and information available on the internet also poses its set of challenges to the learners. While the learners can make connect with readily available information, the challenge is to decipher and use the right source of education. While a wrong source can also be good prudence in connecting with new information is advocated.

The discussion also helped in understanding emergence of new inspirations towards seeking and learning

- Today what we need is a more cognitive or maybe a situated learning approach. For example, students like to learn whenever they feel it is necessary to learn at their own pace and they would like to apply it to real life situation. This can be an inspiration to learners also.
- Physical play can also be an inspiration tool towards learning today. Introducing physical activity that could give learning to the students would be beneficial to the learner. It

pumps up hormones and it makes a chemical difference in the body which enables the learner to act in a sharper manner.

- What could also inspire students is to make them realise that they can be empowered enough to make an impact even when they are students. You know not to imagine you can only make impact after you have graduated or after starting practice but to realise that you can make an impact while being a student
- There are emerging trends in technology, culture, market and they should be fed into the education stream on a day to day basis aligned well to the online portals like Youtube, Ted talks and all sites that discuss the best industry practises and of design. That should be a very integral part of the curriculum
- Digital tools are very popular with the students, might as well use them adapt that technology to impart that education.
- The impact of the macro trends on the curriculum of the future will manifest themselves as a dynamic Curriculum that would enable collaborative learning with students. It would promote blended learning and flipped classroom for student accessibility and asynchronous facilitation of learning. The curriculum would focus on skill enhancing as main learning outcomes. Along with that there should be an acute focus on developing moral and ethical eco system in students.
- It is important for them to be knowledge navigators which means finding information from different sources, evaluating it and interpreting it to integrate their passion for research.
- The learners of future are the go getters and the doers. How do we cultivate problem-solving in our students?
- Innovation is the thread that needs to tie all learning. How can we create rituals and routines that establish a culture of innovation in our classrooms and schools?
- There is an urgent need to figure out how do we empower these learners to drive their learning and authentically demonstrate mastery? How might we build empathy for and across students so that we serve their diverse needs and better understand each other? Have we aligned our learner space and pedagogy with their ecosystem that has strong influence on how they learn? What excites them in classrooms and make them come back for more.

The young learners favour experiential learning over regular organised methodology of teaching. Experiential learning is a process of learning through experience. It is more specifically defined as learning through pause and reflection, learning through the act of

doing. Hands on learning is a form of experiential learning. This ‘learning through experience’ encourages learners to be participative. The other aspect of Experiential learning is that while it actively looks at learning outcomes, the content of the session or the workshop is not set in a rigid structure or a stiff framework of learning outcomes.

29.3 > LEARNING FOR YOUNG LEARNERS

In order to understand and develop insights on how the young learners decode ambition, I conducted four focus group discussions with students from across undergraduate programs and postgraduate programs at college. It was interesting to note that majorly, most of the young learners were able to identify ambition as a positive force. They recognized and accepted this trait admitting that it did drive them towards a goal. Largely the goals centred around being financially independent, to be able to create and sustain a lifestyle, to be able to use all their learning to get them recognition. Few students admitted to having smaller goals. They treat ambition as a series of milestones. For them it is a process of crossing each milestones and building themselves yet one more milestone to reach out for.

The focus group study also revealed that the young learners are largely governed by ambition that was ‘imposed’ upon them by their parents vis a vis their own. This was particularly true of the post graduate students. Sitting in a Communication Design class were four engineers. They shared that their first set of career choice was led by their parents. On asking why did their parents push them for that stream of career they shared that elders felt it was a safer, more reputed choice of career with high remunerations vis a vis other careers in design and fashion led industry. This ‘imposed’ ambition thus was more of an ‘expectation’ than of the driving force the trait claims to hold. Learning however was more fun and impactful now that they are in their choice of career doing what they love and loving what they will do. This self-evolved ambition is the fuel for them.

The focus group on students looked at experiential learning and majority of them agreed that the key take away from such a workshop or on the floor activity rests on ‘engagement’. When probed on basically their understanding of learning they shared that finding new knowledge, acquiring new skill is what they would call as learning. Sometimes they seek knowledge. Simple pure knowledge. This can be learnt best by just absorbing and soaking up what is happening around them. Experiential learning on the other hand gives them the scope of trying something without the fear of failure. They can do a self-reflection in retrospection and deconstruct their own learning experience.

As we are a design school and we encourage creativity we find lots of mentors create projects and assignments where learning happens through experiential learning. The challenge is that a student or a learner is unable to perform or learn due to conditioned mind set they carry from their school. In our schooling system today while they are making small room for experiential learning largely organised learning, traditional methodologies of learning gain precedence. The school education because that is where the students are coming from, it has been extremely structured and boring. It hasn’t changed for years since

the industrial revolution, where our policies and methodologies were catering to a different mind-set hence the students struggle to find their own balance when they enter a design college. The role of educators and mentors take a substantial form in such a case.

The focus group study with students also brings to the forefront the role personal relationship between mentor & learner plays in the process of learning and delivering outputs. Students across the globe are same. Personal mentor student relationship is most important. This is not only true from the students point of view. Admitting that ‘relationships’ become the pivot around which the young learner spins his world a mentor shares, “So much so that it can be seen as a force that drives the entire student community”, this was captured during an interview with a design teacher with 18 years of teaching and mentoring experience. She also shared that experiential learning is heightened if the learner is positively engaged with not only his mentors or the facilitator but also has a positive relationship with his peer groups in college.

The role mentors can also be described as the ‘agents of change’. If a student inclination is at odds with their ambition then it becomes the educators responsibility to align them both. She can do so by maybe positively reinforcing the learner’s strength and directing him/her to make the adjustment. This will be particularly true in case of areas where learners face ‘Dissociative Learning’ practiced largely in subjects which follow a more traditional methodology of teaching. Let us deep dive a little more into this topic .

Creativity being the hallmark of Design education, the role of mentors also stretches. Design is more about doing things with hands...it's not about discussing or talking. Then as an agent of change, the instructor can revolutionise the experience for the learner by steering the direction of the project.

In the changing times the role and the quality of institutions have been changing. It is the same scenario where we see that design institutions are emphasizing more on business, technology as well as the social sciences. In the same line of thought Technology institutes are looking at design and social sciences and business. Business schools are looking at design technology and social sciences. So today the design institutions are really metamorphosing and the meaning of institution is changing. A lot of institutions are actually going online. Today most of the institutions that are there have already put their courses online so a learner is able to take on a course and learn at his own pace and time . He is getting an education which is really adding on to the kind of formal education that he already possess. The traditional institutions are also obviously under stress. We are seeing that also happening in India for example the student pays for a certain kind of education and where there is no government support or support from an endearment then what is the quality of education that is possible to give without running the student in debt. So it is for things like this that the role of the educator takes on a larger much bigger role. The role of the educator to devise an experiential learning environment in ‘non design’ institutes will definitely help. Earlier we have seen how the ambition can also be ‘imposed’ or ‘self-directed’. The mentor can

actually help in synchronise the gaps and align a better learning experience with the learners capabilities.

The role of the teacher or mentor gains importance also because as agent of change he can help by building empathy and curiosity in the young learner. If the young learner is not curious he cannot gain knowledge. So in a way we are looking at teachers/faculty initiating and promoting capacity building. So say amongst his batch of students the mentor works out different segments of students who are good in design or theory, extension or fashion, he can identify them and train them for excellence in the specific area fostering capacity building. The college or the institute can then pick up such units and then inculcate or improve them further. Not only that, this also helps those students who are becoming capacity builders themselves. They are fuelled by their own ambitions to excel. They are a set of young learners who rather than depending on an external catalyst or a mentor to define what kind of capacity they can work on, take tasks head on. They are their own catalyst. The ones who will lead innovation and disruption. As facilitators we know that there exist a set of students who can bind the class together and take them along with them on the path of learning. Just imagine of a situation where students are left at different places, they observe, they see, they find out what are the different problems people are facing. And they form groups where they decide amongst themselves that one change or on can try and organizes things and how the solution can be brought in. Then this is what they like doing about themselves and solution maker rather than designing products in class but thought-out in the world and see the problem which they want to find out. Hence the need to sensitize the learners and encourage them as being curious, being sensitive. This set also includes responsibility, empathy, curiosity, freedom of thought and choice, self-motivation think on feet and explore your own growth.

28.4 > CONCLUSION

The role of a mentor, facilitator, teacher, instructor is not only giving the young learner academic education. They are under their wings with their dreams and ambitions and in few years, four to be precise they are ready to step outside into the professional world. The industry looks up to them as harbingers of change. They need to be ready both emotionally and professionally and stand tall in the corporate game .

One of the things we say to our students on graduation is your next assignment is to design your life! so what do you need to do, how you need to set out. Let us strive to create a student driven pedagogy that would play upon the ambitions and aspirations the young learner nurture. They may be naïve when they started out but by the end they would have discovered their purpose and set up an aim, an objective that they would want pursue and explore the path of how to get there.

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Institution

MAEER'S MIT Institute of Design

Country

India

Keywords

nature; biological vs. digital World; solace; sustainability

30. CREATING WORLD THROUGH OCULUS OF DESIGN

Authors: Amit Kumar Sinha and Mudra S Gandhi

Abstract: The future of our race lies in the symbiosis of natural and material ecology that can create personal micro biomes that would scan our skins, repair damaged tissue and sustain our bodies. This new age of design and creation could offer solace to mother nature. This concept note proposes the idea of design moving away from the age of machines and going back to nature to embraces billions of designs, which are at the levels of molecules or ecosystems.

Designers, combating with the issue of sustainability, should look at nature's design delights composed of heterogeneous parts, which can be then practiced to create technological products. For instance, relentlessly variable synthetic biology has empowered us to design new biological functionality by editing DNA.

We envision this aspect as an evolution by design with two radically opposed design cultures, one synthetic, the other organic. One designed for nature, the other designed by her.

PROLOGUE

Nature has been around about 3.8 billion years. The laws, design strategies and principles of nature can bring solace to the social and environmental anxiety as:

- Nature runs on sunlight.**
- Nature uses only energy it needs.**
- Nature fits form to function.**
- Nature recycles everything.**
- Nature rewards cooperation.**
- Nature banks on diversity.**
- Nature demands local expertise.**
- Nature clues excesses from within.**
- Nature taps the power of limit. (Benyus 1997)**

ABOUT THE CONCEPT

To deal with the burning issue of sustainability, we as designers should attempt to reconsider nature and integrate the material, digital and biological realms that are non-ecology agnostic. We must find a pathway between the world of culture and the world of nature. In this concept note, we propose a convergence of four arenas in allowing designers access to the tools we have never had before. These fields are:

- Computational Design - that empowers to design complex forms with simple code
- Additive Manufacturing – that allows to make parts by adding material
- Materials Engineering – that inspires to create behaviour of materials at atomic level
- Synthetic Biology – that enables to design new biological functionality by altering genetic code

Imagine bio-engineered clothing, bio-engineered living spaces, bio-engineered fuel as an aftermath of the amalgamation of these four fields that AFFORD sustainability and conduit between the world of culture and the world of nature.

Harmony between these fields and the aforementioned two world views of analysis and synthesis, can lead us to a future where we can imagine a new age of design and creation that breathe life into the products and the buildings around us, that rehabilitate and reform nature, that takes us from a nature-inspired design to a design-inspired nature.

HOMECOMING OF HUMANS: BIOMIMICRY

One of the latest apprentice for creativity and innovation is Biomimicry. Inspired by flora and fauna bio-mimetic designers and engineers have created astonishing products. Few examples include Cephalopod Camouflage, Kingfisher inspired Bullet Train, Sunflower inspired Heliotrope, Humpback Whales inspired wind Turbines.



Fig 30.1: Biomimicry Inspired Designs [Digital image]. (n.d.). Retrieved 2017, from https://www.google.co.in/search?q=biomimicry+in+design&dcr=0&source=lnms&tbo=isch&sa=X&ved=0ahUKEwiau4bB4f_WAhVCuY8KHS6kDECQ_AUICigB&biw=1294&bih=571



Fig 30.2: Sunflower mimicked Heliotrope [Digital image]. (n.d.). Retrieved 2017, from <http://www.coroflot.com/jonathanota/sunflower-project-heliotrope>



Fig 30.3: Large three-dimensional functional objects made from chitosan [Digital image].(n.d.). Retrieved Sept. & oct., 2017, from <https://en.wikipedia.org/wiki/Chitosan>

HIGH-TECH PERISHABLE DESIGNS: SYNTHETIC BIOLOGY

Building on recent advances in genetic science and technology, synthetic biology aims to understand the molecular fundamentals of the metabolic and reproductive functions of simple single-cell organisms precisely. This arranged marriage of organisms has, however, conceived some extraordinary, sustainable ideas and trends that have the potential to change our future. Applying this, experts have already succeeded in finding a substitute for one of the most atrocious enemy of nature – Polymer. It is believed that, one of the most abundant biopolymer on the planet is called chitin, and Chitosan, a resilient form of chitin is 100% recyclable and can easily replace plastic.

PROMISE TO SELF: END NOTE

Nature's evolution has turned us from sapience to homo sapiens. However, at every stage of progress, we have degraded nature. Now, let not our methods of evolution (synthetic biology) harm nature in any way. Let's design the way nature does and also inspire nature to design the way it has never done before to build a more sustainable and tranquil world.

Institution

Srishti Institute of Art,
Design and Technology

Country

India

Keywords

death; fear; anxiety;
coping; youth

31. OUR CONSTANT COMPANION

Author: *Kalpana Tanwar*

Abstract: Regardless of who we are, what we are, where we are and how we are, we share a common future. Death, which is just a breath away, our collective future, is rarely discussed, even acknowledged. Death's presence is like a ghost in our lives, sometimes forgotten and other times very close, creating fear, maybe haunting our existence. Fighting or denying the ghost is exhausting business.

Acknowledging it, maybe even trying to connect with it, can lay it to rest. We may even learn valuable lessons in this process. With this premise, in early 2017, I conducted a class with design students called Constant Companion. Through a series of discussions and exercises, an organic view of death as a constant companion in life was introduced.

Students wrote about their feelings, reflections, fears and anxieties over a period of 9 weeks. During this time, death of close ones occurred and resulting feelings were shared and processed. Students felt empowered to deal with this difficult eventuality.

The class notes here explore design students' journeys as they begin to view death as a constant companion.

THE FUTURE OF DEATH

The future varies according to the lens chosen to view it- ecologically, genetically, sociologically, economically and so on. The future I wish to focus on is our personal future, unique to each of us, and thereby universal. Whatever we may envisage the future to be- old age, retirement, grandchildren, ailing health, the future common to us all, and to all things, is rarely discussed - death.

Early last year I started contemplating a class on death, especially as our Institute had lost one of its founders. Years ago, I recall Carlos Castaneda saying that death was our constant companion, it follows us around every step of the way. I decided to name my class of 10 days spread over 10 weeks, Y/Our Constant Companion.

DESCRIPTION OF CLASS TITLED Y/OUR CONSTANT COMPANION

Besides our shadow, we all have another constant companion, who has been with us from the time of our birth. Yet, this companion is usually ignored or marginalized, and we tend to go through life trying our best to forget.

Who is this companion? And why do we wish to distance ourselves? In some ways this companion creates fear and hate, yet could be our best friend, teacher and guide.

This class explores the role and impact of this companion on our everyday lives as well as its influence on different cultures and philosophies. Introspection, group discussions and facilitation will be expected of all participants.

CLASS DETAILS

This class was an elective and 15 students signed up, mostly women, between the ages of 19-22. They came from different parts of the country, with fairly varied social, cultural and economic backgrounds. This diversity needs to be appreciated, especially as there is a high level of discussion and sharing in the classroom. Most of them had little idea what they were signing up for. Yet others were reluctant and the class was their last choice.

A few rules were discussed- the need to maintain discretion and confidentiality, be sensitive to others' thoughts and emotions, be good listeners and be supportive of others' feelings and sensibilities

PROCESS ORIENTED PSYCHOLOGY

Theory was presented to the class with the intention of bringing it to life, and demonstrate that it was something that was happening in the moment, therefore relevant and dynamic. By using theory, I was able to put a structure on the discussion. Most of the concepts came from Process Work or Process Oriented Psychology, which has close connections to physics, developed by Drs. Arnold and Amy Mindell.

Classes comprised of a topic, followed with discussions in small groups, or having a general discussion and then finding a topic the class wanted to explore further in small groups.

The resulting insights were then shared with the larger group. This allowed everyone to have a chance to speak, ask questions, comment and most importantly listen to others. When students sat in close proximity in small clusters it supported an intimate atmosphere of mutual sharing. From the beginning, and constantly reiterated, students were assured that there were no right-wrong or good-bad answers. They were encouraged to connect and share and acknowledge their feelings. At the end of each class students blogged their experience for the day, and explore their feelings - fears and anxieties. They were also given specific assignments.

CLASS NOTES: EXPLORATIONS ON LIFE, FEARS AND DEATH

I will use direct quotes from the student blogs. Identities have been kept confidential, and names have been changed.

Reflections on a documentary film called 'The Shift' by Dr. Wayne Dyer

P: I can completely relate with Dr. Wayne Dyer and his way of living life. If Dr. Wayne Dyer is French fries, then I am a raw potato waiting to become French fries. The only difference between me and him is that I keep changing from potato to fries and then potato again., while he is able to constantly live life as fries and he also has the ability to transform others from potato to fries.

NJ: The film, and especially the character of the film maker inspired me to create work that pleases my talent and skill and not ONLY made to showcase it to the world and rapidly climb the ladder if success without true purpose or emotions.

Discussions on Constant Companion

ABN: Firstly, the discussion that we had kept me into thinking what actually companion is and how tend to define it differently within different situations. The first and foremost thing that I realised about my self and my thought process and how I thought about the word companion. The second thing I felt was how difficult for me was to talk about my fears at first, but after seeing everyone talk about their own, it gave me a little courage to talk about things which I felt deeply about.

BS: When we started talking about Y/Our companion a lot of things came up, like fear, object, parents, god etc. At this point I realised that there were common things that all of us had but in different situations. I figured out that losing my hanky was fear, when I don't get to see it in my hand, it's like getting fits. Realizing this made me laugh and when I shared this with my sister she thought I was silly.

Tragedy: Lived and Experienced

The tragic event of a college student perishing in a road accident preceded the next class. I used this time for grief counselling for some of the students who did show up for class.

DA: It was shocking and frightening for us to hear that one of our friends had passed away in an accident the night before. I was shaken and unsure and had no reaction. I had seen her

the day before, she seemed happy and pleasant and we had waved to each other across the corridor, that was the last I saw of her and it's unimaginable to think that she's gone.

AR: The first thing I did after returning back home was to call up my mother. I was shocked at the way she reacted to the news. 'Oh! My god! I am so sorry for the parents'. I was thinking about V and all her dreams being left unaccomplished, my mother was thinking of her parents. My first instinct was to put myself in the place of V and my mother put herself in the position of a person who has lost their daughter.

"When Breath Becomes Air"

Near death experiences were viewed on Ted Talks and discussed. Paul Kalanithi's book *When Breath Becomes Air* was recommended reading.

RS: Initially it was very unsettling to read a book about a person's journey towards death... I was a bit afraid... fearing it would be too intense, but I started to get to know this person who was so alive and full of goals and ambition, fears and insecurities, just like us. I felt inspired to read about his work ethics and principals and the way he lived his life.

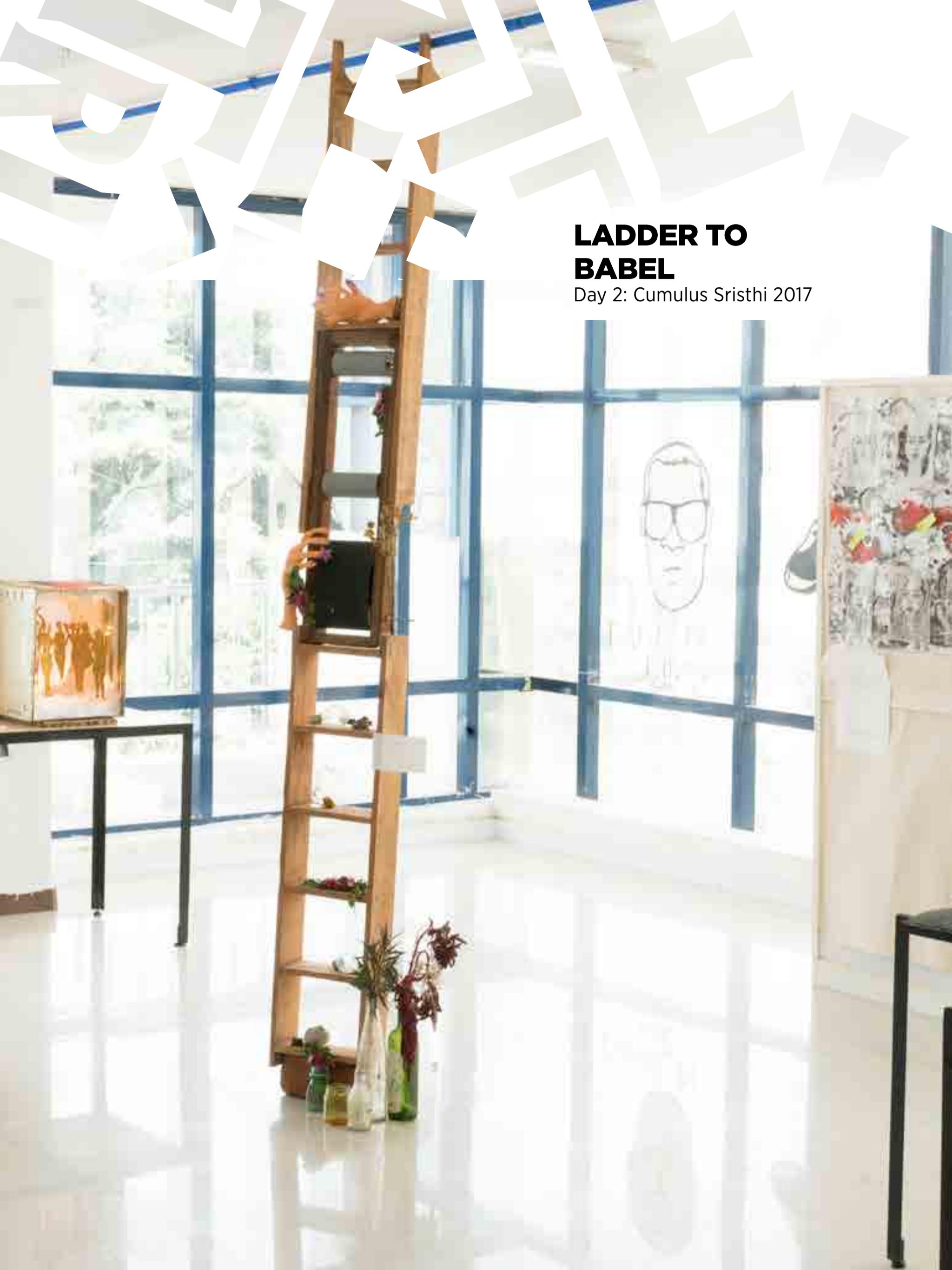
GB: Because of this book I started accepting my life as it is. Before a lot of people told me that I was materialistic and I was like that in some ways. I kept complaining about things I don't have and all. But after reading this book everything was easy to handle. I asked my parents and my friends to read this book.

Teacher's Notes:

I would like to share with you my feelings about this class. I think the students did well with such a delicate and edgy subject. I had a broad idea about what I wanted to do in the class, but it was up to the students to pick up the ideas that I would share with them. They did it bravely and well beyond my expectations!

During the course various incidents took place- one student came back after a long weekend home to tell us about her cousin who had committed suicide and she had been the first one to see the hanging body. Another student returned from a family wedding to announce that no less than 5 wedding guests had died over the weekend celebrations. He added that one of their deaths was most inconvenient as that person had been in charge of keeping track of the wedding gifts!

The macabre and the funny both go hand in hand as we take a walk down life's path. May we all travel with strength and love.



LADDER TO BABEL

Day 2: Cumulus Sristhi 2017

EPILOGUE

On the completion of the proceedings towards the making of this book, the Editors would like to record their thanks to the Cumulus family for their patience and excellent cooperation, the authors for their valuable contributions, the entire Cumulus team at Srishti Institute of Art, Design and Technology and the book design team at Kena Design.

Letters to the Future. This was the theme of the Cumulus Design Conference held in November 2017, Bangalore, hosted by the Srishti Institute of Art, Design and Technology, Bangalore. Each of the papers or letters presented here embody ideas of curiosities and anxieties. The embedment of the speculative nature of art and design curiosities, both in method and practice, are layered with anxieties of the unknown futures- futures that can include as well as exclude, especially in the navigation of virtual reality and artificial intelligence spaces.

What is/are the future(s) of the Future? Or Future(s) of the future? Can words project ideas into the space of the future and speculate how humans can/may live through design interventions? Can we dismantle the present and the past to co-create eco-systems of sustainable living in the future, when the current space is depleted of natural resources? These are the questions we leave you to grapple, play, engage and invent with.

13th November, 2018

EDITORS

Ayisha Abraham

Pooja Sagar

Tapasya Thapa



OUR
LIFE