Developing Context and Culture driven Design Philosophies

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This thesis explains the research and designing of toolkit that aids in developing context and culture driven design philosophies. Various methods such as literature survey, interviewing, co-developing sessions were used to capture the process of developing design philosophies. The toolkit designed helps the design teams to be able to develop design philosophies while designing for different culture through exploration, reflection, discussion and design intention which manifest as Design Philosophies

Executive Summary

As a part of JMP at TU Delft, we had the opportunity to design for implementation of sex education in Indonesia. We were unable to explore the culture of Bali together as a design team because of which we had our own assumptions, perceptions of what the culture is or could be. And most importantly in the project we had reduced a whole culture to a set of constraints we needed to design for. This was deeply troubling. So in order to tackle this issue of culture clash and the need to be sensitive to other cultures, this project was born. The cultural element of Japan and their design philosophy were an inspiration. Their design philosophy and culture are weaved together to form one coherent Japanese Design Philosophy. To address the cultural dilemma for designers, it was decided to bring design philosophies into this project so that one could frame design philosophies based on the culture they design for. The target group for this project was the Master's design students of TU Delft from the Industrial Design Engineering department.

        The research began with understanding of existing design philosophies such as Japanese Design Philosophies, Bauhaus and De-Stijl movements, Buen-Vivir centric design model. These formed the basis on how the design philosophies manifested and how it was culturally connected with their respective cultures. Interviewing two design studios viz. Butterflyworks, Netherlands and Whitenoise Design, India gave an opportunity to understand the workings, the tools they used for designing and gave an in-depth understanding of their design philosophy. These case studies provided a strong basic understanding of design philosophy and when should one consider a design philosophy a design philosophy. Keeping this in mind, the next step was to see how one can frame design philosophies depending on a certain context and culture. This was executed by having design students from TU Delft undergoing co-developing sessions using sensitising material and insights from Cultura tool. Students from the sessions developed the design philosophies which were rooted to the context and the culture. These sessions were analysed to extract the process of developing design philosophies along with the content that required to develop the design philosophies. These inputs were further translated to toolkit requirements and interventions. This way a toolkit could aid the designers in developing culture and context driven design philosophies.

The ideation for the toolkit began with 'The Card Set' which was tested with designers. Though it had some flaws, the participants were able to successfully develop design philosophies. A new concept 'The Board Set' was born which was much more refined. In order to make the interactions much more fun and meaningful, a third concept 'The Block Set' was developed. This involved exploration cards, blocks, response sheets. The designers would undergo initial exploration of self, culture and later develop the design philosophy as a team. This was surveyed with designers, who mentioned that the toolkit definitely provides moments of reflection and brings teams and cultures together without compromising on either of them.

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1. Introduction

The aim of this chapter is to provide the reasons for starting this project of developing culture and context driven design philosophies. This entails with research questions, planning and basic understanding of various design terms that will be used in the rest of the project. More importantly, it deals with 'why' the term design philosophy is being used in this project. This chapter also explains the design philosophies of designers and how they are different from contexts and cultures.

1.1 Motivation for this project

Designers love pushing boundaries and challenging themselves when it comes to designing for different contexts. Joint Master Project(JMP) was one such context and project that I was a part of at the Delft University of Technology, where the team was designing for Indonesian teachers to help them facilitate sex education. In the design process, the research phase had ended and the team had started to ideate. This is where the issue began, the ideas the team generated and the sources of inspiration for those ideas had more or less very little to do with the culture of Bali (where the project took place). Although inspirations and ideas can come from anywhere, it became clear that the team was not looking into the cultural context of Bali or Indonesia as a source of inspiration but rather saw them as a set of constraints to design for. For example: Bali, a city predominantly with a Hindu population was seen to be conservative because we never looked beyond it for any form of reference or inspiration. However, it can also be seen that Kama Sutra which is a well known ancient Hindu text in regard to sexuality, philosophy and sex positions, could have helped in getting the Hindu teachers much closer to being open to talk about sexuality than by any other means. This type of cultural exploration was lacking.

The main goal of this project is to help designers carry forward the spirit of the culture that the designer is a part of in a project, in order to sustain the culture and to generate ideas. A designer here can be a design student, design professor/educator, designers in practice, design researcher etc. It is assumed that design philosophies based on the culture and the contextual insights could help sustain the spirit of the culture in the project. This was inspired from Japanese Design Philosophies where their culture is intertwined with design in the form of beautiful design philosophies such as Wabi-Sabi, Yugen etc. In order to develop design philosophies, this project will entail a toolkit for designers that will help them to combine their design values, cultural values from a different context, so that they can use design philosophies as guiding principles for the rest of the project. As an example, the toolkit could have helped my project in Bali in understanding the richness of the culture with explorations and simultaneously could have led the team to explore our own misconceptions, perceptions and biased interventions as designers, in regard to the culture.

1.2 Problem Definition

During the research phase, designers explore and try to understand the cultural context as much as possible in different ways, using different tools such as emic and etic approaches (van Boeijen and Zijlstra, 2020). Emic and etic approaches are lenses that designers use to understand a culture like an outsider and an insider. These tools help in arming the designers with the information and insights about the culture as an insider and an outsider to it. Next they prepare/ refine a design goal, create a design vision and so on. These become the goals or visions for the designers to reach in the project. Metaphorically, designers often require pathways to reach such a goal or vision. These pathways, many times, are driven by their personal inherent design philosophy as a guiding principle to reach their objective which the designer may or may not be aware of. However, there might exist a conflict between the cultural values of the people in the context (target group) and the personal design philosophy of the designer. These cultural differences could hamper the design and the project. Moreover, a culture sensitive designer is always sensitive on how the design will affect the people, culture, and their behaviour (van Boeijen and Zijlstra, 2020).

Hence in this project, culture based design philosophy will be developed to avoid the conflict and make culture and design philosophy a seamless transition for better, finer and more appropriate design results. The goal of this project is to provide a tool or method for designers to capture cultural nuances and translate them to design philosophies depending on the context.

1.2.1 Research Questions

In order to go deeper into design philosophy, the following initial research questions are framed

- What do we mean with design philosophy in this project?

- Why is design philosophy required?

- When should one use culture and context based design philosophy in a design process?
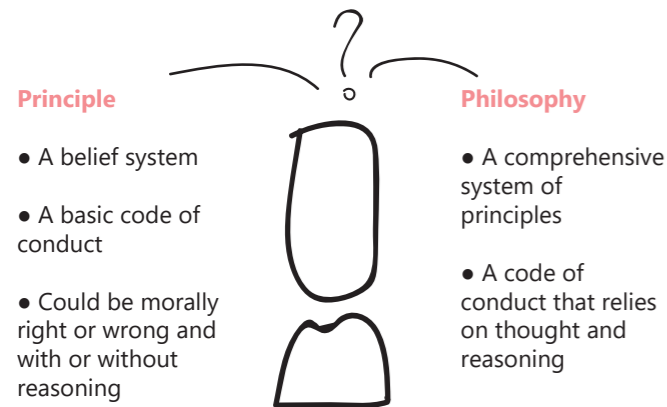
- What are the 'ingredients' of a design philosophy?

This will be further analysed with case studies and co-developing sessions to figure out the process of developing design philosophies within a culture and context.

Design Goal

Design a toolkit that helps a designer to develop context and culture driven design philosophies when designing for a particular culture and context.

1.3 Definitions

1.3.1 Principle or Philosophy?

Principle

● A belief system

● A basic code of conduct

● Could be morally right or wrong and with or without reasoning

Philosophy

● A comprehensive system of principles

● A code of conduct that relies on thought and reasoning

Before diving deep into what Design philosophy is, it is first important to first understand the difference between Principle and Philosophy as this will set the stage for why the phrase Design Philosophy was chosen for this project. Both of these terms have a commonality. They are used as a code of conduct for people. This is where the similarities end.

One internet user writes "*Principles are general and fundamental truths that may be used in deciding personal conduct or choice, whereas philosophy can be used to describe the rational or critical investigation of these principles of being, knowledge, or conduct, or it can be used to refer to a specific system of principles for guidance in practical affairs*" (Yahoo answers, retrieved on 06 Feb 2021). This is in fact also expounded by another user in another forum on the internet who says "*Living according to principles may turn out to be no more than simply living by the ideas one was raised with. These ideas may be good or bad. They are typically defended by saying, "That's how I was raised." You might be raised to do random acts of kindness, which is good, but you also might be raised to believe that people should be segregated by race, or that one race is better than another.*

Living by a philosophy almost always implies that — right or wrong — you've put some thought into the first principles that drive your behavior and that you can at least make some argument, or give some reason, for why you believe as you do. It's implied you can make some kind of intellectual defense, even if it's half-baked".

It is seen that principles form a fundamental belief system as a code of conduct. On the other hand, philosophy can be thought of (as much as possible) as a coherent, logical and systematic worldview, an account of reality (Quora, retrieved on 06 Feb 2021) with reasoning as the basis. Philosophies are a comprehensive systems of thought (Weknowtheanswer, retrieved on 06 Feb 2021). Considering these explanations as the foundation for this graduation project, it is ideal to use the term philosophy than principle as this graduation project requires designers to undergo considerable reasoning, decision making based on personal and team based design values by keeping in mind the cultural values associated with the people in the context.

1.3.2 Design Philosophy

Tony Fry, a design theorist and philosopher defines a New design philosophy as "a philosophy that delivers a new foundation of thought and practice" (Fry, 1999). In other words, a design philosophy is a philosophy that delivers foundations of thought and practice.

Apart from the definitions of philosophy from the previous section, there are two other main definitions. One is related to the Philosophy as a discipline "the study of the nature and meaning of the universe and of human life" (Oxford learner's dictionary, Oct 14 2020) and philosophy as a guiding principle " a set of beliefs or an attitude to life that guides someone's behavior" (Oxford learner's dictionary, Oct 14 2020). It is not so useful to go deep into the discipline of philosophy for the sheer enormity of it and the second definition makes more sense as 'design philosophies' have always been seen as guiding principles in the history of design discipline. Combining the definitions of philosophy as a guiding principle and definition of design philosophy from Tony Fry, a design philosophy can be defined as:

Design Philosophy

is a set of guiding principles in thought, practice and behaviour in design.

Design Philosophy is not to be confused with Philosophy of Design. Philosophy of design is a new field of research combining the fields of philosophy and design research (Galle, 2009). It is a field that relates to asking questions on design such as how is design different from other disciplines such as engineering or arts, or how is design different from an artefact (Galle, 2009). On the other hand, design philosophy is a statement in form and a principle to practice for designers. Taking design philosophies of various designers as seen below as examples, it can be concluded that it is a rule of thumb that the designers follow in their design projects There is highly likely that they would have formed these philosophies after considerable thought and experience as designers. If this is the case, calling them design philosophies than design principles could be the better option. And not to forget, Dieter Ram's famous 10 Commandments of good design where he clearly explains what good design entails and the principles he uses to work with, because of which the brand Braun became famous for. The whole system of 10 good design principles of Dieter Ram's could be termed as a single system of design philosophy.

"Never work against the fabric, which has a life of its own"

Givenchy, Fashion Designer

Source: https://www.onewhodresses.com/library/2018/3/the-timeless-philosophy-of-hubert-de-givenchy

"Design is ambiguous, a celebration, a dialog with the cosmos and the inner callings"

Dr B V Doshi, Architect

Source: 1) https://audiogyan.com/2018/12/05/balkrishna-doshi/
2) https://premjain.in/Testimonials/Testimonials.php

"The word 'fun' is inside the word function"

Oki Sato, Industrial Designer

Source: https://www.youtube.com/watch?v=c3TPbj2_Xjg
https://www.kookudesign.com/designer/77/nendo

The above stated design philosophies are deeply connected to a designer. It stems from their personal experiences, values and practices. One might even say that design philosophies can be a designer's opinion on Design or the design process. However, there are design philosophies that stem not from a designer. They can be culture based as seen with Japan, where their design philosophies are very explicit and culture centric. There are company and organisation based design philosophies as well, taking Braun or Apple Inc as examples.

Culture and Context driven Design Philosophies

Culture and context based design philosophies, on one hand, can help a designer better understand the culture they are a part of. On the other hand, this gives the designers the opportunity to understand and develop their own design values explicitly, in order to make themselves culturally sensitive. Annemiek van Boeijen in her book 'Culture sensitive design' specifies why it is important for designers to be culturally sensitive as they will be able to understand the effect the designs can have on the target group's culture and how the same culture can have an impact on the design values of a designer (van Boeijen and Zijlstra, 2020, p-23). Finally the major factor for developing culture based design philosophy is to encourage the designers to not let go of the spirit of the culture as there would be many sources of inspiration that one may find that can be valuable for the design project. The 'spirit' according to the Cambridge

dictionary, states that it is a "a particular way of thinking, feeling, or behaving, especially a way that is typical of a particular group of people, an activity, a time, or a place" (Retrieved on Jan 12, 2021). This 'spirit' is perhaps best captured by designers when they look at a culture in all its manifestations.

Culture
Japanese design philosophies

People
As shown above

Design Philosophy

Design Movements
Bauhaus, De-Stijl movements

Culture and Context driven
Current graduation Project
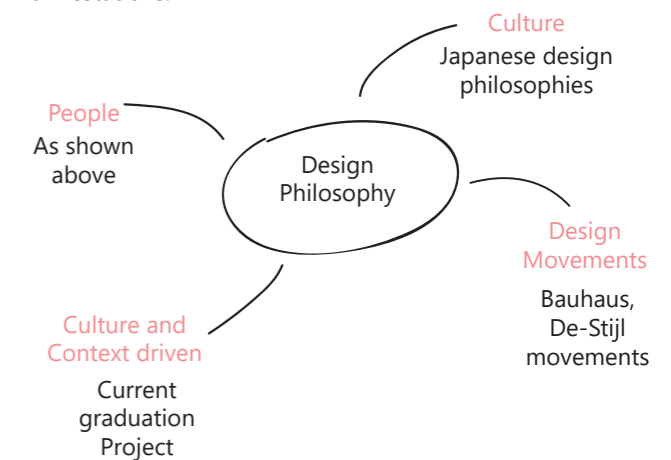
When should one frame and use a culture and context driven design philosophy? This project proposes the best time to develop design philosophy(ies) is just when one might be updating a design brief or preparing a design vision for the project. As culture and context based design philosophy can be considered as a guiding principle for the project, the earlier the design philosophies are developed the better. However, considering that the cultural values being a key ingredient of design philosophies, one needs to have a strong foothold in the cultural values of the context of the design project. Considering the Double diamond design process as an example (Design council, 2005), the design philosophy(ies) can be generated immediately after the Define phase and before going into the development phase or in a Design thinking process, between definition phase and ideation phase. But the process can be started earlier i.e using the toolkit, the process of developing the design philosophies could be started as early as even the start of the project.

Feasibility Review

Concept Review

Design Philosophy

Brief

Discover   **Define**   **Develop**   **Deliver**
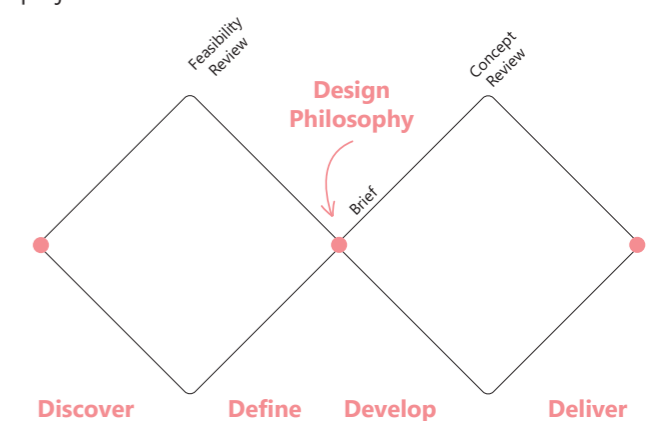
Fig 1 : The placement of Design Philosophy in a Double Diamond design process
Source: Design Council (2005). The Design Process. Retrieved October 1, 2014, from: http:// www.designcouncil.org.uk/about-design/How-designers work/Thedesign-process

1.3.3 Cultural Values

As this project deals with developing culture and context based design philosophies, it is important to take into account the cultural values of the users as they greatly shape the behaviour of the people (van Boeijen and Zijlstra, 2020). Culture can be described as

Culture

The system of shared beliefs, values, customs, behaviors and artefacts that the members of a society use to cope with their world and with one another, and that are transmitted from generation to generation through learning" (Bates and Plog, 1976 in van Boeijen and Zijlstra, 2020)

These can be written or unwritten rules depending on the group. For example, religious cultures mainly stem from scriptures which are written rules or structures, whereas public spaces see unwritten social norms which is another type of culture. Also professions have cultures taking a hospital as an example where they have their own code of ethics, hierarchy and so on (van Boeijen and Zijlstra, 2020). The values of these cultures are the ones the designers look for when designing. There are tools such as the Onion model, socio- cultural dimension model, Cultura which have been developed specifically to extract these cultural values from cultural research (van Boeijen and Zijlstra, 2020). This project will entail the specific use of Cultura tool developed by Hao, van Boeijen, Stappers, in 2017 as this seemed to be a comprehensive tool for finding cultural values with specific themes which had produced effective results amongst the designers. The themes of Cultura can be found in *Appendix B*.

Cultural values are also planned to be a part of the toolkit that is used to develop the design philosophies. This will enable the designers to compare their design values and the cultural values. It is important to make the differences clear between design values of designers and the cultural values of the target group of a project as this can help them make decisions on how to carry forward the spirit of the culture throughout the project in the form of guiding principle for designing. The culture that this project targets is the values, practices, beliefs of social culture that grew from a religion or nation specific ideals. This targeting is based on my personal experience in a completely different culture where there were very clear differences in values of designers and the values exhibited by the culture which makes the design project the most challenging to carry out. This project will also look into how the designers make their choices and develop design philosophies when they are faced with such contradicting values.

1.3.4 Context

Context is a word that is used in the Design discipline ubiquitously. However, defining what a Context is, has been a slippery slope. On one hand it could be as abstract as a hospital or sometimes even a person (Sleeswijk Visser & Stappers, 2011). More often than not, Context is defined as the environment of human-product interaction (Sleeswijk Visser & Stappers, 2011). However this does not provide enough information to go ahead. It requires boundaries. So where do you draw the line? "It depends on design problem, brief, whether a product or service is designed, whether the product is totally new or already a core functionality is give, ...it depends on the aims of a designer, including the ethical, social, political views, budget" (Sleeswijk Visser & Stappers, 2011). As it's a very subjective term, how does it fit into the Culture? On the contrary, culture can be used as a lens to draw some boundaries. Hospitals have a culture. So hospitals can be considered as a context. It does not necessarily mean a physical boundary, hospitals as context can also include ambulances, parking lot and so on as long as it is meaningful for the designer to use in the project. If one is designing a ventilator, parking lots may not be useful for a designer. So there is always a boundary. Moreover, cultures can provide a certain sense of a boundary to deal within a project. When it comes to passport cultures, nations become a context (van Boeijen and Zijlstra, 2020). Religions can become a context. A certain sport can be a context. Context can be condensed to 'on the ground reality' which includes culture and environment of human-product interaction. For example, designing social interactions in a Japanese shrine in Japan. This has a cultural, human, and product environment which can form a context in itself.

Another aspect is how to choose a culture or the starting points? Annemiek and Yvo explain the book 'Culture Sensitive Design' that there are different ways of approaching a culture. It could be from the perspective of a

● **Historian:** where the past acts as the main inputs for designers in designing. The past includes the behaviour of people, their values and how it developed over time which can provide some basis for designers to predict the future with the insights garnered.

● **Anthropologist:** where the designer studies the everyday habits, behaviours, rituals of people and how they cooperate and co-exist within a given community.

● **Philosopher:** where the designer can try to understand what is good or bad in the current culture and how it could be helpful or not so helpful for the projects at hand. For example, should a technology be developed to have electronic chips inside the brain? Is this ethical?

There might be a whole lot of ways of how to approach a culture depending on the perspective you choose. For this project, the student designers designing for people from different cultures within different nations are the target users. This is also based on the personal experience described in the motivation section. For example, if a design student from Africa, is designing for a certain context and culture for the people of Mexico, this toolkit would be best used by him/her. *Section 1.3.6*, will explain how the culture and context for this graduation project was chosen based on my personal experience. This shows that Cultures can be approached and studied through different perspectives. However there are drawbacks to this as many times it would be hard to define a culture and context if a goal is not set, or a problem not yet defined.

1.3.5 Design Values

Prasad Boradkar explains that value and values are different (Boradkar, 2010). He explains, value as a fluid aggregate relation where it changes over time, space, contexts. It is the worth of a relation between object and subject, sometimes only object, sometimes only subject, or even many times transcends the subject-object relationship where the experience and engagement with the object becomes more valuable (Simmel, 2001), which Boradkar explains in his book. The Subject as an example is more often than not an individual and an Object could be a tangible entity (iphone, buildings) or intangible entities (stocks, actions like sewing). For example: If the experience of using an Iphone transcends the user and iphone, then the value seems to be in the experience and not on the user or the iphone. On the other hand, "*values are related to moral codes, ethics and standards of behaviour adopted by individuals or groups*"(Boradkar, 2010). He also explains the different types of values such as financial value, aesthetic value, functional value, brand value, emotion value, historical value, environmental value, social value, cultural value, political value and symbolic value (Boradkar, 2010). Also Kahn and Friedman in their book discuss human values in relation to technology such as privacy, ownership, property, trust and so on (Kahn and Friedman, 2002). However, it appears that all these values as explained by above authors deal with values other than values of a designer. In other words, values are based on human centered design keeping the users in mind but not designers themselves.

The designer is the one designing the product/ experience/ service. It is impossible to take away the designer from a project and it would not be wrong to say that the designer is the one who will be developing a design philosophy. Friedman and Kahn do touch upon the designer's intentions and values and how they inscribe them into the technology (Friedman and Kahn, 2002, pg 1178-1179). This inscribing of values by designers on the designed product or experience changes the user's behaviour (Friedman and kahn, 2002). In this regard, it is imperative for a designer to know his/her design values as it has a lot of influence on the culture and behaviour of people.
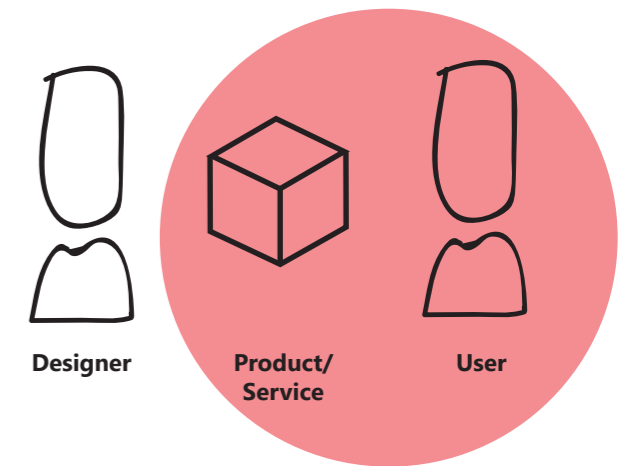
Fig 2 : Human centered design values the relationship between product and user.
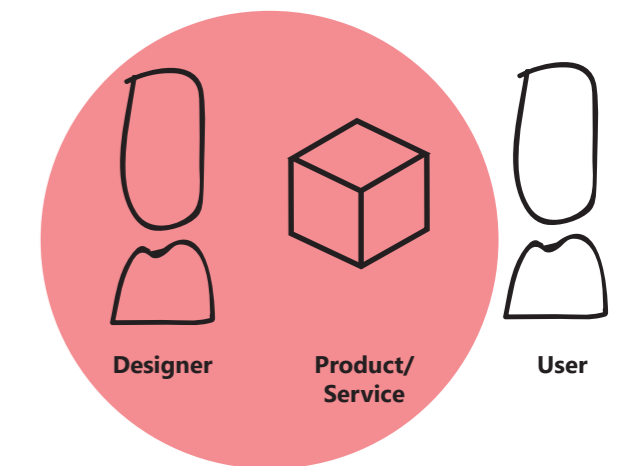
Fig 3 : This project would like to deal with the designer's design values which plays an important role in designing.

It is unclear how many people are clear about their design values which many times changes with context and time (Boradkar, 2010). Hence a designer knowing the design values in the context of a project helps in formulating a design philosophy. Now what is a design value and where does it come from? There doesn't seem to be a consensus within the design community on what design value is.

There are certain articles on the internet which try to define it such as " Design values are the fundamental principles that define us and stay with us even when technology, context and the world changes" (Glebkovskaya, 2019). There is also no general framework on what constitutes a design value, it could be related to sustainability, ethics, aesthetics like 'Less is more' and so on. The only way to move forward in this project is to help the designer to reflect on his practices (Schoen, 1984). Providing the designer an opportunity to reflect in the project would greatly benefit him/her and in turn in developing a design philosophy. The areas to cover for reflection could be related to the design culture of the designer. Annemiek van Boeijen describes the three layers of a designer related to his/her design culture which affects their way of designing (van Boeijen and Zijlstra, 2020):

● **Designer as an individual person:** corresponds to the designer's ideals, moral codes, opinions on good and bad design, personal interests.

● **Designer in a contextual scenario:** corresponds to personal opinion due to current circumstances which would be influenced by the place, politics, economy, society, education etc

● **Designer's historical background:** corresponds to the designer's past which includes education, upbringing, life experiences etc

These three layers would be used as the base for reflection that can greatly help designers in knowing themselves and can provide a direction for developing a guiding principle such as a design philosophy. This type of reflection will be included for designers as a part of the toolkit being designed for this project.

1.3.6 Self identity, TU Delft, Design Culture and Context for this project

Identity
I was born and raised in India with Hindu culture and traditions. I completed my Bachelors in Mechanical Engineering and now graduating in Design for Interaction stream in TU Delft, The Netherlands. An Indian with Hindu roots in a Western European education setting, I am able to see and reflect on many aspects of how different the cultures are in terms of Nations (India and Netherlands), pedagogy and disciplines (Mechanical Engineering and Design for Interaction), the interaction with peers and professors, the food and lifestyle and many more. This type of self introspection couldn't have been possible if I had stayed back in India. Considering my JMP project in Bali, Indonesia, barring the travel, I was able to understand, introspect and tackle the similarities and differences between my indian roots, western education, Bali project,and with a diverse team from Portugal, Brazil and Italy. This experience of being in a JMP project provided an opportunity to plug the holes in the way I designed and how we could design.

This graduation project is the result of such exploration and reflection.

TU Delft and Industrial Design Engineering (IDE) department
Delft University of Technology or TU Delft is a technical university in the Netherlands. The IDE department is the engineering department which specialises in design. In this department, the design students, researchers, professors can employ various tools and methods in their design process that have been designed, engineered or strategized for various problems, scenarios and complexities (Stappers, retrieved on 06 Feb 2021). These various tools and methods have been developed in the IDE department and elsewhere. One of the design processes included in the pedagogy is the Double diamond process. This is extensively used by the students and researchers in design in IDE. As I have been a part of this education system, for the sake of simplicity and focus, this graduation project will also be employing a Double diamond design process as seen in *Fig 1*. In addition to this, Cultura, a tool developed in the faculty of IDE is also being used for this project.

Coming to the topic of diversity, the TU Delft Master's course had about 272 International students out of 881 Students in 2018 alone (https://www.tudelft.nl/en/about-tu-delft/facts-and-figures/education/student-population/, retrieved on 06 Feb 2021). More than 25% of the population come from different schools and different cultures with different behaviors and attitudes but later trained in the culture of TU Delft such as in pedagogy, style, design processes, tools and methods, research and so on. This graduation project will be situated in the TU Delft community and its culture of research, engineering and design. Although this limits the usage of the designed toolkit, the toolkit will have a definite target group (Design Students of TU Delft) who can use it in various international projects.

Global Design Culture and Reflection as a tool
There is a global design culture where every designer is trying to solve or improve the systems, existing problems, services, products etc in various scenarios and contexts. Within this culture there are many who opt for different processes, methods and tools to arrive at design/solutions. But the one aspect that the global design community has started to explicitly and extensively make use of, is the 'reflection' of a designer in a design project ever since Donald Schoen has described the processes of reflection in terms of Reflection-in-Action and Reflection-on-Action (Schoen, 1983).

It is important to understand that all cultural differences cannot be answered through a single stroke of solution (toolkit in this project). Hence in order to tackle cultural differences, reflection as a tool is being used. It is also vitally important for every design student to understand who they are as designers through reflection. As Tracey and Hutchinson say "novice designers can leverage reflection to interpret and manage issues of uncertainty, instability, uniqueness, and conflicted values that are inherent in ill-structured design problems, both during and after design experience" (Tracey and Hutchinson, 2013). Hence for this graduation project, reflection will play a key role in understanding oneself as a designer and while designing for other cultures in a design project. This should also help the design students from any background and cultures to be able to make progress as designers.

Limitation
The main limitation is that the target group is the Design Students of TU Delft even if the students are from different cultures and backgrounds. These differences in the cultures of design students will be addressed in the toolkit via co-developing sessions explained in *Section 3.2.1* and through reflections. There is a possibility of other designers from around the world to be able to use the toolkit provided that the design process they make use of, is a Double Diamond process. All the processes of this toolkit will be mapped with a double diamond process as shown in *Table 5*. Also, Cultura tool is recommended to be used for researching which would provide comprehensive insights on the target culture. Another point to be made is that all design institutes/universities make use of different design processes and have different cultures in terms of ped agogy, tools, student diversity etc. This toolkit developed in this graduation project may not be applicable in these universities until and unless it is tested in these contexts. On the other hand there are design studios, design companies who have their own design philosophies, tools and cultures. The recommendations in regard to the usage of the toolkit from design studios' point of view by involving multidisciplinary teams, have been included in *Section 6.2.1* (Recommendations for Research) and *Section 6.2.3* (Recommendations for what constitutes a good team).

1.4 Approach and Planning

The approach was to include the usual design phases into this project. Research phase, Analysis, Ideation, Testing and another iteration of the phases.

Chakra 1: Initially, there is a literature study on existing design philosophies for example in Japan and Bauhaus and De Stijl movements. This would bring new insights into how design philosophies are formed, its format and usage.

Chakra 2: The next phase would include the co-developing sessions where the designers in teams undergo workshops to develop design philosophies based on the context and culture. Here the tool Cultura (Hao et al, 2017) is used as it provides comprehensive themes to understand a culture from a designer's lens. These insights would be used to analyse and bring the process of creating design philosophies to surface.

Chakra 3: Post analysis, ideas for the toolkit would be developed to see how the toolkit would look like, what it contains etc using this process of creation as a backdrop. This is later tested with designers to see its working, feasibility and appeal.

Chakra 4: Finally the tool for developing context and culture driven design philosophies is developed as a toolkit that designers can use in their culture centric projects.
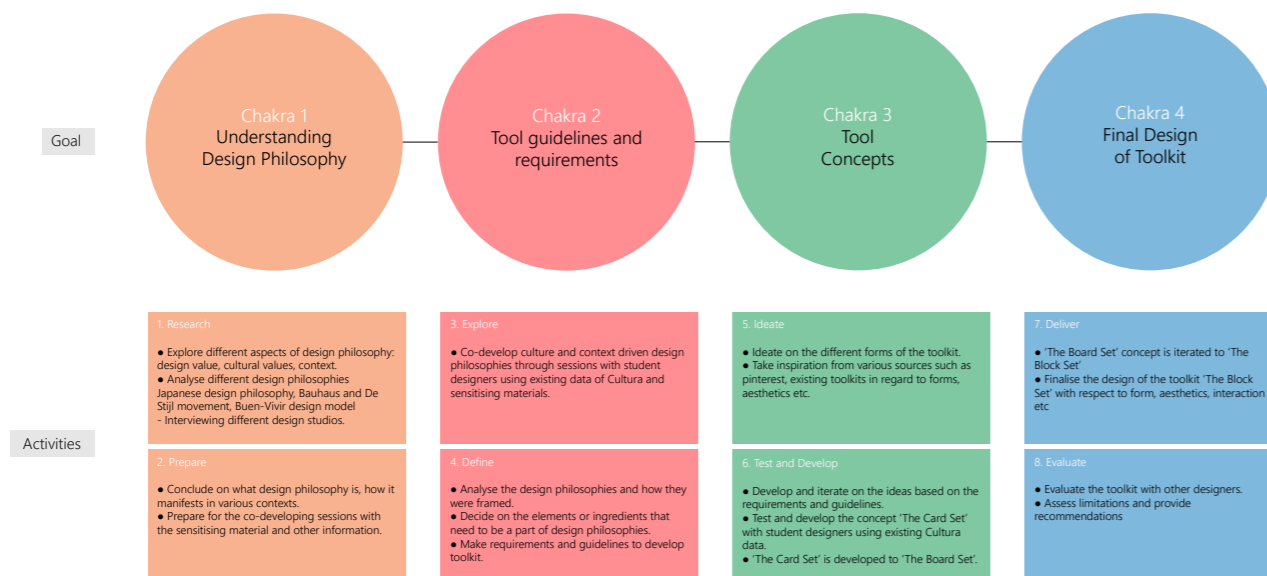
2. Analysis of existing Design Philosophies

The aim of this chapter is to analyse the already existing design philosophies such as Japanese design philosophies, Bauhaus and De-Stijl movements. Also included is the newly framed Buen-Vivir centric design model which will be studied. This research is commenced with a set of research questions. On top of this, interviews with two design studios Whitenoise Design and Butterflyworks Design, both of which will be analysed to look for design philosophies that they may exhibit. Finally all the insights are concluded to frame how design philosophies actually manifest in reality in different cultures and different design studios.

Goal

Chakra 1
Understanding
Design Philosophy

Chakra 2
Tool guidelines and
requirements

Chakra 3
Tool
Concepts

Chakra 4
Final Design
of Toolkit

Activities

1. Research
● Explore different aspects of design philosophy: design value, cultural values, context.
● Analyse different design philosophies Japanese design philosophy, Bauhaus and De Stijl movement, Buen-Vivir design model
– Interviewing different design studios.

2. Prepare
● Conclude on what design philosophy is, how it manifests in various contexts.
● Prepare for the co-developing sessions with the sensitising material and other information.

3. Explore
● Co-develop culture and context driven design philosophies through sessions with student designers using existing data of Cultura and sensitising materials.

4. Define
● Analyse the design philosophies and how they were framed.
● Decide on the elements or ingredients that need to be a part of design philosophies.
● Make requirements and guidelines to develop toolkit.

5. Ideate
● Ideate on the different forms of the toolkit.
● Take inspiration from various sources such as pinterest, existing toolkits in regard to forms, aesthetics etc.

6. Test and Develop
● Develop and iterate on the ideas based on the requirements and guidelines.
● Test and develop the concept 'The Card Set' with student designers using existing Cultura data.
● 'The Card Set' is developed to 'The Board Set'.

7. Deliver
● 'The Board Set' concept is iterated to 'The Block Set'.
● Finalise the design of the toolkit 'The Block Set' with respect to form, aesthetics, interaction etc.

8. Evaluate
● Evaluate the toolkit with other designers.
● Assess limitations and provide recommendations

2.1 Research questions for analysis of Design Philosophies

These are the next set of research questions on the application of design philosophy for designing and how they came to be. On a broader note, these questions will look at the cultural values and how they were used to underpin those values while designing.

● What are the sources for design philosophies?

● How do design philosophies manifest?

● How do designers use cultural values as design philosophies?

● How do designers encounter values and how do they answer the differences?

● How do designers retain the cultural spirit in their project?

2.2 Japanese Design Philosophies - History

Japanese aesthetic has been very influential in the design discipline. The minimalism that is so widely known, stems from Zen Buddhist principles (Bruens, 2007). Zen style arts and design do not use unnecessary elements but rather choose to use simplicity to depict the content (Interactiongreen, retrieved on Oct16,2020). Their cultural principles have existed for more than half a millennium and are extensively influenced by Zen Buddhism (Parkes and Loughnane, winter 2018). These principles manifest in art, calligraphy, writings, architecture and have been documented in historical texts. Going back to the topic of design philosophy, there are plenty of these philosophies that have originated from Japan, such as Miyabi (Elegance),

Shibui (Simplicity), Iki (Spontaneity and Originality), Jo-ha-kyū (Modulation and Movement), Geidō (Discipline and System), Ensō (Void and Absolution), Kawaii (Cute and Lovable). One of the main design philosophies, 'Yugen', relates to 'dark' or 'mysterious' (Parkes and Loughnane, winter 2018). It is a way of not completing the story. The Japanese culture values withholding information and not revealing everything at once (Walter, 2012). There is as much importance for what is not said as much as what is said. This manifests in the Splashed Ink Landscape painting by Sesshū as seen in *Fig 4*. The landscape is filled with fog and does not reveal the mountains in the background. This is how the Zen Buddhism principles/values manifest in Art.

One other famous design philosophy is Wabi-Sabi. This relates to imperfection, impermanence and incompletion in design. School of Life youtube channel explains Wabi-Sabi as a principle in Zen Buddhism that respects the world which is imperfect, fragile and modest and this is more beautiful than achieving perfection. And that wisdom comes by making peace with nature which is filled with imperfections. Wabi-Sabi initially had a negative connotation. Wabi had "meant misery and loneliness of living in nature, away from human consolation but now an exquisite bitter-sweet melancholy of being on one's own. Sabi which was originally meant as chill, lean or withered, which started to denote the marks of aging and wear, which can enhance an object' (School of life, 2015). Zen Buddhism had started to make principles which generally had a negative connotation into a positive one. This is also seen as a design philosophy with Murata Shuko, who is known as one of the father's of tea ceremony, where he in 1488 started to present the ideal way of how one should drink tea (School of life, 2015). He told his students to not to look at the full moon which was earlier an essential part to enjoy while drinking tea in balconies, but embrace the beauty of an incomplete moon or the moon behind the clouds. Another father of modern tea ceremony Sen no Rikyū codified the movements of tea ceremony- perfectly economical and graceful notions of preparing tea with minimal fuss (School of life, 2015).

Fig 4 : Splashed Ink Landscape painting by Sesshū
Source: https://plato.stanford.edu/archives/win2018/entries/japanese-aesthetics/

Fig 5 : A withered tea cup from Japan which has undergone sabi (aging and has gained more value)
Source: https://www.etsy.com/listing/166069207/vintage-wabi-sabi-cha-ji-japanese-shiho

In Conclusion
To answer the research questions:

What are the sources for design philosophies?
History, religion, nature, architecture tend to be the sources for designing products.

How do design philosophies manifest?
The design philosophies manifest in the form of interactions specifically in the tea ceremonies and the design of cups

How do designers use cultural values in design philosophies?
They would think about those values while designing in the form of a lens (Wabi-sabi) as imperfection for example in designing tea cups. Also looking into nature and making it an everyday experience would provide better understanding on how the products and interactions could be like.

How do designers encounter values and how do they answer the differences?
Zen Buddhism helped in changing perspective i.e seeing things in a positive note and to rely on positivity than perfection

How do designers retain the cultural spirit in their project?
The designers would map cultural values to products, for example wabi-sabi to the tea cup.

Zen Buddhism played a role in changing the perspective. Looking at things positively had a profound impact on the culture. Would it be possible for a designer to turn something which is viewed negatively in a culture to a positive value? Would there be a moral or ethical complication? These are profound questions but there is a possibility of a designer changing the perspective of a certain value to suit the project at hand. This can be connected to the design intention which will be later discussed in the report.

2.3 Bauhaus and De Stijl movement

By the late 19th century, Europe had gotten tired of sameness, especially in artistic styles, architecture(Bruens, 2007). Machines had taken over labour and there were questions like how should one differentiate between man made and machine made when machines could also execute the same artistic styles (Bruens, 2007). During the late 19th century and early 20th century, there was flooding of Japanese products in the market due to trade. The people were highly influenced by architecture, art, products from Japan which were filled with new composition, new colour, new materials etc (Bruens, 2007). New movements began to bridge the gap between craft and machines such as Bauhaus (Borteh, 16 Oct 2020). Another movement De Stijl which was similarly influenced by Japanese culture, wanted to fuse form and function (Borteh, 16 Oct 2020).

Both Bauhaus which originated in Germany and De Stijl in the Netherlands, have almost similar design philosophies which are extensively influenced by Japanese fine arts. Bauhaus design philosophies (Schenker, 2018), which are manifested in the products designed by the designers of those times, are

● Plainness
● Straightforward simplicity
● Being conducive to mass production
● Retaining the integrity of craft materials (as in materials should be used in their honest and natural form and not altered)
● Streamlined aesthetics

Both Bauhaus and De stijl have similar design philosophies but differ mainly in their visions. De Stijl had a utopian, collective or universal appeal which transcended individualism (Wolf, 16 Oct 2020). On the contrary, Bauhaus rejected this idea and wanted to pursue the confluence of craft and machinery with individual skills (Bruens, 2007). Walter Gropius (1883-1969) was one of the famous founders of the Bauhaus school. His philosophy were plenty and one such is:

> *"Let us together create the new building of the future, which will be everything in one form: architecture and sculpture and painting."*
>
> Walter Gropius

Source: https://blog.miragestudio7.com/walter-gropius-quotes/6683/

Fig 6 : Walter Gropius designed his own house with strong lines and minimal colours blurring the lines of architecture, sculpting and painting.
Source: http://visitmodern.com/gropius-house-lincoln-ma-1938

His design philosophies have manifested in his buildings and craftsmanship. There was extensive Japanese influence like the usage of diagonal composition, use of typical Japanese colour contrasts inspired from Japanese block prints (Bruens, 2007).

On the same lines, Gerrit Thomas Rietveld (1888-1964) from De Stijl movement had similar design philosophies.

"When I sit, I do not want to sit as my seated flesh likes, but rather as my seated spirit would sit, if it wove the chair for itself"

Walter Gropius

Fig 7: Gerrit's famous Red Blue chair and his design philosophy in its flesh. Source: https://www.icollector.com/Gerrit-Rietveld-Red-Blue-chair_i8513387

Ger Bruens in his book Form, colour, anatomy published in 2007 describes the Rietveld's chair and how his design philosophy manifested: "Rietveld's chair is made from relatively simple wooden parts, lacquered, and is clearly not handcrafted, but rather shows a machine made appearance.... the expression of the machine, liberating the furniture designer from hard work just to produce a flat surface" (Bruens, 2007). Rietveld also had influence of Japanese aesthetics like minimalism, plainness and these can be seen in the strong lines and shapes in his products such as the Redblue chair.

In Conclusion
To answer the research questions:

What are the sources for design philosophies?
Completely different culture (arts, architecture etc) i.e from Japan

How do design philosophies manifest?
In the form of architectures, products such as Red Blue Chair

How do designers use cultural values in design philosophies?
They would choose values such as simplicity as the values they imbibed from Japanese. This simplicity can manifest as less material, less resource use, minimal number of colours and so on

How do designers encounter values and how do they answer the differences?
The designers needed something new. They changed their values after getting influenced by another culture and made it suitable for them such as 'perfection' from Japan although Zen Buddhism extensively venerates imperfection.

How do designers retain the cultural spirit in their project?
The cultural spirit here is that of Germany and the Netherlands in the early to mid 20th century. The designers would seek perfection, mixing creativity and manufacturing(industrialisation).

Changing values such as imperfection to perfection and then designing for themselves provides a new perspective for how designers would like to change their own art and design field by keeping their cultural tenets of perfection still intact. In order to do this, one should know their own values first before making any changes or bringing new values from other cultures. However, when it comes to designers designing for other cultures specifically, it is always good to know how the other culture is and simultaneously the culture of their own (designers). This way, the designers know the clear differences between their own and the other cultures. For the toolkit, it would be a good idea to provide an opportunity for designers to get to know their own values so that clear distinction in values could help them in designing better.

2.4 Decolonising Design: Buen Vivir centric design model

This was the Phd thesis of Diana Albarrán González, a design researcher from Mexico and an interview was conducted with her to learn about the work. The context of this thesis was related to Mayan backstrap weaving and to understand the 'weaver community's embrace of heterogeneity, rather than standardisation and universalisation, and the exploration of links between art-design-crafts to nature-culture, as well as the importance of creative-art practices to individual and collective well-being (Albarran Gonzalez, 2020)'. She had to orient herself to an identity which in itself was complicated. She is a Mexican with roots to Indigenous Latin American and Spanish communities and Japanese ancestry with design education in the Global northern region. This project was a journey to knowing herself. She positioned herself as an 'outsider-within' for this project where having multiple identities was a no go but rather needed to orient herself to Indigenous bearing so that she would be better equipped to feel 'at home' with the Latin American community while doing the research. This research resulted in Buen-Vivir centric design model and guidelines that can be used for collaborating with the indigenous communities by placing the community at the center and giving them the autonomy (autonomia) to have a fair and dignified life

Buen-Vivir (Good living/ Well-being) is a community based philosophy that has culturally existed in Latin America and different communities interpret it differently. Hence the approach to understanding how this philosophy manifested in the Backstrap weaver's community was by having a participatory design approach with the community members. This resulted in various manifestations like sketches, embroidery works that started to depict the life around the community members. They shared how they lived, how this philosophy manifested with nature, the surroundings, their work and so on. This is an approach to seeing how one philosophy manifests in a community.

Fig 8: The backstrap weaving community with the results of participatory design on Buen-Vivir with fair and dignified life philosophy. Source: Personal Interview with Diana Albarran Gonzalez, 2020

There was one other principle/philosophy 'Sentipensaar' that was personally used by the researcher in her thesis. It means feeling-thinking which greatly helped the researcher in experiencing a glimpse of the spirit of the weaver's community. She personally weaved the backstrap loom in order to know how the spirit of the community manifests with an individual like herself. However, 'Sentipensaar' is not from the weaver's community but rather from the fishermen's community.
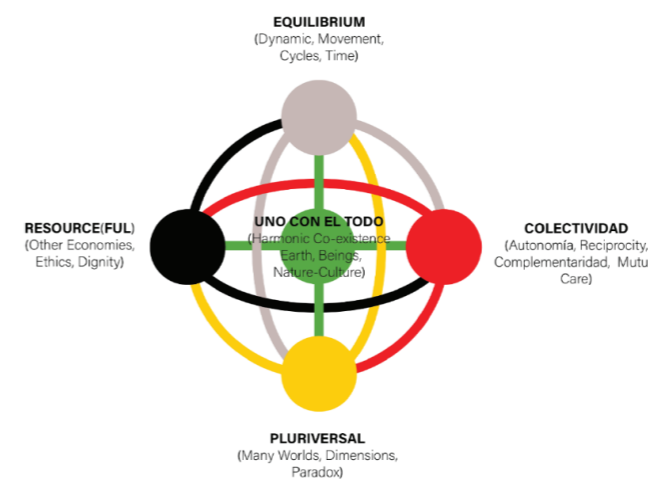

Fig 9: Buen-Vivir centric design model for designers as guidelines for designing for the backstrap weaving community in Latin America. Source: Albarran Gonzalez, 2020

It is an important aspect to experience the culture first hand to really understand and feel the culture if one is designing for them. In this cultural exploration, it is also seen how another philosophy from a different community can also be used to still retain the cultural value in the design process. The final Buen-Vivir centric model describes how everything is connected with each other Equilibrium, Colectividad, Pluriversal, Resource(ful) with the main central theme Uno con el todo. The model is shown in *Fig 9*. In a nutshell, this helps designers to grasp the cultural nuances of this community

In Conclusion
To answer the research questions:

What are the sources for design philosophies?
Cultural principles which are central to their working and principles/ philosophies from other communities such as fishermen's.

How do design philosophies manifest?
It manifests in Backstrap weaving and other community led work. Moreover a set of guidelines and model as seen in the above *Fig 9* can also manifest the design philosophies.

How do designers use cultural values in design philosophies?
Designing for the community by connecting the community members together and a participatory approach to understanding how they view Buen Vivir in their lives, communities and work.

How do designers encounter values and how do they answer the differences?
This is done by looking at a culture with a completely new eyes with no judgements and internal biases.

How do designers retain the cultural spirit in their project?
It is to bring the communities together and be receptive to their understanding of their own philosophies.

This research talks about decolonising design where as a designer, one's design values should be kept aside and start anew in the context. This way, the designer would not be able to pollute the cultural values with the designer's design values. The first step to do this is not to translate any philosophies(Buen-Vivir, Sentipensaar etc) into another language as it will lose its importance and credibility (Interview, Albarran Gonzalez, 2020). However this is easier said than done with new culture and an unknown language. The other way is to reflect what is ones own values, biases etc. Reflections might help a designer if he has internalised the biases (schoen, 1983). Having a set of reflections to ask if the designers are biased or not, might be the best way forward in the toollkit.

2.5 Interviews with Design studios

2.5.1 Whitenoise Design Studio, India

This study was conducted through an interview with Ram Sunkara, Design Principal of Whitenoise design, a branding design studio. The reason behind interviewing design studios is that design studios always work with clients from different professions or with consumers across different cultures or both. It was imperative to look at the design studios' philosophies, work and how they managed to sustain the culture of the clients or consumers or both.
Whitenoise design works on the theme of Carl Jung's Archetypes. Clients need branding for communicating who they are to their consumers. Brands always have personalities and it is possible to map the archetypes with brands. With this in mind, Whitenoise design always searches for the client's archetype through the culture, events, histories etc in order to truly know who the clients are. Authenticity becomes the cornerstone for the design process.

"Authenticity should drive the design process"

Questions they often ask themselves: How can Whitenoise design do their work if the clients are not true to themselves or the design studio? How can Whitenoise design do their magic then? In fact the archetype of Whitenoise design is a Magician who can help other brands know their true self.

"A magician is always someone who does not have a quest of his/her own. He/she always helps other rulers. We don't want to rebel or save the world but would like to help people who would want to do that (in branding)"

Hence authenticity of the clients is important in order for Whitenoise design to do their job. This in turn helps them tune their design process in terms of research, observation, operations etc while keeping Brand identity(Archetype) as the north star. This is how they retain the culture of the brand intact in the design process and in design itself.

"To preserve the brand and continuously reflect on it in the design process so that we can come up with something we can use"

One of their projects was branding a TV News channel. The owner of the channel wanted to preserve the policy of being grounded and approachable for people from outside. However, their operations did not reflect that. The Whitenoise design team had to pass through three security checkpoints to meet the owner. It can be seen that authenticity, observations in the context, brand identity play a major role in designing. Apart from archetypes, there are other tools such as Brand Asset Valuator that are used to filter the clients to work with in the first place. Whitenoise design would look at brands which need high differentiation and high relevance in the marketplace, to work with.

On a side note:
Differentiation is the ability of a brand to stand apart from its competitors. Not just different but how it is better. **Relevance** refers to how closely consumers can relate to the brand's offering and is a significant driver for a brand's penetration. (Young and Rubicam, retrieved from van Tyne, 2018 on 30 Oct 2020)

Another way of filtering clients is, Whitenoise design would love to partner up with clients who would provide the awareness to their consumers about their consumption of their products. These filters can be seen as design values of the studio. If the values of the clients do not meet the value requirements set up by the studio, then collaboration will not take place.

In Conclusion
To answer the research questions:

What are the sources for design philosophies?
Carl Jung's Archetype, Brand Asset Value, Authenticity

How do design philosophies manifest?
It is a tool that manifests as an archetype. As a magician what can they do in the design process to extract the authentic image of the brand.

How do designers use cultural values in design philosophies?
Brand archetype drives the design process. For example, if the brand archetype is a leader, they look at how this manifests in the client's organisation. This research requires different tools and methods in a design process (sometimes observation or shadowing, other times interviews etc). Hence brand archetype drives the design process within Whitenoise design.

How do designers encounter values and how do they answer the differences?
They filter out clients with whom their values do not match.

How do designers retain the cultural spirit in their project?
Client archetype and their culture becomes the north star in the design process.

There are two important aspects that need to be considered. One is that Whitenoise design knows who they are and their values because of which filtering clients becomes easy. Again it comes down to who the designers are in order to design for somebody else. And the second aspect is the use of external tools such as Archetypes or Brand Asset Value which act as a lens to view the client's culture. Cultura is one such tool to extract cultural values and practices which has already been decided to be used in this project. But one major problem with tools is that it is just a tool. A tool will not provide exhaustive information of the entire culture. A tool may have in it, its own biases/shortcomings which needs to be looked into. For example: Archetypes are very distinct characters like leader, magician, prostitute etc.

A human on the other hand cannot be distinguished based on a certain set of archetypes, let alone a brand (Ram Sunkara, interview). A human is a complex system with distinct behaviours at different times. Archetypes cannot map this. Nevertheless,the tool Cultura is used in this project for the reason that it looks at the culture with nine sets of different themes which is good enough to generate information from the data extracted. It is not clear whether Cultura has biases/shortcomings. However, it has produced good results through its studies (Hao et al, 2017)

2.5.2 Butterfly Works Design Studio, The Netherlands

An interview was conducted with Merel van der Woude, Creative Strategist from Butterfly Works Design Studio. They are a social design studio specialised in international development. They are also a foundation with donors but not a business.

"A butterfly's world is one without boundaries. They discover and mark their own paths, graceful, curious, relentless. Spreading seeds across long distances they connect the places they visit. It shows that a small action by anyone can make a big difference everywhere. Some call this the Butterfly Effect, we call it Butterfly Works" (Butterfly Works four-pager document)

Their main mission is:

"To make sure the people who experience part of the problem are also part of the design process"

Co-creation is their main go-to tool in the design process. This tool dissolves almost in every stage of the process, be it research, ideation, prototyping. This acts as a value generator for different cultures. Every stage, the client and the local designer/ artisans/ technologists co-create within a project. Which in turn helps the design studio to derive values from the cultures, clients, people etc. Butterfly works act as a facilitator. "They connect different people with different skills, viewpoints and backgrounds" (Butterfly Works four-pager document). Hence their role as a facilitator is more dominant than decision making. In Fact the process of decision making is left to the clients. But garnering different values of the culture is shouldered by the design studio. This creates a boundary for Butterflyworks and how they work. This acts as a design philosophy in itself.
The cultural values extracted from co-creation sessions are further used in the design process. All the stakeholders participate in the process. Therefore this gives a lot of freedom to local designers/ artisans to create a value for the local context. For example, one of the tools used at the end of a research phase is called "inspiration presentation" where all the insights are distilled and concepts outlined. These insights are mixed and different concepts are created with as wide as applicability, genre are concerned. Some insights can be related to theater, online tools, services etc.

These are co-created and tested locally by the local designers. Butterflyworks acts as a provider of information and tools for the clients and other stakeholders to amplify their creativity skills.

Although the decision making is left to the clients, in order to choose clients in the first place, the values of the clients need to match that of the Studio's. Anyone violating human rights will not be able to collaborate with Butterfly works. Hence a filter is used to choose clients initially and the rest of the decision making, once the project begins, is left to the client.

In conclusion
To answer the research questions:

What are the sources for design philosophies?
Process such as co-creation and roles such as facilitation which help in developing connections for the clients. Clients are central to bringing new sources of information to the table.

How do design philosophies manifest?
It manifests as the co-creation process and roles they play. Not to go beyond the roles of the design studio. Creating a boundary.

How do designers use cultural values in design philosophies?
All stakeholders are part of the design process throughout. Clients, local artisans, designers during research, proto etc. There is no clear indication where the design studio chooses cultural values explicitly. It is left to the other stakeholders as much as possible.

How do designers encounter values and how do they answer the differences?
They filter clients based on values of the studio. They do not engage with human rights violators. In the design process: All decisions are made by clients/stakeholders through co-creation.

How do designers retain the cultural spirit in their project?
By having local people(designers, artisans etc) join the co-creation sessions

One of the sources of a design philosophy can be a tool in a design process such as co-creation. Going a little broader, a design process in itself can be considered a design philosophy. Changing a design process to suit the context (Whitenoise Design) or using one main tool such as co-creation to sustain the values of the culture in the process can be named as a design philosophy as well. Co-creation in itself is a facilitating tool for a designer. The role of a designer being a facilitator draws boundaries on his/her decision making but that acts as a design philosophy just as the Magician Archetype in the previous interview with Whitenoise Design.

Being a facilitator provides an opportunity for Butterflyworks to not confront the values of the culture directly but leave the decision making to the clients and other stakeholders who might be more reliable and worthy of making the local cultural values explicit. Hence the design values of Butterflyworks are not compromised by the values of the culture or in other words, cultural values may not be compromised by the values of Butterflyworks as a team. The dynamics of a design team, inclusion of other stakeholders, and the roles played by all the stakeholders, play a major role in decision making. This needs some serious thinking as designers are not the ones who take explicit decisions when it comes to designing such as in the Butterfly works design studio. But it is out of scope for this project to include multi-disciplinary teams and better to focus only on student design teams for now.

2.6 Discussion and Conclusion

The consolidation of all the design philosophies and the analysis can be seen in *Table 1*. This chapter provided some examples that depict different design philosophies. From religion (Zen Buddhism) to movements (Bauhaus) to communities (Buen-Vivir). On the other hand, there are much more sophisticated technical tools like Archetypes (Whitenoise design) and Co-creation (Butterfly works) which act as design philosophies themselves. These rich sources tell us that there are no clear definitions of design philosophies in terms of its inception, usage, qualities etc. It completely depends on designers what they want to call as design philosophies. Moreover they may not even call it design philosophies as not much knowledge seems to be available within the design community. Is it even right to call them as design philosophies? Similar to asking questions such as "when is art?" (Goodman, 1976 in Visch et al 2013) Or "when is a game?" (Visch et al, 2013). The question that erupts is when is design philosophy a design philosophy? Or in short 'When is Design Philosophy'? It was stated earlier in the report about the definition of a design philosophy being " the guiding principle in thought, practice and behaviour in Design''. Is this enough to make anything a design philosophy? Moreover, this project deals with culture and context based design philosophy. It remains to be seen how culture and context can be used to develop design philosophies. These are profound questions which require a considerable amount of research into this topic. The next section will deal with how these design philosophies can be developed depending on the context and culture with the help of other designers in a participative approach.

Research Questions / Case Study	Japanese Design Philosophy	Bahaus and De-Stijl movements	Buen-Vivir design centric model	Whitenoise Design Studio	Butterfly works Design Studio
What are the sources for design?	History, religion, nature, architecture	Different culture such as that of Japan and very own industrialisation of products	Cultural principles/ philosophies such as Buen Vivir or Sentipensaar	Carl Jung's Archetype, Brand Asset Value, Authenticity	Process such as Co-creation and the Role of a facilitator.
How do design philosophies manifest?	In the form of interaction during tea ceremonies or design of tea cups	Architecture, products such as Red-Blue chair	Manifests in communities, in their work such as Back-strap weaving. Also in the model devloped by the researcher	Tool that manifests as an Archetype (Magician)	Co-creation process and the facilitator role which creates a boundary for the Studio and a philosophy to rely on
How do designers use cultural values in design philosophies?	Everyday experience with nature and using religious principles as the lens	Imbibing values from Japan such as 'simplicity' which can manifest as less material etc	Through participatory approach and trying to see how the values manifest within the community	Brand Archetype decides the process. The archetype have certain cultural behaviour which are picked up by the Studio and it later dictates the design process	All stakeholders are part of the design process. The decision making is left to the stakeholders, especially the clients
How do designers encounter values and how do they answer the differences?	Changing the perspective from a negative connotation to a positive one	Designers wanted something new and Japan provided the values. Designers changed value such as imperfection to perfection.	By looking the culture through new eyes with no judgements and internal biases	Filter out clients whose values do not match with that of the Studio	Filter clients based on the values of the studio. Do not engage with Human Rights violators
How do designers retain the cultural spirit in their project?	Map the cultural values such as Wabi-Sabi to everyday objects such as a tea cup	Mixing creativity, perfection, manufacturing into the process of designing	Bringing communities together and make them receptive to their own cultural principles/ philosophies	Client Archetype provides the cultural insights and acts as the north star in the design process	Having local stakeholders such as artisans, designers join the co-creation sessions

Table 1: This is the consolidation of all the research questions and the analysis of exploration of various design philosophies

# 3. Exploring the Conceptualisation of the Toolkit

With the basic understanding of design philosophies from previous chapters, this one aims at developing the design philosophies. This is manifested by carrying out two co-developing sessions with student designers using sensitising material and Cultura insights. These sessions are analysed to form themes and depicting the process of how the participants developed the design philosophies. Before concluding, as a part of reflection, a host of what worked and did not work during the sessions are also analysed.

3.1 Design Questions

For the development of culture and context driven design philosophies, here are some design questions that will be tried to answer through co-developing sessions:

● What are the different values and their sources that designers bring to the discussions?

● What did they do with the values? Did they change it?

● How do values and practices manifest in the discussions?

● What are the steps required to develop design philosophies?

● How did they make decisions during this process? And why?

● What are the ingredients and qualities of design philosophies?

● What is the format of the culture and context driven design philosophies?

3.2 Method

1. Sensitising   2. Observing and   3. Analysing
                         Interviewing
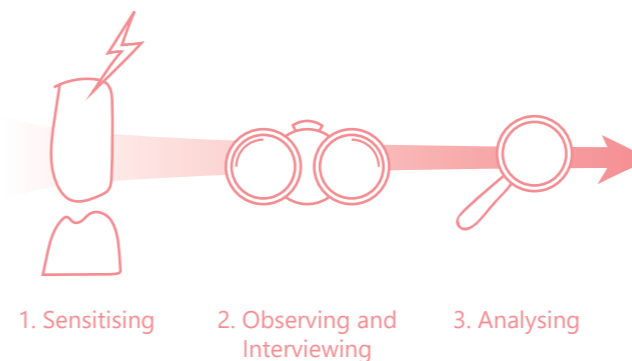
Two co-developing sessions were conducted which involved student designers. They were sensitised, observed and interviewed. Finally the data gathered was analysed to gain information on developing culture and context driven design philosophies. These sessions were conducted as a bottom up approach i.e to see how the designers develop the design philosophies themselves without a template so as to know all the difficulties and the steps to bring the design philosophies to surface. This is a way to say that the stakeholders and users are the experts in their work and we as designers are only to support that broader work structure with the solution we are introducing(Hartson and Pyla, 2019). This also provides raw data which supplies a better flow to understand the entire process of developing design philosophies

3.2.1 Activities

Sensitising

It was important to sensitise the designers as though they were part of a hypothetical project with a particular context and culture. A hypothetical project has its own pros and cons. The advantage is that it could provide quick insights to the designers and does not need too much effort and resource to gather the insights. On the other hand, the designers would not be sensitised to the same level as they would have been in an actual project.

This hypothetical project was an actual project carried out by Chen Hao in regard to Chinese student dormitories (Hao, 2019). The data was gathered using Cultura tool with nine themes and further tested with other designers separately (Hao, van Boeijen, Stappers, 2017). Similarly for this project, the same Cultura insights as gathered by Chen Hao will be used as a hypothetical project here in this graduation project. This project was given to designers as a part of sensitising material where their design brief was:

Designing products/services enhancing university students' social relationships in China.

This sensitising material needed to be used for both before and during the co-developing sessions. The material contains two parts. Cultural Insight Cards and Sensitising Workbook

1. Cultural Insights Cards

What?
These are the Cultural insights(cards) gathered by Chen Hao in her Phd thesis(Hao, 2019)

Why?
This is given to the participants for them to get to know the context and culture in order to design for this hypothetical project. This is not to exactly design any product or service but rather assume that they were designing for this project but come up with design philosophies considering the insights from Cultura.

2. Sensitising Workbook
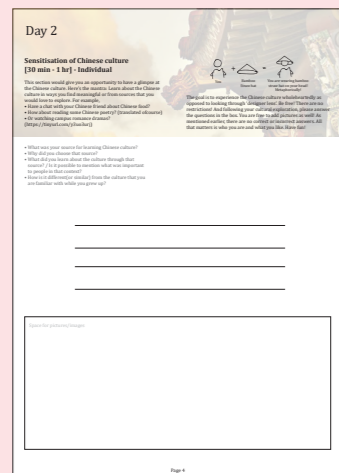
What?
This is the workbook given to the participants to fill up before the session and during the session. This is all also to form the base for the discussion in developing context and culture driven design philosophies. The complete details of the sensitising workbook is available in *Appendix C*.

Why?
This was given to the participants for the following reasons:
● To help them understand what design philosophy is
● Make them explore and sensitise themselves on the Chinese culture so that they can frame design philosophies with rich kowledge of the culture at hand.
● To reflect on what they thought about the Chinese dormitories and the situation of students inside. This would help the designers to bring their biases, opinions to the surface
● To help the designers to remain rooted to the context and focused while developing the design philosophies

Observing and Interviewing

Once the sensitising material was filled by the participants, sessions were conducted with different participants for each session. Each session lasted for about three hours. Observation was carried out by me during the sessions, to see how the participants discussed, their thought process, their decisions and most importantly on how they developed context and culture driven design philosophies. The role also involved answering any questions that the participants had during the sessions and supporting them with as much information was available at hand. This role of supporting or answering needed to be watchful so as to not lead the participants in a particular direction as this was mainly a bottom-up approach. Also there were moments when the participants would get stuck, there was also a duty to facilitate the sessions.
        Interviewing them was the last part of the session in order to ask them their decisions, on why they happened to choose/ make those decisions, what they thought about the design philosophies they developed etc.

Fig 10: Session 1 with participants where observation and Interviewing took place

3.2.2 Participants

The Co-developing sessions are conducted with TU Delft students studying in Industrial Design Engineering Masters programme. They were selected so that they are available in times of Covid for these sessions. The sessions needed to bring diverse views, attitudes, behaviours and experiences from the participants and thereby, they were also selected on the basis of their national culture so that the sessions are rich in discussions with personal experiences and opinions. This could lead to varied discussions and ultimately varied design philosophies. Too many opinions, experiences can spoil the broth and for this reason the number of participants were limited to three to four per session.

Fig 11: Session 1 participants 1 Italian, 1 Portuguese, 1 Brazilian/Italian
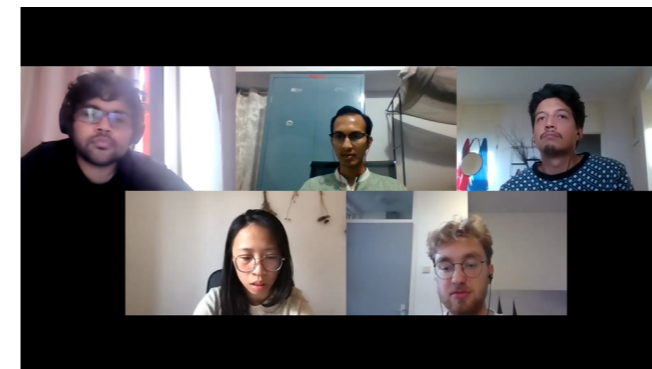

Fig 12: Session 2 participants 1 Indian, 1 Spanish, 1 Italian, 1 Taiwanese

3.2.3 Data Collection

Data was collected through different modes while observing and interviewing. This is to analyse and create a rich repository of all the data for future references. This will be the bed for building the toolkit which would help the designers in developing design philosophies.

● **Zoom online video recording:** As the participants were located in different places, with Covid-19 situation in mind, it was right to have online sessions. This recording would be useful for future references as well. This also beats the option of taking photographs which would require extra resources such as camera equipment, handling, and planning. Online video recording has made this process all the more streamlined.

● **Sensitising material:** The completed sensitised materials were another set of data that were collected from the participants. This would give a glimpse into their thoughts and opinions.

● **Observation Notes:** There were notes generated by the author while observing and interviewing the participants

● **Transcribing session videos:** The two sessions were transcribed word-to-word which would be later used for analysing for themes and steps to develop design philosophies.

● **Non-verbal cues:** Seidman talks about giving importance to non-verbal cues (seidman, 2006). Unfortunately, these were not observed as the author was handling the research alone and reading non-verbal cues would be time consuming and might make the data more complicated. Nevertheless, considering that the sessions were video recorded, it is easier to get back to reading and observing these cues later on if needed.

● **Consent form:** Although this is not a part of the qualitative research, consent forms were given out to participants to ask for their consent in using the research material for product marketing, presentation, reports etc. Consent form is available in *Appendix D*.

3.2.4 Data Analysis

Data analysis was carried out through Grounded approach. "Grounded Theory approach for analysis (Corbin and Strauss,1990), data is studied to discover structures without using pre-set expectations of the data. Potential indicators of a phenomenon are discovered during the analysis, rather than being hypothesized in advance" (Sleeswijk Visser et al, 2005). Hence with no previous dispositions, perceptions, theories were involved during the analysis. Elizabeth Sanders and P.J Stappers explain about analysis through Ackoff's DIKW scheme which is Data, Information, Knowledge, Wisdom (Sanders & Stappers, 2012). This scheme explains the steps of analysis from data to wisdom. This is also represented through *Fig 13* below. The analysis was carried out for both the sessions separately.
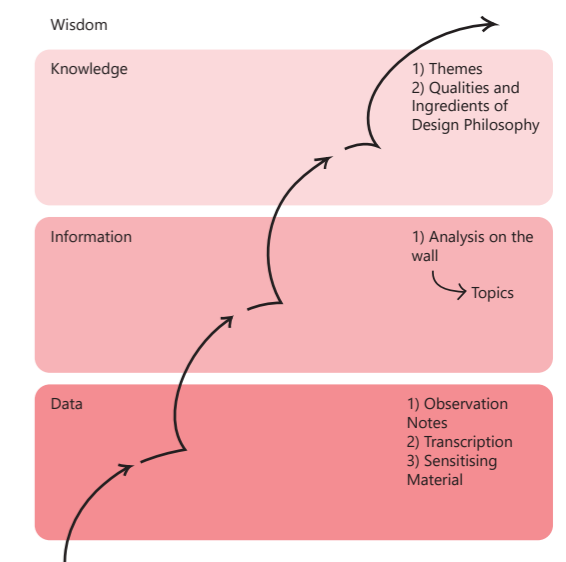

Fig 13: Basic version of DIKW analysis taken from Convivial toolbox (Sanders & Stappers, 2012). This also includes the results of each phase of the analysis through this DIKW scheme

Data level analysis

Data can be of any form, notes, videos and which can be stored and retrieved later on (Sanders & Stappers, 2012). Here the data was first gathered using the zoom recordings, observation notes, sensitising material. Once the video was recorded, transcribing of the video took place. This was done for easy access to the discussions which otherwise would have been difficult had it been still in the video format.

Fig 14: Transcribing video discussions.

Information level analysis

Information is the interpretation carried out by the designer on the data (Sanders & Stappers, 2012). During this, the transcriptions of the sessions were collected together to form a common idea/ arguments that the participants were discussing about. There were some arguments that were difficult to understand, some were very good arguments but did not go very further. However, they were all noted down and pasted using small post it notes as shown below in *Fig 15*. There was also the sensitising material which revealed the participants' exploration and inputs in regard to the participants thinking and attitude towards a culture.

Fig 15: Interpreting of data to gather information

Knowledge level analysis

Knowledge is the abstraction of information to form theories or patterns (Sanders & Stappers, 2012). Here the information gathered was further abstracted to form central topics. The topics could be from discussions or processes employed like decision making. They were collected and spread on the table to capture all the post-its at once so that they are immediately available for referral. This type of analysis is called On the wall analysis (Sanders & Stappers, 2012) but was carried out on a table.

Fig 15: Interpreting of data to gather information

These post-its with topics that could be interpreted with similar meanings / ideas were grouped together and were further abstracted to form a central theme for the entire bunch of topics with similar meanings/ideas. The next step is to look at the results achieved and discuss the interpretations.

3.3 Results

3.3.1 Ingredients of Design Philosophies

Ingredients of design philosophies are the parts or components that are combined to form the complete design philosophies. Looking at these ingredients should provide a basic assumption of design philosophies could consist of. This way, it can be hypothesised what the design philosophies could include once developed from the designed toolkit. Here are the ingredients:

Session 1

Design Philosophy

Design promotes conditions in which basic human needs are met, and human flourishing is stimulated. Designers should take a stand on the future implications of their designs. Taking responsibility for the direct and indirect consequences.

Designer's values: in the form of what design should do (promote conditions for basic human needs and human flourishing) and what designers should do (taking a stand on future implications of design. Taking responsibility for direct and indirect consequences).

Basic human values or more specifically the needs are mentioned. There is no description of what those are in the design philosophy. Perhaps food, shelter and clothing but not clear.

Cultural values are missing/ not explicit. The discussion of the participants led them to saying that needs are dependent on cultural values and practices but needs by themselves are always existent. For example, "a monk in a monastery may not need a pillow to sleep as it is his culture" - one of the participants in the session. This means that it is not advisable to paint with the same brush regarding what the basic human needs are for all people and is also culture dependent. Basic human needs might be universal but manifested in different forms in the culture.

Time based design philosophies: Most of the philosophies are invariably regarding the present and/or the future as much cannot be changed about the past. In the above mentioned design philosophy, time manifests in the form of words and grammar(present tense, future tense etc) and are used in the sentences of the design philosophy (promotes conditions.... Future implications of their design).

Session 2

Design Philosophy

● *Individualism vs Community: Map the impact on community and individuals for ideas and decisions.*

● *Ideal vs failure: Illustrate the role of failure in the road of success.*

● *Leaders vs Followers: To identify the importance of imperfections and incorporate them when you create hierarchy systems.*

● *Independence vs conformity: To help individuals reflect on their individual needs in the context of the place in society.*

Design values: The designer's design values are explicit and mentioned in the design philosophies. For example: Failure in Ideal vs failure, Independence in Independence vs conformity. These were explained as design values in the discussions by the designers themselves.

Cultural values: Unlike the previous session where the participants wanted to develop a culture based design philosophy but were unable to carry out, here in this session the participants were fruitful in executing it. For example: Conformity was a point discussed by the participants where they thought the students needed to conform to hierarchies, rules, groups etc. So was 'community' where the students would cook inside dorms together and so on. These cultural values as discussed by the participants remain explicit here in these philosophies.

Ideological values: the topics of idealism, ideologies for example perfect world, leaders and followers were continually being discussed and these values appear too in the design philosophies. This was also the case in the previous session where they were discussing ideological values but ended up mostly focussing on getting the basic values and designer values right in the design philosophy.

3.3.2 Qualities of design philosophies

The previous section dealt with the ingredients of the design philosophies and now it is important to understand the qualities of the philosophies. This is also to understand the basic structure of design philosophies. Both ingredients and qualities should pave the way for how the design philosophies should look like when developed using the toolkit.

Session 1

● Intention/ effect / expectation
● Purpose / goal

Design promotes conditions in which basic human needs are met, and flourishing is stimulated. Designers should take a stand on the future implications of their designs. Taking responsibility for the direct and ideirect consequences.

● Action

● Time Oriented

● Feedback Loop

● Text
● Convincing
● Memorable

● Hierarchy

* Culture based design philosophy*
(Team would have come up with culture driven design philosophy based on the above template later on)

Purpose/goal: There is a sense of purpose in the design philosophy on what design should do (promote conditions in which basic human needs are met)

Intention/effect/expectation: Again the framing of the sentences by saying "promoting basic human needs conditions and human flourishing" allowed the participants to discuss the effect the design needs to have in the end.

Action based: This is related to the purpose of designers that they should take a stand on the future implications of their design. Designer's actions affect the implications of their design.

Future oriented: As described in the ingredients section in the Time related values, here the design philosophy specifically targets the future as what designers do now will have an effect in the future.

Feedback loop: Once a designer designs and he/she should take responsibility for the consequences of the effect of his/her designs. If not, this leads to a linear process where the designer adds his values into the design but not being accountable for the consequences. This is unacceptable as stated by the participants of the session.
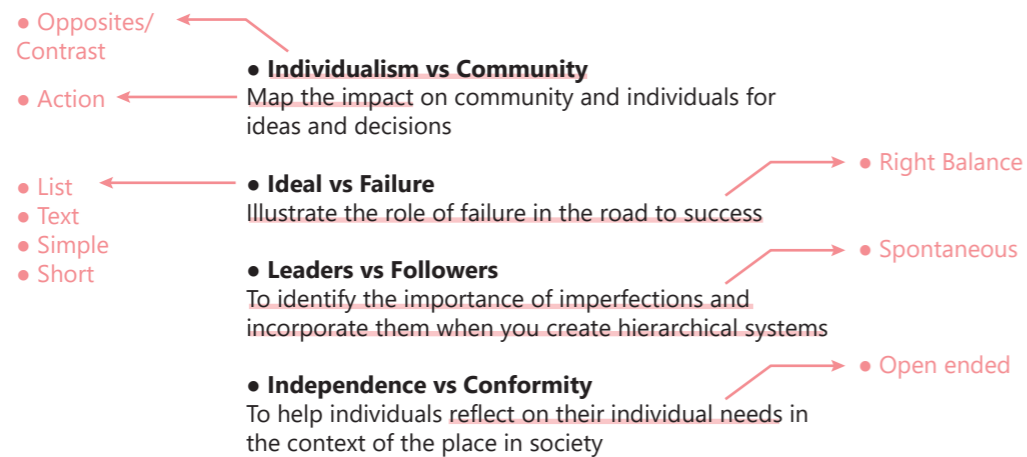
Hierarchy: Although the cultural values are missing, the participants wanted to customise this central design philosophy by using the cultural values such as doing things together like cooking or sleeping late in the context of dormitories. Hence from a central design philosophy a secondary design philosophy would have emerged which is culturally rich. Unfortunately due to the issue of time, they were unable to do so.

Text: The participants wanted the design philosophy to be straightforward with no room for misunderstanding.

Convincing: Design philosophy needs to be convincing for themselves as they are the ones using it.

Memorable: The philosophy needed to be short and impactful so that they can remember whenever they can during the project or 'which can be hung on a wall.

Session 2

● Opposites/
Contrast

● Action

● Individualism vs Community
Map the impact on community and individuals for
ideas and decisions

● List
● Text
● Simple
● Short

● Ideal vs Failure
Illustrate the role of failure in the road to success

● Right Balance

● Spontaneous

● Leaders vs Followers
To identify the importance of imperfections and
incorporate them when you create hierarchical systems

● Open ended

● Independence vs Conformity
To help individuals reflect on their individual needs in
the context of the place in society

Action: The design philosophies have the element of an
action required for the designer to perform like 'map the
impact on the community...'

Opposite/Contrast: The main themes such as Individualism
vs Community have included both designer values
(individualism) and cultural values(community) which
contrast each other in order to inhibit from making a choice
at this phase of the project. I.e the participants did not want
to choose values at this juncture of this hypothetical project.
They felt more information was required to make decisions.

Right Balance: Here it is not just balance but a right balance
where the values such as failure and success are crucial and
finding the right balance of failure and how it is interpreted
in the Ideal perspective and individual perspective, needs to
be taken into account (for example "failing in college degrees
and its importance in the ideological perspective and
individual perspective" as described by one of the
participants).

Spontaneous: As failures more often than not come
unexpected, how this is perceived by the Chinese students
was a question the participants had. As failure is concerned
as an imperfection (by the participants), the participants
wanted to see how this imperfection affects the chinese
students and the culture and take spontaneous decisions
based on the knowledge gained.

Open ended: The decisions of the designer are left to the
context and user and how the users (Chinese students)
reflect on their individual needs. The designer does not force
his views into this system.

Text: Similarly to design philosophy developed in session 1,
the participants in this session too conceded to text based
design philosophies.

List: The design philosophies were developed as a form of
list where this list consists of several contrasting values that
designers from the co-developing session came up with.

Simple and short: The participants wanted the design
philosophies to be simple and short with one sentence. They
wanted to have a simple one first so that they could expand
on this later. Just like a catchphrase as used by the
participants of Session1.

**3.3.3 Themes involved for developing design
philosophies**

Comparison and choosing of one session for discussion

Through the various data analysis as described in *Section
3.2.4*, various themes were recognised. The same process of
card sorting and theme finding were employed for both
sessions. However here in this section and the subsequent
sections, only one session (Session 2) will be taken as an
example. The process of card sorting and all the resulting
discussions for Session 1 is available in *Appendix E*. The
referral to Session 1 will be done in the main text in the
report wherever necessary and applicable.

There are several reasons for choosing only Session 2:

● Both session 1 and session2 had similar proceedings with
sensitisation before the co-developing sessions which both
lasted around three hours and explaining both would be
redundant.

● The themes gathered are the same (*Appendix E*) and can
get repetitive if explained again.

● The Session 2 was the session where the participants
successfully framed culture and context based design
philosophies. Now what is meant by successful?

● As seen in *Section 3.3.1* regarding the ingredients of a
design philosophy, cultural values are successfully
integrated into the design philosophies. This was also
confirmed by the participants when asked. One of the
participants mentioned ".... How Chinese values come
into play. My values are perceived to have conflict with
Chinese culture. It was a matter of resolving this conflict.
It was a matter of finding the right balance (in design
philosophies) at end of the day between what we
identify as core values of Chinese culture and our own
values as design values"

● In regard to the definition of the design philosophy
which "acts as a guiding principle in thought, practice
and behaviour in design" is also fulfilled by the design
philosophies that the participants came up with.
Confirming this was one of the participants mentioned
"... These would be principles I would go by when
designing for that culture...".
.

● The Session 1 was incomplete as the participants were
unable to come up with a design philosophy that was
culturally and contextually driven (This will be discussed
later).

With all these reasons in mind, the next sections will take into
account the proceedings and analysis of Session 2 with
inputs from Session 1 wherever necessary.

Session 2

The first point of analysis to be noted is the final themes from Session 2. The themes that one sees here are patterns extracted. These themes seem to be exhaustive however there are some elements such as team dynamics of the participants which were not a part of discussion during session rather the behaviour of the participants being observed by me, which also needed to be considered. This will help in programming the toolkit in such a way that it is beneficial for both, designer as an individual and as a team as developing design philosophies are personal and yet a designer more often than not is within a team.
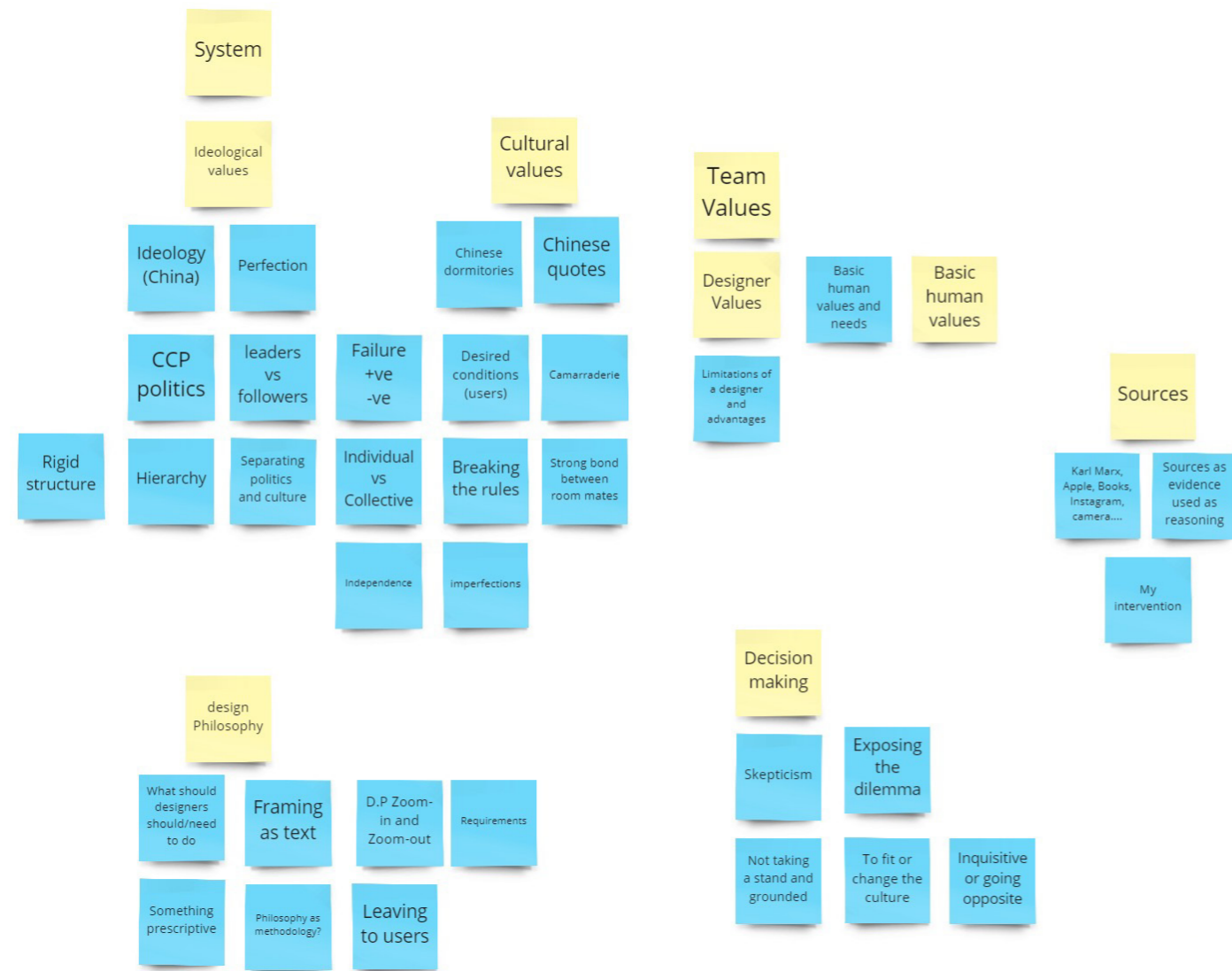
The question here is what is the use of these themes? These themes reflect all the aspects the participants discussed in order to develop the culture and context driven design philosophies. In other words, these could form the content of the process framing design philosophies.

As these themes are still too abstract, the following descriptions of how these themes manifested during the discussion is described. Although the themes are seen separately as shown in the above image, they do not manifest in the co-developing sessions as mutually exclusive as they have been depicted here.

1) Sources

Sources here mean that the participants bring different metaphors, facts etc in order to make the argument more understandable for the other participants during the co-developing session discussions. For example Chernobyl, a TV series made its way as a source (evidence) for the argument that societies need to acknowledge imperfections as a value or otherwise it could be disastrous, where a participant mentioned "In the (Chernobyl) plant, the people are aware of the problem but they are not taking responsibility. Sheer fact that there is a problem is making people uncomfortable". There have been many sources during the discussions such as companies like Apple, or philosophers like Karl Marx. During discussions it became very clear that the more the participants brought other sources, the richer the conversations became. The toolkit could provide various sources for participants to explore in order to bring more arguments or evidence to the table.

During the two sessions, the author had intervened once in both the sessions to make the participants think in other directions as well. During session 2, there was a moment when the author asked the participants to have a look at their own cultural explorations (as individually explored during sensitisation) during the middle of the session. The participants were very much rooted to the context during the discussions, and the author wanted to see if they could go beyond the context for a second and see how the participants would react. The participants then brought their own cultural exploration into the conversations like what they saw in the animations, cultural differences on Youtube, which made the discussions much richer in terms of variety and arguments. Going to the toolkit, it would be good to ask the participants to bring their cultural explorations into the conversations and reflect on them.

2) Design Philosophy

It is without a doubt that the participants would discuss regarding design philosophy during the sessions. However, there were many questions that were posed by them during the session.

●How does design philosophy look like or feel like?
●How different is it from requirements?
●How different is it from a methodology?

The participants started to ask deeper, more contextual and designer related design philosophy questions. In order to frame the design philosophy they asked themselves " What kind of guiding could we have here to contrast that dilemma…. How could we help the designer on how to think about the balance between community and individual?". This question was particularly intriguing as it was unexpected for the author to see such a question which was explicitly contextual and design related.

They would also refer to the sensitising material given to them for the sessions, where design philosophies of well known designers were mentioned. This would act as inspiration and reference for how the design philosophies should look like. There was plenty of room for developing a video, illustration or any other form of design philosophies. However they stuck with developing text based philosophies. As far as the toolkit is concerned, it is important to provide a resource on what design philosophy is and their different forms of design philosophies in order to provide the basic knowledge for developing them.

3) Team dynamics, Team Values and Design Values
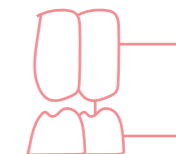
This project would like to bring out the toolkit for designers who are working as teams. Keeping this in mind, designers as individuals have their own values and team based values. During this session, the participants were strangers to each other but the session discussions were healthy. They were pretty much on the same page throughout the session. This is also reflected in their decisions. When one of them said "Since there are 10 (regarding Dieter Rams' commandments), I think we need to have four...These four are already culture specific".

Fig 16: Themes gathered from Session 2 after analysis.

This was readily agreed by the other participants in order to frame four design philosophies referring to 10 commandments of Dieter Rams.

Moreover there were examples of participants discussing the value 'independence' in relation to the Chinese students in dormitories and everyone agreed that the Chinese students need independence. Everyone's value of 'independence' became an accepted value for the entire team. Not to go deep into this, although this was a great team, but there might be differences of opinions and conflicts during discussions with many other teams across the globe. Hence it is important to understand individual values and team values separately by each team member. And this should be communicated within the team. The toolkit should provide opportunities to understand who they are as individuals and as a team so that they might be able to tackle the different values within themselves first before embarking on the project.

4) Cultural Values

The sensitising material along with Cultura cards helped the participants to get to know the culture and the context of Chinese student dormitories. The sensitising material also had culture explorations. One participant explored chinese culture through movies, someone through youtube videos, another participant through animations etc. This material provided an opportunity to explore outside the context of the project (regarding Chinese student dormitories). During the sessions, they would dedicate time to look at certain values from all possible directions. For example, one participant says "I might come off as condescending if I tell him/her(Chinese student) you should understand failure. As an outsider It would be very interesting to learn how to reframe my own learnings which seem to be brash", another participant said "Failure might seem different for them and us... What is big failure? What is a personal failure? What do you mean by community failed? It would be nice to ask the students what they think of failure". The participants were very much aware of the shortcomings of their current role and knowledge as participants and were reflecting on that. This made the participants strive for unbiased views. In order to understand the culture, one participant mentioned that it depends on how far he/she immerses himself/herself into the culture, doing objective research and how one draws inspiration from it.

Looking at the final design philosophies, participants mentioned that their own design values and cultural values were deliberately added into the design philosophies. Like independence(design value) and community (cultural values) in the design philosophy of independence v/s community.

This shows that participants were able to manage both their design values/ team values with the cultural values. In regard to the toolkit, making designers think in different perspectives regarding the cultural values is the key to remaining unbiased. It needs to be seen how this can be executed.

5) Ideological values

Ideology has been defined as "a world view, a system of values, attitudes and beliefs which an individual, group or society holds to be true or important; these are shared by a culture or society about how that society should function." (ministry of education, New Zealand, retrieved on 17 Jan 2021). The values associated with ideologies could be named as Ideological values. One of the participants started to talk about Karl Marx as the one who envisioned a perfect world. "The system (China or Chinese dormitories) want to go in that direction. Stability and following rules". There is constant reference to communism and Chinese political system. This too happened in Session 1 (*Appendix E*) when there were references to Ideological values of current Chinese culture or politics.

Here in this co-developing session, the team had come to a common consensus that Cultural values and ideological values cannot be separated. One of the participants mentioned "It is difficult to separate cultural elements from political systems. Parts of the political system became big chunks in the cultural system".

The participants would find many instances of political ideology within the culture and context of dormitories. For example the strict hierarchies, classroom leaders being the followers of Chinese Communist Party etc. On a broader note, Ideological values seem to play a huge role in this culture and context according to the participants. Hence for a toolkit, finding ideological values of any culture could bring a new lens to the project.

6) Basic Human Values

There seems to be a constant reference to Basic human values. Session 1 discussions had much of the content related to basic human values, human flourishing and wellbeing. In Session 2, there was only once the basic human values were mentioned explicitly.

This was when one participant opened with the question of whether one should design for Chinese values or Basic human needs.

This was the end of the road in regard to Basic Human Values in this session. It seems that basic human values come into picture especially when one needs to design for other people. Also there is the possibility that if one cannot know his/her own design values, designing for basic human values could be the best way forward as this happened during the discussions in Session 1.

For the toolkit, it seems better to be able to address basic human values and let the participants discuss accordingly. This can provide a basic foundation and lens to look at all the cultures.

7) Decision making

Initially the designers themselves(participants) decided on working individually for 20min in the session and then came together to discuss what they thought about developing a culture based design philosophy. This gave them time to think by themselves without having opinions and arguments from other team members affecting their own judgements. At first, they worked on cultural values and design values independently (sensitisation) and then came together as a team for developing team values and cultural values (co-developing sessions). This separate individual and team work could provide assistance in developing individual design values and later team values respectively. In designing the toolkit, it would be best to keep this in mind.

In relation to the process of developing design philosophy, the participants were very much aware of their capacity to make decisions based on the limited knowledge they had. One of the participants mentioned "Failure might seem different for them and us... What is a big failure? What is a personal failure? What do you mean by community failed? It would be nice to ask the students what they think of failure". This conversation about values and how the same values might mean something different is an important factor that might be an obstacle to decision making due to lack of enough of information. This skepticism might be the fear of hampering the project at an early stage(research completed and moving towards ideation) by making untimely decisions.

And lastly, the participants decided on having a simple design philosophy based on the reference of Dieter Rams design philosophy but also keeping in mind to not choose any values but make the designer aware of those values.

As far as toolkit is concerned, providing different tools for decision making like design intentions (see *Section 4.2*), and simultaneously providing decision making spots during the process of developing design philosophy could greatly ease the process of developing design philosophy and help participants be agile while making decisions.

3.3.4 Process of developing design philosophy

In the previous section, the themes were formed based on the proceedings of the discussion that happened during co-developing sessions. Here in this section, the process of creating or developing design philosophy is looked into. This process of creation is what forms the basic structure in developing design philosophy which would be later applied to the toolkit.

Though the co-developing sessions exhibited discussions that went back and forth, by looking at the overall picture (entire process of developing design philosophies), there was still a linear process that manifested in order to frame culture and context driven design philosophies

The approach here is to see how the arguments made by the participants manifested and connected to form a linear process. This is in turn abstracted so that it can be applied to the toolkit at a later stage. This linear process gives a clear goal or an end for the toolkit with clear steps in between. Abstracting non linear process which manifested during the co-developing sessions, is too complex. This would require more research, time and effort. For the sake of practicality, a linear process is chosen to clearly understand the different stages with which the participants developed design philosophies during the co-developing sessions.

It is important to note that this might be a linear process but in reality the session involved designers discussing and iterating. For example, though the participants had framed concrete values such as Individual vs community (Step 6 in above image), they went back to talking about ideals, failures from scratch (Step 2). Hence it can be said that this process is also an iteration and yet linear. The best example for a similar process is the Design thinking process which is linear and yet involves iterations as seen in below image
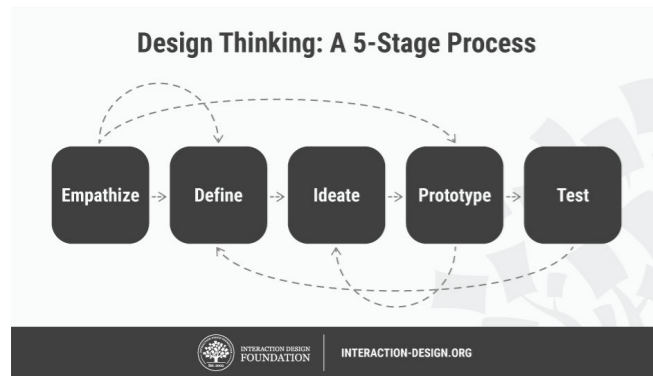
Fig 17: The design thinking process with iterations
Source: https://www.interaction-design.org/literature/topics/design-thinking

Step Number/ Sequence	Arguments by Participants		Analysis	Abstraction	Phase/ Step	Illustration
1.	*"I could see individual needs and community needs"*	Comparison of values	The participants were trying to find values from different sources	Pick up or discover values from contexts from different sources	Discover	
	"What does society think about failure"	Imagining another scenario				
	"I could sense camaraderie when roommates pick up parcels for others"	Inputs from Cultura				
	"Seeing independence in a lot of places"					
2.	*"I might come off as condescending if I tell him (student) you should understand failure"*		The participants were trying to look at values by empathising and reflecting	Looking at values from different perspectives & rooted to the context to try and understand how these values manifest and how they might affect the context	Study	
	"As a student if someone asks me (about failure), I would say I can't do it"					
	"................we can propose Western failure or Startup failure"					
3.	*".......ok we have some good points.... 'Ideal v/s Failure' , 'Community v/s Individual' "*		Participants make a respository of all the values and making sure all the values are understood thoroughly	Pooling of all the values together and making sure all the values are understood with respect to the context and practcices	Gather	
	"....... Sorry ..... but what was it about Leaders v/s Failure again?"					
4.	Camaraderie, Basic Human needs were mentioned in the beginning but did not make it to the Design Philosophy as an explicit content. It could be that: Camaraderie —Modified→ Community Basic Human Needs —Modified→ Independence		They seem to collectively abstract values to encompass all the related values	Filtering / modifying / abstracting values	Analyse	
5.	*"Prescribe an antidote.... not to guide it too much into a direction"*		They are making decisions on values	Deciding on what needs to be done with the values available	Decide	
	"Consider it is upto the designer. (Asking him to) be aware"					
6.	Framing of a final list of values a. Individual v/s Community b. Leaders v/s Followers c. Independence v/s Conformity d. Ideal v/s Failure		Participants framed a list of contradicting values by getting inspired from Dieters Ram's list of 10 commandments for design	List down all the values by getting inspired from existing Design Philosophies	Replicate	
7.	*"Start simple and then we can expand"* On Leaders v/s Followers discussion: *"Importance of forgiveness when envisioning an ideal world"* *"(The word) Imperfection is better than forgiveness and don't make a system for robots, make it more human"* *"To identify the importance of imperfections and incorporate them when you create hierarchical systems"*		This is the final step where the participants iterated sentence structures such that it depicted what their task was in relation to the values and making sure the sentences were simple to understand	Explaining what designers can do in the context using the values founded, with simple sentences. Making sure it makes sense and rooted to the context (iterate until it done)	Frame	

Table 2: This is the linear process that manifested during the co-developing sessions. On the far right of the table is the abstracted version of the steps which will be later used for purposes of brevity

3.4 Discussion

3.4.1 Interaction of themes and process of developing design philosophy

Here the two sections 3.3.2 (Themes involved for developing design philosophies) and 3.3.3 (The process of developing design philosophies), will be discussed together to look at how the design philosophy was actually developed. Themes and process form the backbone of developing a design philosophy. Just like how 'sentences' are framed in any literature, with words and grammar, the themes form the words and the process forms the grammar for framing 'design philosophy'. Hence the themes and process are brought together in order to understand which themes affected which part of the process of developing design philosophy. This way, it would be helpful in ideating and developing the content for the toolkit along with the necessary steps for framing the design philosophy.

Developing Design Philosophy		Sentence formation in any language or literature
Themes	similar roles ←→	Words
Process of developing design philosophy	similar roles ←→	Grammar
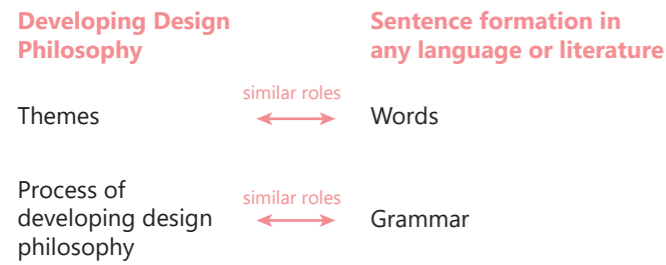
This was an attempt at trying to map the content and process. This process along with examples makes the process much clearer for understanding (see above table). And the themes provide a sense of what their role is in the process of developing design philosophy. There might be several processes to developing design philosophies, this is one such with a bottom up approach. The major problem one could find with this process of developing design philosophy is the efficacy of the design philosophies developed by the participants. It is almost impossible to know if the designers would use the design philosophies as design philosophies at the end i.e as guiding principles. There is no way of validating if the designers would like their design philosophies they developed within this process. However, this might be out of scope for this current project.

Table 3: This is the mapping of Themes and Process together to form the complete process of developing culture and context driven design philosophies

Step Number/ Sequence	Process of developing Design Philosophy	Ideological Values, Cultural Values, Team Values, Sources*	Themes from the sessions	Analysis from the sessions
1.	Discover — Community, Perfection, Individualism		● Personal Values ● Basic Human Values	● The participants would have gotten to know their personal values through sensitising material ● Basic Human Values was mentioned once during the discussion ●Through Cultura, Sensitising Material, previous experience and knowledge, participants brought new values to the discussions
2.	Study — Failure		● Intervention as a form of Source	● The participants were having discussions without help from other sources such as internet ● The intervention of the author helped the participants to bring new information into the dicussion
3.	Gather — Hierarchy, Independence, Leaders		-	● Participants were pooling and filtering values through constant discussions and triyng to abstract and relate values to one another
4.	Analyse — Ideal, Camaraderie, Failure, Community		-	-
5.	Decide — Decision		● Decision Making	● This involved the participants not deciding on choosing one value over another
6.	Replicate — Existing Design Philosophy → Influences → New Design Philosophy		● Design Philosophy	● Examples of design philosophies from Sensitising material provided inspiration on the how the design philosophy should look like
7.	Frame — Failure, Design Philosophy		-	● This is a new process of created by the participants ● Their thought process was to connect designers and their roles on what needs to be done in the context to facilitate the navigation of value differences between designers and culture

* All these values and sources seem to appear in every form of the discussion amongst the participants which conveys that they were pretty much rooted to the context during discussions

3.4.2 Values and Practices

There are several values that have been unearthed and discussed during the co-developing sessions such as designer values, cultural values, ideological and basic human values. These are important values that designers see in a project such as the Chinese dormitories for students. Are these the only values that exist? or should these values be reconsidered and repackaged? Also how these values affect decision making needs to be looked into. This will help in packaging the values in a way that can be helpful for designers to develop design philosophy via the toolkit.

Cultural values, ideological values, basic human values

In the sessions, ideological values and basic human values made their way into the conversation. These basic human values and ideological values are perceived by the designer in the project and may end up providing arguments with inherent biases. Cognitive biases are making decisions quickly with limited information (Kahneman, 2011). Hence with limited information the designers may end up making decisions which could hamper their projects. However, the designers during the sessions were aware of much of these biases. "When I think its human rights, they might think it is something else" as mentioned by one participant during session 1. On top of this, these values could mean different in practice as stated by a participant "Failure might seem different in the context... what is a big failure? What is a personal failure?". Here is a brief discussion and conclusion for various values.

1) Ideological values

As mentioned by one of the participants during Session 2, that politics cannot be separated from the culture. But this was not a general statement but rather focused on Chinese politics and cultural context. Moreover, through the exploration of other design philosophies, from the culture of Japan for example, Imperfection could be seen as an ideological value. Culture is too broad and in the context of Chinese dormitories, politics acts as the source for ideological values. Where should one draw the line for ideological values or cultural values, should these be left to the designer? Considering Japanese cultural values such as imperfection, is this cultural value or ideological value or ideological value in the culture of Japan?

From *Chapter 2* regarding the exploration of other design philosophies, taking Buen Vivir (Good living) as an example, is it an ideological value or just another cultural value? Since Ideological values are a bit complicated, it would be wise to test and ask for ideological values from the participants in the toolkit and their opinion on these values could be useful for the further iterations.

2) Basic Human Values

It was not clear why these values came into the conversations during the sessions. These values have been related to wellbeing, human flourishing etc. The designers wanted to address this first, more than the contextual or ideological values. Now, what are the basic human values in the first place?

Shalom Schwartz in the paper has described 10 Basic Human Values using values theory. The paper mentions that these values come from three universal requirements of the human condition: "needs of individual as biological organisms, requisites of coordinated social interaction, and survival and welfare needs of groups" (Schwartz) After extensive research, Shalom lists the 10 basic human values are as follows:

- **Self-Direction:** Independent thought and action; choosing, creating, exploring.
- **Stimulation:** Excitement, novelty, and challenge in life.
- **Hedonism:** Pleasure and sensuous gratification for oneself.
- **Achievement:** Personal success through demonstrating competence according to social standards.
- **Power:** Social status and prestige, control or dominance over people and resources.
- **Security:** Safety, harmony, and stability of society, of relationships, and of self.
- **Conformity:** Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms.
- **Tradition:** Respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide the self.
- **Benevolence:** Preserving and enhancing the welfare of those with whom one is infrequent personal contact (the 'in-group').
- **Universalism:** Understanding, appreciation, tolerance, and protection for the welfare of all people and for nature

This list of basic human values could be helpful for designers in choosing those values that they think are missing or need to be addressed in the context. An important note is that the designers in the session were aware of their biases and practices in relation to the basic human values "Is the wellbeing (in the Chinese dormitories) the same as in the EU? Does wellbeing mean to stay indoors and not go-out?". This is particularly helpful as designers do tend to reflect a lot which would be helpful in making balanced decisions.

These basic human values could also be rooted to the context and culture, as practices and needs are culture oriented as well. In order to not drive too much into what designers should do, using the toolkit, a list of basic human values could be useful and see how they work using these values in the project.

3) Cultural Values and Cultura

During the sessions, cultural values were already available through the Cultura tool and insight cards. In reality this is not the case but the designers themselves frame the values of the culture and context using Cultura tool and maybe through participatory design and so on. Cultura acts as the repository/source for cultural values in developing design philosophy.

In the sensitising material, the cultural exploration became the medium for cultural sensitisation. The participants had come up with various sources such as animation, history, movies, Youtube videos etc in order to learn about the culture. The participants during the sessions were mindful of their own culture and culture of others. Reflection in the sensitising material seemed to make them more sensitive to cultures.In the toolkit, reflection of Cultura's insights could be helpful in making the designers more conscious of their biases by asking them explicitly on their views on cultural values.

Design Values and Team values

Designer's design values have dominated much of the discussions in the sessions. Whether it is about ethics, responsibility, helping people (Session 1) or about independence, growing as an adult, failure (Session 2). These values popped up due to the fact that they were designing for a different culture altogether. In fact this distinction between different cultures, designers were able to become aware of their own values due to reflections requested in the sensitising materials.

In the second session, these reflections were shared by the participants with the other team members on what they thought. One of the participants who is from Spain, commented to the other team members "Oh man... I have a lot of respect for them (Chinese students living in dormitories). I don't think I can make it through (living in those dormitories)" and later started to talk about individual needs and collective needs which ultimately was one of the design philosophies. Hence the designer values that they reflected in the materials ended up becoming a part of the discussion and in turn a part of the design philosophy. In other words, these individual designer values became team values, which in turn made its way into the design philosophies. This is also re-iterated by a participant "We all detected certain things (during sensitisation). They were worthy of examining. Something we have to address."

In the analysis of different design philosophies of design studios, the team values such as using Archetypes(tool) and Co-creation process were used as design philosophies and they are team based as those two studios have teams working on projects although the design values of individual designers might vary. And most importantly it is about drawing consensus on what the designers as individuals and as teams feel and then making decisions on how to proceed next.

Reflection in sensitising material   Discussion within the team   Framing of Design Philosophy

Design Philosophy

3.4.3 What worked and did not work from the sessions

Role of Sensitising Material for co-developing sessions
The main role of sensitising material is to sensitise the culture. In reality, the designers will already be working on a project and immersed themselves in the culture as a part of the research. The other role of the sensitising material was to get the designers to know themselves and their design values. In a realistic project, this would be highly beneficial for reflection so that the designers can understand their values compared to the culture of the target stakeholders in the project.

During the co-developing sessions, some of the activities in the sensitising material were used as references for discussions. For example Definition of Design philosophy, examples of design philosophies(Japanese design philosophy, Bauhaus, famous designer philosophy), personal motto, personal design philosophy, personal cultural exploration (different sources such as books, movies etc), Cultura which involved cultural values. These were actively used during discussions and some of them as interventions.

On the other hand, activities such as the task of asking designers their personal strengths and weaknesses in the sensitising material, did not find its way into the conversations during the sessions. Maybe it does not need to as long as the designers are aware of their own personal design qualities or skills. However, what would be an effective way of reflecting? According to Donald Schoen in Reflective Practitioner, is reflection-in-action and reflection-on-action (shoen, 1983). In this toolkit, a questionnaire of personal questions which would enable explorations of the self would be beneficial for getting to know personal values. Having both reflection-in-action and reflection-on-action for the toolkit could prove worthy but needs to be known what would transpire during these two reflections.

Format of design philosophy
In the *Section 3.3.1* (Ingredients of Design Philosophy) and *Section 3.3.2* (Qualities of design philosophy), the design philosophies developed by the participants from Session 2 were deconstructed to understand their components and qualities respectively.

In regard to the ingredients of the design philosophies, it was quite obvious and expected that the design philosophies had design values, cultural values and ideological values. As this makes the values explicit, it provides the necessary base to frame context and culture driven design philosophy so that there is no room for unconscious biases.

In regard to the quality of design philosophy, there are quite a few of them. It would be almost impossible to ask designers to frame design philosophies that are action based, have the right balance, has opposite values, is open ended, with simple sentences etc. This is a long list of qualities that the participants came up with on their own.

There might be other qualities that other designers might come up with. In regard to the toolkit, it would be better to leave much of these to the designers so that they are free to frame design philosophies of different qualities. On another note, having a look at the design philosophy of participants from Session 1, it looks like it too has action based, simple and short sentences. They have different qualities although it does not contain cultural values. Giving the designers a complete open space to frame design philosophies could be problematic. They would need some sort of a nudge in what the qualities of a design philosophy could be. Taking the common qualities of design philosophies from both sessions, qualities such as Action based, Simple and Short sentences would make the ideal qualities that could be used by the designers for framing the design philosophies

On the note of Text based design philosophies, there is a very good chance of the designers being biased after reading text based philosophies from different designers, Japanese design philosophies and Bauhaus movements. In spite of having mentioned in the sensitising material that the participants could develop video, dance, illustration based design philosophies, there were several points made by the participants in the defense of having text based design philosophies like no room for misinterpretation, gives a sense of finality, most easily communicable (in fact one of the participants of a session mentioned: the text based is easily explainable to stakeholders) etc. Hence all these factors and in order to make this project more pragmatic, a text based design philosophy would be developed using the toolkit.

Concept of time
The whole event of sensitising and co-developing sessions were separated by time(over the days) and were time stamped(a three hour session). To execute such an event is herculean and not to mention the mental space, time and effort required by the participants to be a part of this.

	Session 1	Session 2
Sensitising Material (Individual Session)	3 hours	2 hours
Co-developing session (Team Session)	3 hours	3 hours

The sensitising material requires time to complete for individuals. This should be kept in mind and made which is simple and appealing (Sleeswijk Visser et al, 2005). As mentioned earlier, designers in a real project do not require sensitisation as they are already sensitised through their research. However, the sensitisation in the sensitising material for co-developing sessions, also covered exploration of the culture beyond the context and participants getting to know their personal self. Hence exploration is also important and requires time.

Developing design philosophies take time. The three hour time slot given for the design team to develop design philosophy worked for participants from Session 2 but not Session1. During the testing it will be seen if one session of 3 hours is required or multiple sessions for developing design philosophy where the steps taken could be spread across different sessions at different times or even days. It would be ideal to see how this process of developing design philosophies maps to the actual design process such as a Double Diamond process.

3.5 Conclusion

In this section of exploring the conceptualisation of the toolkit, two co-developing sessions were conducted with participants which involved sensitisation of the culture through Cultura. Participants from session 2 were able to successfully develop the design philosophies. The ingredients of the design philosophy were as expected with design values, cultural values and ideological values. The qualities on the other hand were plenty and needed to be tone down to just three i.e simple and short text, and action based. This would help the designers in giving them a certain nudge in what the design philosophy could look like(short and simple text) and what it should do(action based) and leaving the space open for much wider design philosophies. The process and themes provided enough information on the content of the toolkit. The personal exploration of self, reflections and exploration of culture beyond the context should be included in the toolkit. The duration of the entire process of developing design philosophy is still not clear and would take time and will be tested again with a concept.

4. Toolkit requirements and interventions for developing Design Philosophies

With the basic content and process of developing design philosophy were finalised, it is now important to understand the role of a toolkit, its requirements on how it should aid designers in developing design philosophies. Moreover, the toolkit should have content that can aid or intervene with the designers while developing the design philosophies. This chapter explains these in detail.

4.1 Toolkit requirements

In order to design a toolkit, one must know what the toolkit is all about and its characteristics. "List of requirements are the important characteristics that your design must meet in order to be successful"(van Boeijen et al, 2013). There can be requirements in relation to the material, form, experience etc. For this toolkit, the requirements are described below in relation to the process of developing design philosophies for now.

It comes as a no surprise that the first requirement of the toolkit is that it should have a goal of developing design philosophy. Keeping this goal in mind here are some requirements.

The toolkit should:
● help designers explore their design values and the culture beyond the context.
● help in reflecting and being unbiased while arguments are made.
● help in giving enough space for the designers to provide arguments and counter arguments.
● guide the designers through the process of developing design philosophies in every step.
● provide the team a platform to know who they are as a team.
● help provide a sense of accomplishment for developing design philosophy.

4.2 Toolkit interventions

Considering the inputs from the analysis from *Chapter 3* (Exploring the conceptualization of the toolkit), the following interventions are planned to help the designers move through the process of developing culture and context driven design philosophies. It should be kept in mind that the toolkit should guide and not provide an engineered way of developing design philosophies i.e design should provide and guide the process of creating design philosophies. Each toolkit intervention is as explained according to *Table 4*.

a) Toolkit Introduction:
This is the introduction that is needed for the design teams in regard to the introduction of design philosophy, its definition, uses and including the examples of existing design philosophies such as Japanese design philosophies, Bauhaus movement, Dieter Rams principles etc. This serves as the starting point for the process. This can also include a short introduction on the entire process of developing design philosophies.

b) Exploration of self through reflection
This is the moment when designers get to know their own self and their design values. A reflective task could help bring the designers to know who they are as designers. This is done in the beginning of the process before diving deep into it so that all the values become explicit and would be beneficial for framing team values, checking biases and finally framing design philosophies.

c) Exploration of culture
Cultural exploration will be done by the designers during the research as always. However this is the exploration of the culture beyond the context at hand. From the sessions, it was clear that bringing new perspectives from the same culture could be highly beneficial for the discussions and more so to understand it.

d) Personal views on culture and context
Cultura would be used to consolidate all the values and practices of the culture and context of the project. The designers could reflect on what they personally think of the culture and the context. This is a short reflection moment where their own biases and opinions can be known by them and worked upon.

e) Form team and know the team
As designers tend to be in a project as teams, it would be ideal for each member to chip in their personal views, opinions of the culture along with their personal design values. This way they can work on the team values asking themselves who they are as a team and what do they value in the current project at hand. Design agencies or companies would also have an opportunity to reflect on their values as teams and companies.

f) Basic Human Values
In *Section 3.4.2*, it was described that basic human values, listed by Shalom, has the capacity for designers to look into the culture through these values as lenses.

● Self-Direction
● Stimulation
● Hedonism
● Achievement
● Power
● Security
● Conformity
● Tradition
● Benevolence
● Universalism

This could make the designers be much aware of the basic human values that manifest in the context or ones that could be compromised thereby taking some decisions later on.

g) Ideological Values

Referring to *Section 3.4.2* again, it was decided that it would be better to ask designers for ideological values explicitly in the toolkit so they could provide the knowledge of basic working ideologies of the culture. This inturn could help the designers in deciding on the intentions later on. It seems that it would be wise to explain what ideological values are in the first place before asking designers to explore and find such values. Also, however, one needs to be aware of the ambiguity of ideological values and cultural values to consider how it can be used in the toolkit.

h) Team Reflection

Team reflections can act as interventions in the process. This can provide a platform for teams to gauge their understanding of the culture, context and themselves.

i) Design Intention

According to Annemiek and Yvo in their book 'Culture sensitive design(2020)' there are five ways of dealing with a culture along with examples from *Chapter 2* (Analysis of Existing Design Philosophies):

● **Affirm a culture:** How can existing values be affirmed by design?
Ex: Japanese Design Philosophy, Buen-Vivir Centric Design Model

● **Attune a culture:** How to avoid mismatches between a cultural group and a design?
Ex: Whitenoise Design Studio, Butterflyworks Design Studio
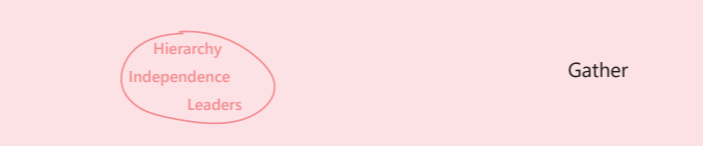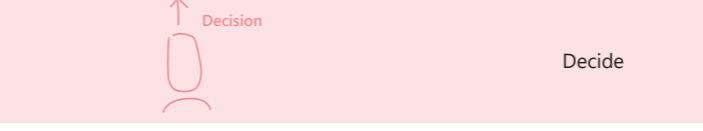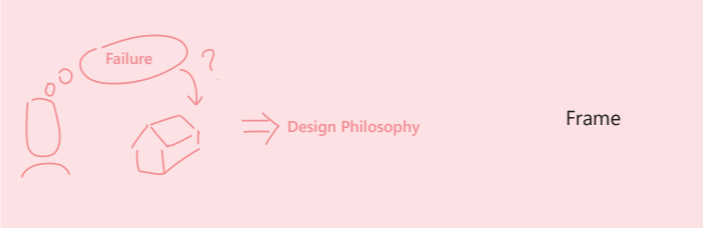
● **Change a culture:** How can existing cultural values be changed by design?

● **Abridge cultures:** How can different cultural values be bridged by design?
Ex: Bauhaus and De-Stijl movements.

● **Bypass cultures:** How to define another focus to bypass cultural aspects?

Here are some examples of design philosophies with respect to the intention. Affirming a culture results in continuation of the culture without any changes. Japanese design philosophy and Buen-Vivir enteric design model adhere to these (there is a question from when does 'affirming' apply with respect to Japanese design philosophy, as cultures keep changing). Attuning a culture relates to avoiding mismatches with another culture. The design philosophies of Whitenoise design studio and Butterfly works design studio seem to comply with this. Bauhaus and De-Stijl movements happened because of the culture of Japan influencing the West and hence there is bridging of cultures. There haven't been explorations of cultures during this research where the culture was changed or bypassed as an intention. These inputs of design intentions should be given to the designers and team when they start to develop a design philosophy. This can provide the design team an opportunity to explicitly decide what can/ needs to be done with the culture.

Table 4: Here the toolkit interventions are mapped with the themes and the process. These interventions form the core of the content of the toolkit

Step Number/ Sequence	Process of developing Design Philosophy	Themes from the sessions	Toolkit Interventions
1.	Community, Perfection, Individualism — Discover	● Personal Values ● Basic Human Values	a) Toolkit Introduction of what design philosophy is and why designers need it b) Exploration of Self through reflection c) Exploration of Culture d) Personal views on Culture and Context [Cultura] e) Form a team and Know the team f) Basic Human Values g) Ideological Values
2.	Failure — Study	● Intervention as a form of Source	h) Provide opportunity to reflect as a team
3.	Hierarchy, Independence, Leaders — Gather	-	Could intervene during this stage by asking designers to use 'Card Sorting' techniques for example. But designers already do that. It would be better to not intervene in this stage (as it is a process of creation)
4.	Ideal, Camaraderie, Failure, Community — Analyse	-	-
5.	Decision — Decide	● Decision Making	i) Design Intention (van Boeijen and Zijlstra, 2020)
6.	Existing Design Philosophy → Influences → New Design Philosophy — Replicate	● Design Philosophy	j) Provide existing examples of design philosophies (of designers, Japanese Design Philosophy, Bauhaus movement)
7.	Failure → Design Philosophy — Frame	-	k) Provide a process to explain what designers need to do in the context so that it acts as a guiding principle by using Design Intention

Ideological Values, Cultural Values, Team Values, Sources
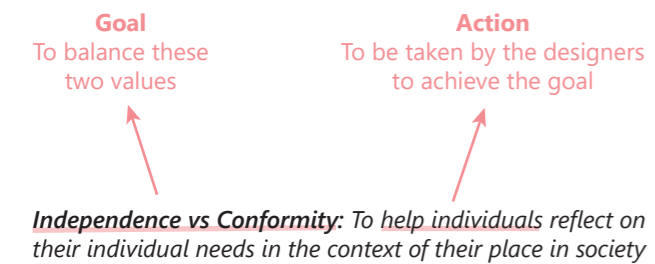
Include in

**j) Providing examples of design philosophies for referral**
This is combined with the introduction section where the examples of existing design philosophies are mentioned for designer to refer to during the process of developing the design philosophies

k) Design intention to Design Philosophy
This should be the last stage for developing the design philosophies. During Session 2, the participants developed the design philosophy. As discussed in *Section 3.3.2* (Qualities of design philosophies), the participants framed the philosophies in such a way that the philosophies explained the action that designers needed to take to achieve a certain goal. For example:

Goal
To balance these two values

Action
To be taken by the designers to achieve the goal

Independence vs Conformity: To help individuals reflect on their individual needs in the context of their place in society

Now, how should one frame design philosophies if one has decided on design intention. For example, the value is 'independence' and the design intention is 'Affirm' because the students portray a behaviour where they would like to cook together in the dormitories and as designers we see that Chinese students do prefer and value independence, we have decided to keep(affirm) the value 'independence'. One can address 'independence' by making sure the value of 'independence' for the students is still retained in the context and with the students (affirm) through design. Now what should designers do in the context to retain the value of 'independence'? This becomes the action to be taken by the designers to retain(affirm) the value 'independence' in the context. And affirming the value becomes the goal. This action by the designers translates to design philosophy.

Value
Independence

Design Intention
Affirm (Goal)

Action to be taken by designers to achieve the goal
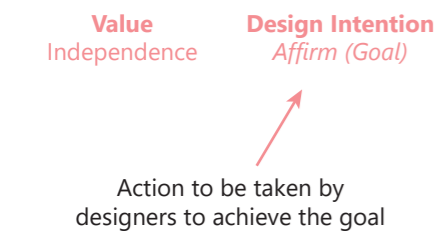
As this is just a model, it still remains to be seen if this model of developing design philosophy from design intention actually works. The problem could be that this might be too silly for designers or could be difficult to execute. The testing of the toolkit should be able to provide better insights.

There could be another possibility of not providing this model but rather give the designers during future sessions examples of design philosophies such as the design philosophies developed during session 2, for example "Independence vs conformity: To help individuals reflect on their individual needs in the context of the place in society." And then leave the rest to the designers on how they would like to come up with design philosophies based on the examples. Nevertheless, it would be better to test this model during the testing of the toolkit as it could provide concrete design philosophies with explicit cultural values and intentions.

4.3 Conclusion: What design can do

With toolkit interventions and requirements, it was seen that the foundation is set for ideation. The list of requirements provided the understanding of what the toolkit should entail in terms of the process of developing design philosophies. And the toolkit interventions provided a wide array of different content during the process of developing design philosophies. The next stage is to ideate based on the current requirements and interventions. Here is where design comes into picture. The design of the toolkit should be such that it provides guidance for the designers to develop design philosophies. However, first it needs to be tested and then some iterations for further refinement of concepts.

5. Designing toolkit for developing Design Philosophy

With the requirements and interventions set from previous chapters, this chapter helps to explain the various concepts that came to life for example 'The Card Set', 'The Board Set' and finally 'The Block Set'. This final design is thoroughly detailed in this chapter along with its role and purpose during every step of developing design philosophy. This concept was finally evaluated with the designers through a short video and questionnaire. This toolkit also helps to understand how my personal design philosophy was employed in this current project.

5.1 Personal Design Philosophy for this project

Considering that this project is about developing design philosophy, it would be wise to see and have a design philosophy for this project. This philosophy should entail who I am as a designer and how it has affected this project. Revisiting the definition again: Design philosophy is a set of guiding principles in thought, practice and behaviour in design.

As a short reflection: during the research phase which involved data analysis, I was very much biased in my views of how the co-developing sessions should have ended and how the participants could have behaved instead of looking at the sessions the way they are rather than how they should have been.

I have been a follower of Advaita Vedanta School of philosophy in Hinduism. It deals with non-duality i.e there is no difference between human and the cosmos. In it, there are four Mahavakyas or the four great utterances (SwamiJ, retrieved on 19 Jan 2021). One of them is Aham Brahmasmi.

अहं ब्रह्मास्मि

(Aham Brahmasmi)

I am That
I am Absolute
My identity is Cosmic

Source: 1) Iskcon web archive, retrieved on 19 Jan 2021 (Padmavati, 2012)
2) Meaning of Aham Brahmasmi, Youtube, retrieved on 19 Jan 2021

The interpretation here is that as humans we must realise that we are the part of this cosmos and yet cosmos itself. As Carl Sagan once said " We are made of star-stuff" (Goodreads, retrieved on 19 Jan 2021). This is an understanding that we need to go beyond our everyday roles and see that we are the absolute truth (Meaning of Aham Brahmasmi, Youtube,retrieved on 19 Jan 2021). That there is no judgements, no biases and see every cosmic element as a part of oneself. Moreover, the utterance also says there is no difference between the creator and the creation. In fact Brahma is known as the god of creation, who created this universe. The Mahavakya (great utterance) "Aham Brahmasmi" also conveys that 'I am Brahma'. I am the creator. But we need to realise this non-duality. Once we do, we would be able to see the world (universe) the way it is and the way it is changing and not how we want it to be.

This philosophy of thought greatly helped me in maintaining an unbiased mind throughout the analysis phase. Aham Brahmasmi acted as a reference point for every claim or judgment I was making. I would constantly reflect with questions such as, Is this really true? Am I seeing the way it is or the way I want it to be? This helped in getting past with as least of a bias as possible.

Now the question is, why is Aham Brahmasmi not the same as the design philosophies developed by the participants like Individualism Vs Community. Moreover Aham Brahmasmi is not the result of the usage of the Toolkit which is not yet even designed. Aham Brahmasmi also stems from my own culture and not when designing for other cultures such as TU Delft IDE culture. As mentioned in section 2.6, it is not about what is design philosophy, it is about when is design philosophy? The current understanding of design philosophy through this project is that anything can be used as a guiding principle in the design discipline and could be very personal as well. I could understand through the short explorations in the project that, as long as any designer, any design company, has a guiding principle which he/she/it constantly adheres to and reflects on it in every project, that can definitely act as a design philosophy. For future research in the design field, it is a recommendation that there should be more mainstream research in the design research community and academia in what design philosophy is, what it entails and how design philosophy actually operates in the world of designers.

5.2 Previous Iterations

5.2.1 Concept 1: The Card Set

The first concept involved a set of 15 cards. The form factor of using card for the toolkit was because:

● The cards make the process simple by having a limited amount of words on the cards which tend to be normally small in size.

● Most of the design toolkits for designers end up being cards as designers tend to travel and could carry them (portable)

● It was simple and could test quickly

It was decided at first that it was right to test the process developed in the toolkit and not worry about the form factor of the toolkit for this first stage of the concept. Hence all the effort went on to developing the content for the toolkit. The complete inspiration, ideation and the design of the card set can be seen in *Appendix F*.

The content was developed based on the toolkit interventions and requirements as described in *Section 4.2* (Toolkit interventions). These interventions will be depicted in the concept of the The Card Set as shown below.

The Instruction Manual

The instruction manual is a small manual that instructs the designers how one can use the toolkit. This manual also introduces to the designers the concept of design philosophies, its definition, with examples and why it is important to develop design philosophies for different cultures and contexts.
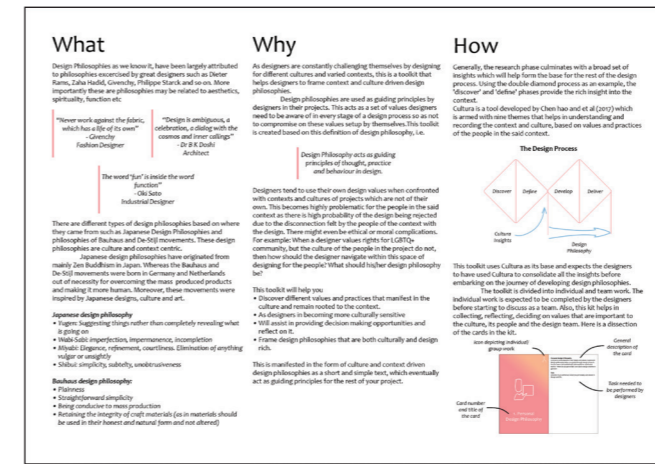(**Intervention a,j**)

Fig 18: Instruction manual of the card set where it describes the What's, the Why's and the How's of the toolkit

The Cards

Cards 1,2,3 look into the personal explorations of self, opinions on the culture and context, and explorations of the ideological values. This set is completely exercised by designers individually before embarking on team related sessions. (**Intervention b,c,d,g**)

Card 4 marks the beginning of team sessions. Cards 4 and 5 help the designers to prepare the team and get to know their values as a team. Card 6 is about reflecting the outcomes of individual explorations in card 3, as a team. (**Intervention e,g**)

Card 7 and 8 deal with the basic human values. A list of basic human values are provided and asked how these values manifest or are compromised in the context. This list provides a proper lens on basic human values with which the context can be viewed. (**Intervention d,f**)
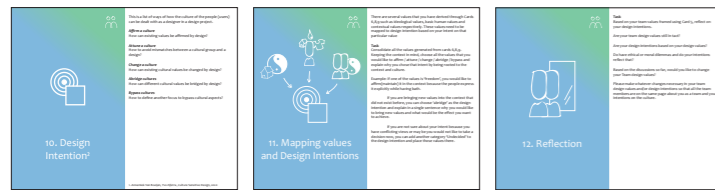
Card 10 is about the Design Intention. Card 11 deals with whatever values had been garnered in terms of ideological values, Basic Human values and Cultural values, are mapped with design intention. This is finally reflected as a team in card 12 as intentions require a considerable amount of reflection before making decisions which could have unintended consequences on the culture later on based on the decided intentions. (**Intervention i,h**)

Card 13 gives a basic introduction to the qualities of design philosophy (action based, simple and short text). This is followed by framing design philosophies based on the design intentions of the design team resulted from Card 11. Card 15 helps designers in case of intentions were not decided on certain values by describing how to frame design philosophies from such 'undecided' intentions. (**Intervention k**)

Exploring and testing the Card set

The concept developed needed to be tested with a bunch of designers for its efficiency and feasibility in aiding the designers in developing culture and context driven design philosophies.

Method
The design questions for this exploration and testing were quite simple:

● Is the toolkit helping them to bring different perspectives? different sources to the conversations?

● Are there moments of being stuck in the conversation during the process? Why?

● How do the participants view their design philosophies they came up with? What positives or concerns do they have?

● Are the design intentions helping the participants to reflect and deliberate before making decisions? Why or why not?

● Does the flow of the process make sense to the participants?

The decision was to carry out a similar type of session carried out during the co-developing sessions so that the toolkit could be gauged under similar settings. There were three participants from the IDE faculty, TU Delft, with two Master students and 1 Phd student and all three from different countries.

Two of them had already participated in one of the two co-developing sessions. The materials given to them were a set of Cultura Insight cards based on the topic of Chinese student dormitories and the Card set (Instruction Manual + Cards). Just like the co-developing sessions, the participants were initially asked to explore as individuals for 1 hour and later joined for a three hour session together with a 30min interview in the end.

Fig 19: Participants in the exploration and testing of toolkit. 1 Indian, 1 Spanish, 1 Turkish

The data was gathered using observation notes and video recording. This was analysed based on the design questions stated above. The analysis was not too elaborate but was more of understanding the designers and the toolkit interactions with a Grounded approach (Corbin and Strauss,1990 in Sleeswijk Visser et al, 2005).

Result and discussion
The design philosophies the participants developed are as follows:

Design Philosophy

● *Helping students maintain their discipline while cleaning and task sharing.*

● *Discussing and reflecting on traditions in a new light.*

● *Encourage individuals to empathise with all the genders.*

● *Promote transparency by encouraging open dialogue among individuals*

● *Showing the balance between self-sacrifice for the group and the importance of individual wellbeing.*

The complete analysis of each step of the process in the toolkit can be viewed in the *Appendix F.* Here are the main insights gotten from the analysis, with some discussions.

Design philosophies: It is clear from the above design philosophies that the participants were able to successfully develop design philosophies albeit with a lot of hiccups along the way. These design philosophies are quite similar to the ones developed by participants in session 2 of co-developing session i.e there is action needed to be done by the designers, they are short and simple texts, there are different values like cultural values (traditions) and designer values (empathy). These indicate that the philosophies are fully developed using the toolkit.

Initial exploration: This task of 1 hour exploration for culture, ideologies, and personal design philosophy was not quite successful for the fact that two of the people did not have time to finish it and the third participant was able to explore Chinese poems and said he had enough time to work on this. This indicates that designers can explore the areas requested under the toolkit provided they have time for it. In a real project, the designers will be able to explore considering that they will be dedicating time and effort for the project anyway.

Team Values: The participants were able to gel well together and able to generate values that were important to them as a team. In fact they were able to create values that were project specific like respect, openness and not sustainability. They were able to phrase what their purpose could be as a design team for this project. The discussion that ensued through this stage was healthy with everyone chipping in what their own values are and assessing if it applies to them as a team.
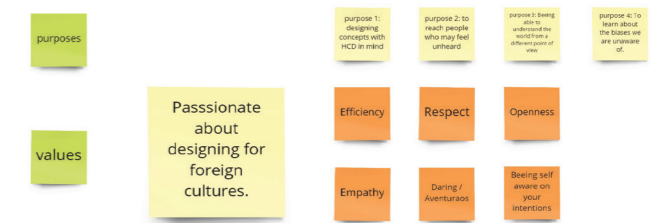

Fig 20: Team values and purpose as developed by participants

Cultural values, Ideological values, Basic human human values: The gathering of these values and discussing them as a team did not go very well. One aspect was that there were too many different types of values (cultural, basic human, ideological, team values). There were many times when it became redundant to discuss because there many values which would overlap. One of the participants mentioned that "I had written down values like... acceptance, tolerance, which we have covered already in card 7 (Basic human Values)". It felt like Basic Human values already is a repository with quite a few values. There is a very good chance designers could discuss the same values available in Basic Human values, which has a different name, later on. It should be seen how the cultural, ideological and basic human values could be merged to avoid redundancy.

On the other hand, the ideological values were quite difficult to understand in regard to what they were and as one of them said later on during the interview that ideological values have a negative connotation. For these two reasons, it would be better to drop the usage of the word ideological values and see how else we can address ideological values in the process.

Another vital concern is the balanced discussions of the participants. The fact this became a linear process, the participants at some point seemed to be in a hurry to complete the process because of which they were unable to have rounded conversations. It looks like a lot more interventions possibly in the form of reflections could help.

Design intention and Reflection: The design intentions seem to be clear and the examples helped the participants out. There was only an issue when the designers did not understand the 'Bypass' design intention on the culture. It is imperative to provide a better explanation for the next concept/ iteration.

The reflection section provided an opportunity for the participants to reflect on their intentions and the discussions were healthy. They were able to go back to their team values and gauge their intentions based on those values. Moreover, they were able to add more values to the list of team values through these reflections.

Design intention to Design philosophy: This was a model that was developed in section 4.2. This model was successfully executed by the participants and able to develop the design philosophies. There does not seem to be any issue about this at the moment and will be included for the next concept.
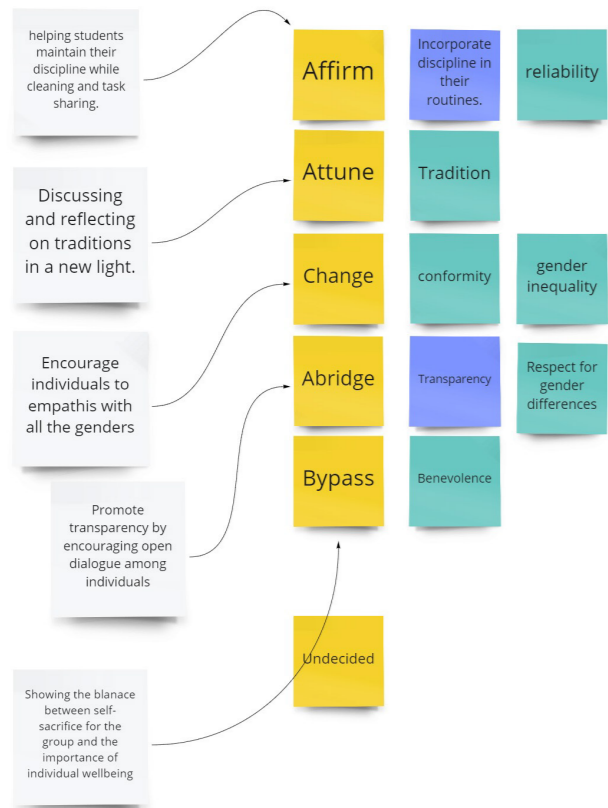

Fig 21: Design philosophies generated by participants in white post-it, Intentions in yellow, and values in green and purple post-its

Time: Although the participants developed design philosophies, time is still an issue. Time is required for exploration and more time for going through the process of developing design philosophy. Any explorations and discussions require considerable thinking and effort. As Daniel Kahneman points out in his book Thinking fast and slow, there are two systems.

● "System 1 operates automatically and quickly, with little or no effort and no sense of voluntary control.

● System 2 allocates attention to the effortful mental activities that demand it, including complex computations. The operations of System 2 are often associated with the subjective experience of agency, choice, and concentration." (Kahneman, 2012)

It is this system 2, that is required for deliberation prior to decision making. And this deliberation requires effort and mental work (Kahneman, 2012).

Hence there seems a possibility that the sessions could go beyond three hours due to the requirement for more deliberations and reflections and yet still be engaged with the process via the toolkit. It should be seen how this can be incorporated into the process.

Final feedback by participants:
● They were happy with the final outcome i.e the design philosophies they developed.
● Entire process was lengthy, complicated, language too technical and repetitive
● Overall process makes sense with constant discussions and reflections
● Provide the toolkit to get to work quickly. As of now it takes a lot of time to just read through the descriptions
● Provide visual aids, guides, make it more fun, fluid and creative
● "Developing design philosophies was the most fun part of the entire process" as mentioned by one of the participants

Conclusion
The process in general works well and the participants were happy with the final design philosophies they developed. They mentioned that the process makes sense in hindsight. However, there are quite a few changes in the details which are very much necessary in order to keep the designers engaged with the toolkit and engaged in discussions. The time required for the sessions could be more which could provide enough time for explorations and discussions. The discussions in general were rooted to the context. There were many moments that the discussions seemed one sided and many times well balanced. There should be interventions which could help the discussions be more fluid and balanced. The three types of values (cultural, ideological and Basic human values) need a modification in how they are portrayed and used in the process to save them from redundancy. The language of the descriptions need to be more engaging, succinct, focused and easy to understand. The form factor of cards proved to be not so good with so many steps in the process as the participants seemed to get bored and tired. And the cards do look repetitive in terms of aesthetics and content. One last point is in regard to the recording of the progress by the participants. There was constant questioning with themselves as to who was writing down the important values and practices. Many times the participants would type a value and other participants would not remember what the value was about. For example 'transparency'. The participants had to go back in time to formulate why they had written transparency in the first place. It looks like there should be someone who could be incharge of noting the progress and reasonings, as indicating only value will not make people remember even after the discussions.

5.2.2 Concept 2: The Board set

Based on the inputs from the participants in regard to the Card set, there was a new concept that was born. This was the result from the ideations and inspirations which is available in *Appendix G*. Here is the main description of the toolkit.

Introduction Booklet and Instruction Manual
Similar to The Card set, The Board set also contains an introduction booklet which explains the why, how and the what of the design philosophies. In addition to this booklet, there is an instruction manual that describes the working of the toolkit, the roles of the participants (moderator and team member roles) and the components of the toolkit.
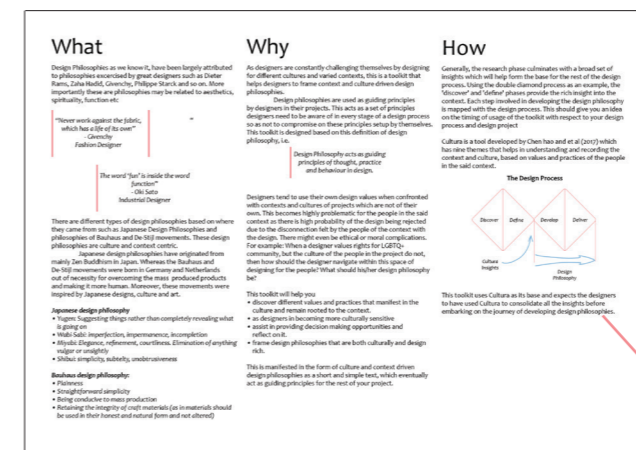
Fig 22: The introduction and instruction booklet regarding the Board set concept that explains the ins and outs of the toolkit and the roles need to be played by the team members
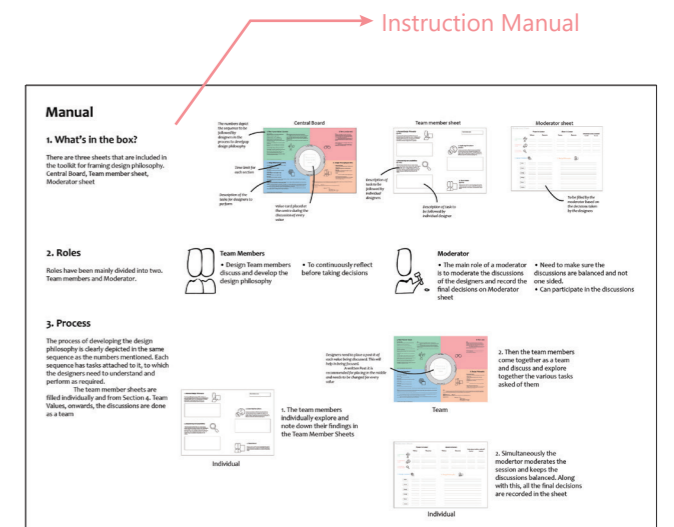
The Personal Exploration Sheets, Central board and Moderator Sheet

The personal exploration sheets are the sheets with instructions and spaces for notes that are given to the individual team members for exploring the culture, their design philosophies, mottos, discovering new possibilities. This is where each participant individually could think about bringing different values from different cultures before the session begins with a team.

The moderator sheet is the entire sheet for recording the values and reasons discussed by the participants. And finally note down all decisions for the entire process of developing design philosophy including the final design philosophies. One member of the team would be the moderator who will be incharge of this sheet and notes taking. The other main role of the moderator is to make sure the discussions are balanced. If the participants are taking quick decisions without having much reflection or discussion, it is the role of the moderator to slow things down and help participants to provide arguments and counter arguments.

The Central board is the board of rest of the instructions for developing the design philosophies. The board has a central space which is for placing value post-its. i.e values written on post-its and placed them centrally so that the participants could be focused on discussing one value at a time and take a decision before going to the next one. Around this central space is a concentric ring on which the team needs to note down their team values during the session. The location was decided based on the fact that the team would be able to discuss the values from value post-its with the team values always visible to them. This is to provide the designers a nudge for them to think and discuss in terms of team values and reflecting on the same. The ideological values and Cultural values are merged to form New lens section where the personal explorations performed initially would be discussed here with basic human values being separate. There is a decision to place the Basic human values section before 'New Lens' to make sure all the basic human values are discussed first and not to make the values repetitive. This would also provide an opportunity for the designers to bring new values under New Lens, which were not discussed previously under Basic Human Values.
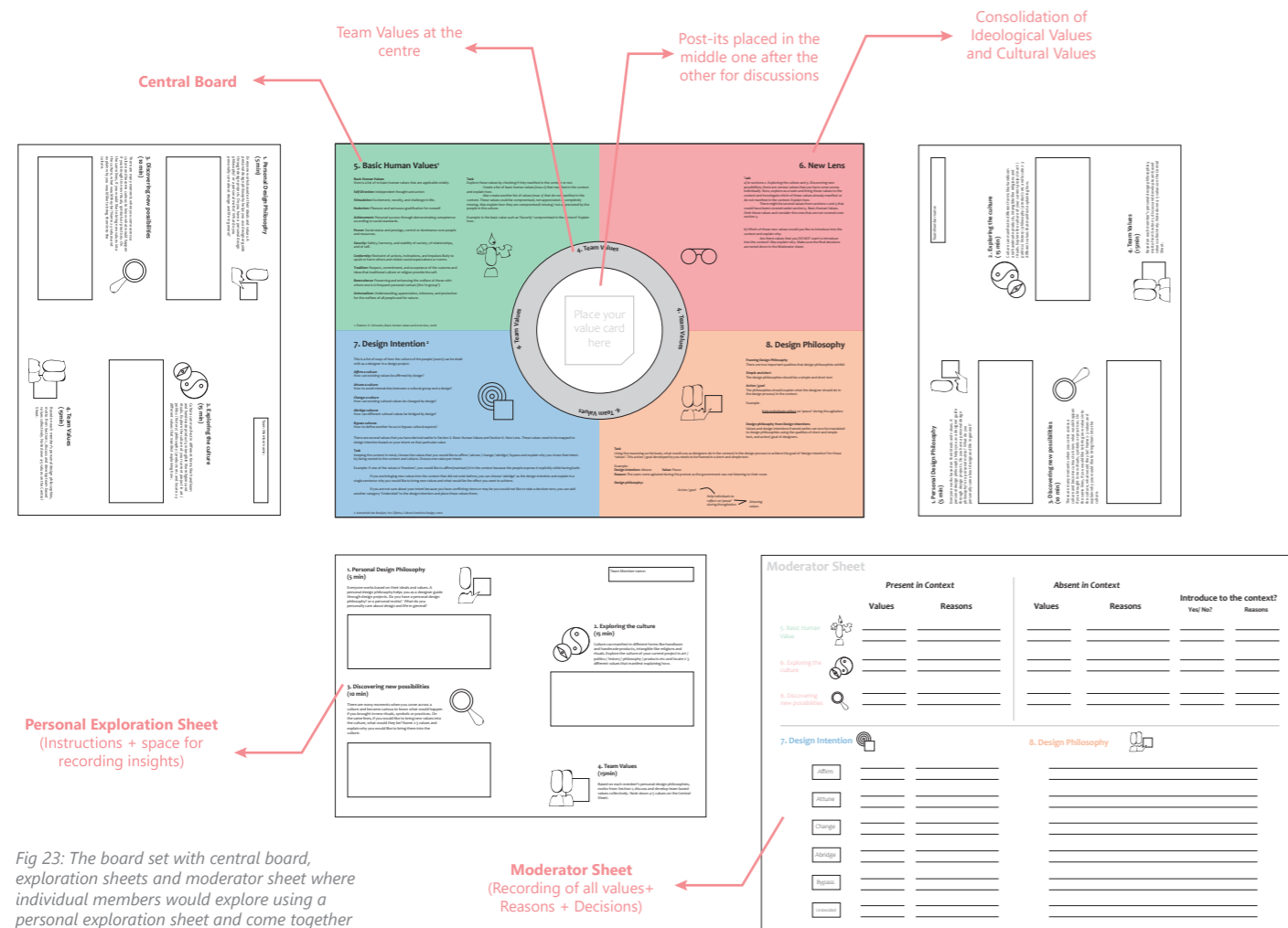
Feedback from Supervisors

This Board set concept was scrutinised by the supervisors of this project and their comments are explained below:

● This is a much improved concept compared to the Card set

● The whole process seems to lack a bit of finality i.e when does the process end. How should one know about the end?

● The need to bring time concept. When should one undergo this process of developing philosophies? And this should also be looked beyond a session. And how does this process and the double diamond process interact?

● The language of the description of the process still needs to be improved.

● The space required for noting down explorations in personal exploration sheet is very limited

● Could make things more interesting and inspiring such as a concept shown below:

Fig 24: A concept with different folds from a previous IDE Masters graduation project (schokkin, 2019)

Conclusion

This concept has provided and amended various loopholes found in the Card set. But there are still more changes to make in terms of the language, time, details such as the space required for explorations. The design should provide a finality to the design philosophy created by the designers. A little more explorations in terms of ideas for the toolkit could provide more inspirations for the interactions. The interactions, provided feasible, could make the toolkit more engaging and enjoyable. There is also the introduction of my personal design philosophy 'Aham Brahmasmi' into this toolkit. It needs to be seen how this design philosophy can manifest. It is unfortunate that this concept was not tested due to unavailability of participants as it was the end of semesters and covid situation.

Central Board

Team Values at the centre

Post-its placed in the middle one after the other for discussions

Consolidation of Ideological Values and Cultural Values

Personal Exploration Sheet
(Instructions + space for recording insights)

Moderator Sheet
(Recording of all values+ Reasons + Decisions)

Fig 23: The board set with central board, exploration sheets and moderator sheet where individual members would explore using a personal exploration sheet and come together and use the central board for developing design philosophies. The moderator sheet will be used for recording the progress.

5.3 The Final Design: The Block set

5.3.1 Inspiration and Ideation

Keeping in mind the Board Set's shortcomings and improvements, a host of ideas were generated to capture the next 'form' of the toolkit. There was constant search for an answer to the questions "What could provide better experience and interaction to the designer".
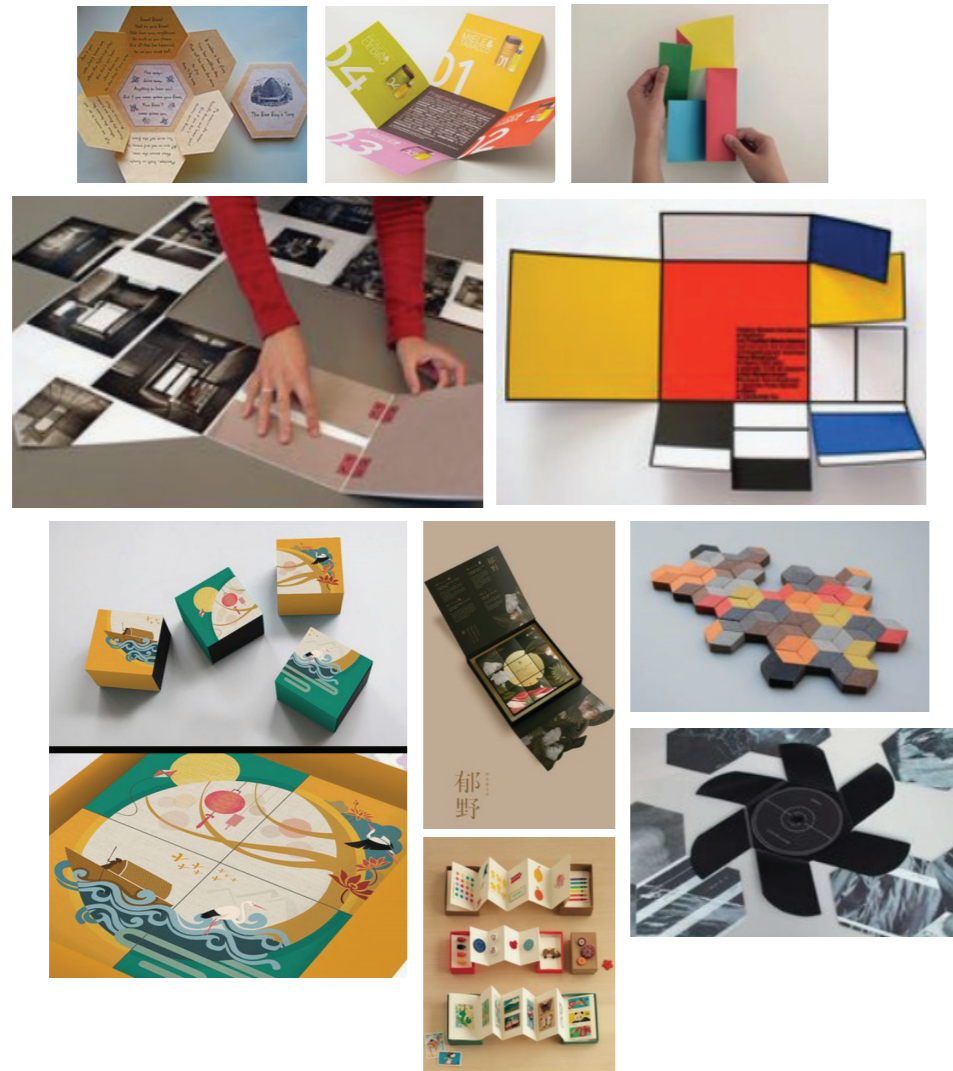
Gaining some inspirations as seen in the above image, ideas were generated to get a glimpse of what form and interaction could fit the toolkit. This was also coupled with constant search for the overarching theme that could provide the necessary experiences such as a bit of fun and joy while using the toolkit.

Fig 25: A collection of inspiration for some interactive forms
Source: Pinterest
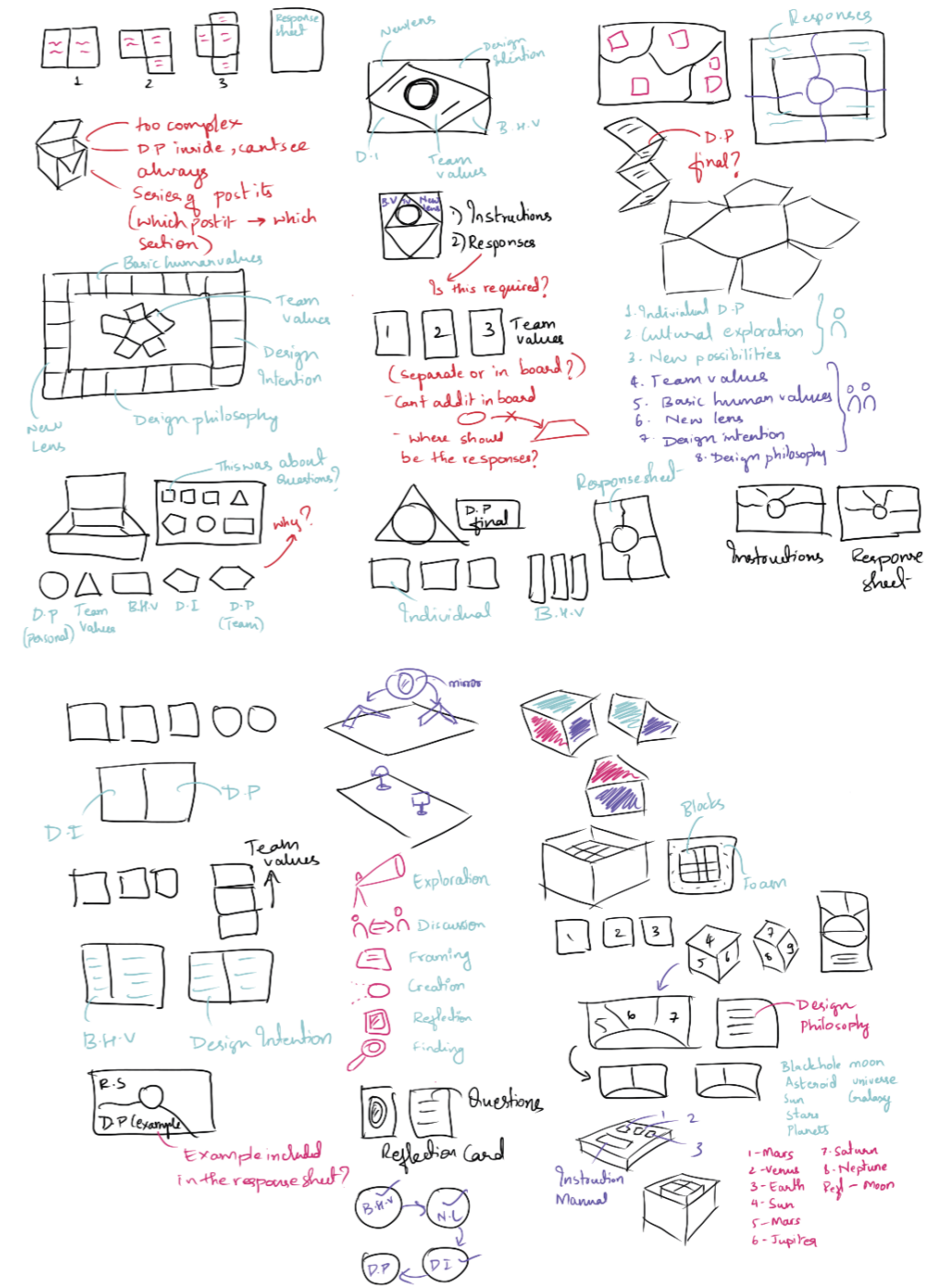
Fig 26: Ideations trying to figure different forms and interactions starting from a board and ending with a set of blocks

5.3.2 Prototyping the Interactions

To understand certain interactions, some small prototypes were made. This was analysed physically in terms of effect the interaction has on the user (author in this case), size (how big or small should the actual design be?), and the goal of the interaction(providing meaningful interactions).

Personal Exploration steps in the process of developing design philosophies

For the personal exploration steps, there were three mock-ups which were made out of paper. The one factor that needs to be considered is that the personal exploration for culture, personal design philosophies, the content would be in the form of questions as part of reflections. Hence the toolkit product should contain questions more than the statements. From the interactions, it was seen that the mock-up - 1 could provide better experience for designers. It seems to provide simple interaction with each layer being peeled or opened, the questions would attract much more thought and reflection with a metaphor of going deeper into oneself.

Team based interactions

Now that the interaction for individual sessions are finalised, the team sessions require that the team members should stay together in order to develop the design philosophies. Hence something quite similar to the Central board in Board set concept where the central board acted as the gelling product for the team members resulting in them surrounding it.

One such unique interaction which could be at the center of attraction, was a set of blocks. Through a mock up as shown below, it seemed to provide a considerable fun interaction albeit with great care. As a designer it is required for other designers to test these mockups. However this was not possible due to Covid. Hence decisions were taken based on the author's experience alone which could be marred with biases. The evaluation of the interaction is as follows:

Fig 27: Team members interacting with each other using The Board Set concept. The central board helps in getting the teams together to one spot and acts as a gelling unit

Fig 27: Assessments of different folds of paper for the Personal exploration phase of the toolkit

Mockup-1

Simple and Easy flipping of folder

Made out of normal 80gsm paper which is flimsy, a thicker paper would provide better feedback

Mockup-2
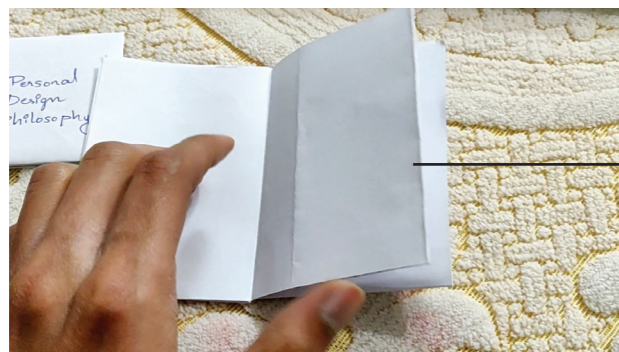
Feels like a small booklet which could be used for exploration but Mockup-1 provides better meaningful interaction

Mockup-3
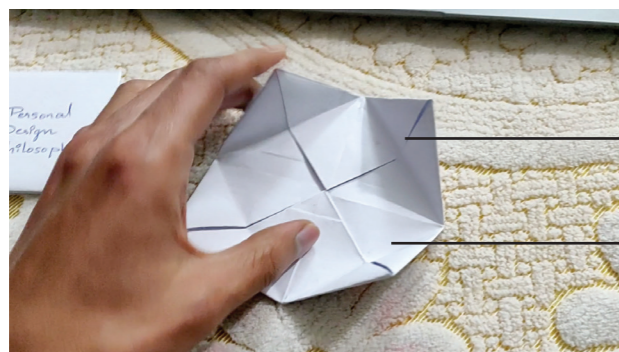
Too many folds for interaction and could be a problem for readability

The size of the prototype works well with hands (my size)

Small blocks with each side having a small incomplete portion of the instruction

Size was 120mm by 120mm in total. This was too small for readability of instructions

Requires a bounding box that supports the blocks to stay together

Provides a fun interaction like a puzzle with each time trying to figure and place all the blocks in the correct manner to read the complete instructions

Was flimsy because of paper but a solid material can be better handled

Fig 28: The assessment of the interaction with the blocks to see if the blocks can provide a fun and interactive way of handling the toolkit

Coming to the content, it can be placed on each side of the block. When all the same sides of the block are placed together in the right manner, they form the instructions for the designers to execute. Each side of a block contains one section (for example, one side contains team values, another side of block contains Basic Human Values, the third side New Lens etc)

This interaction acts as a puzzle where the participants need to look at different sides to bring the same faces together and placed in the right manner providing a fun little experience.

This interaction also gives a meaning that when discussions happen, it is important to look at an issue or a value in this case from all side before making judgements or decisions. In order to move to the next step, designers need to look around the blocks trying to assess where the next step is. Moreover, culture is definitely a puzzle. It needs to be looked at from all sides before making decisions on whether to engage/change etc.

Prototype iteration
Here is a higher fidelity prototype made out of MDF wooden board.

Some key points to be made:

● The toolkit seems to be big and hence there could be hindrance to its portability.

● The readability of the text is excellent but the prints seem dull. Need to make the contrast higher so that the text pops up for better reading.

● As the blocks are not very precise and the gap between blocks make the texts break. A precise control of prints and manufacturing is required.

● The interaction with the blocks seem very efficient.

● The paper glued to the blocks peel off quite often. It needs to be seen what the final design could have with respect to the material.

Toolkit and Response sheet
Considering that the personal exploration sheet involved recording of responses, keeping the instructions and response sheets separate could bring down the cost of the product and usage of resources. This would also help in keeping the entire toolkit as one product which would help in transportation all at once.

Toolkit   Response Sheet
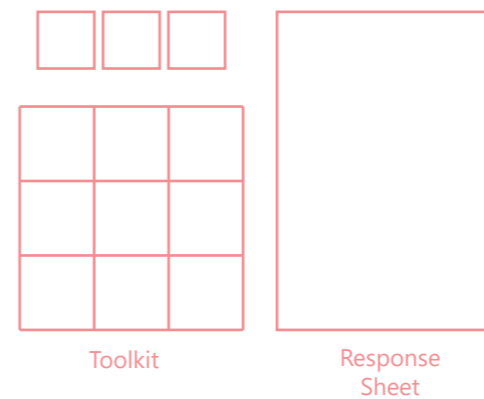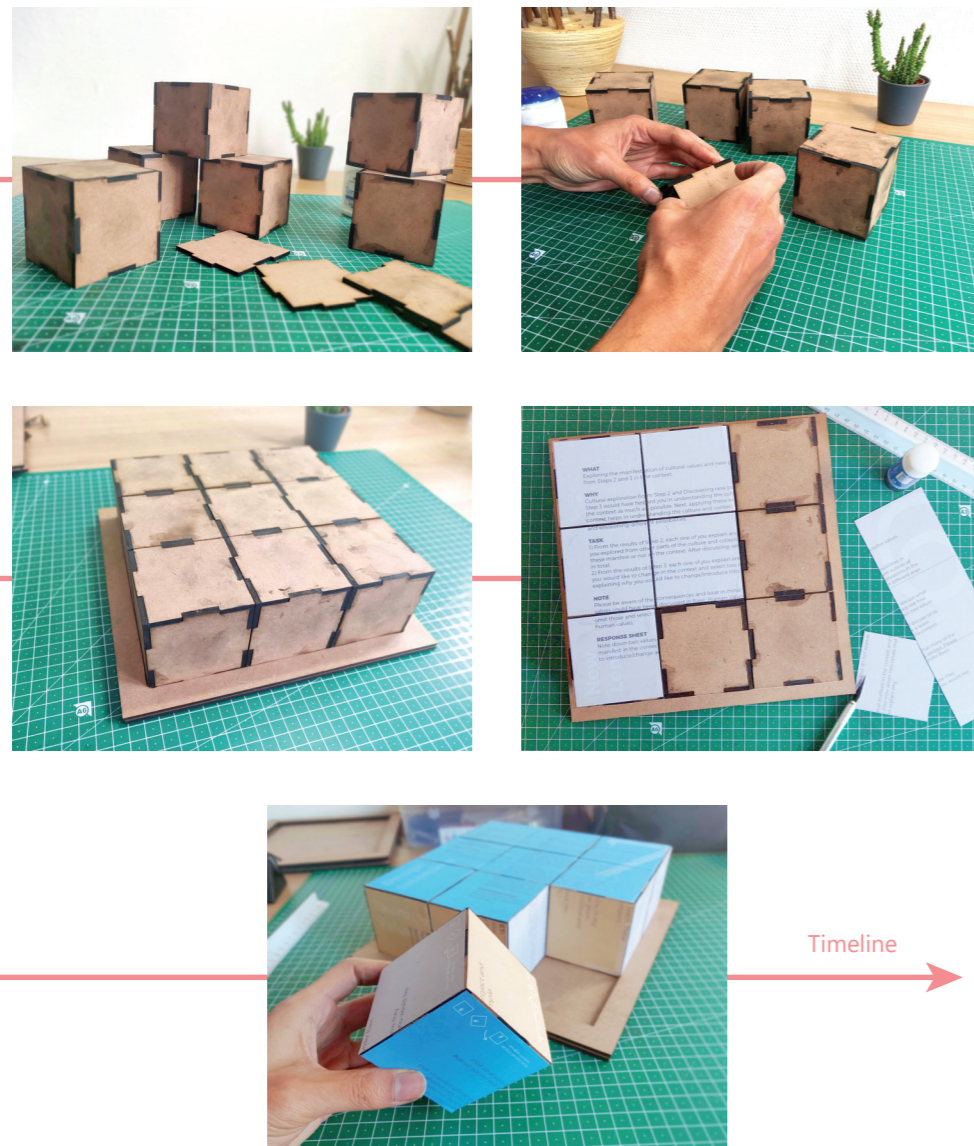
Fig 29: The journey of making the toolkit prototype with MDF, printed paper and some glue, is as shown.

Timeline

5.3.3 Final Design

The final design of the product is based on the theme 'Universe'. This was developed from the design philosophy Aham Brahmasmi which translates to 'I am the absolute truth', 'My identity is cosmic'.

Here you can see the exploration folders, the blocks/cubes, the introduction booklet and the final packaging design along with the theme 'Universe'.

Fig 30: The branding of the toolkit with the name 'Brahma', is the name associated with the God of Creation in Hinduism.

Fig 31: The 'Instruction Manual' that explains the usage of the toolkit and how this toolkit can be used in a design process.

Fig 32: Glossary helps in getting to understand the various terms being used in the toolkit
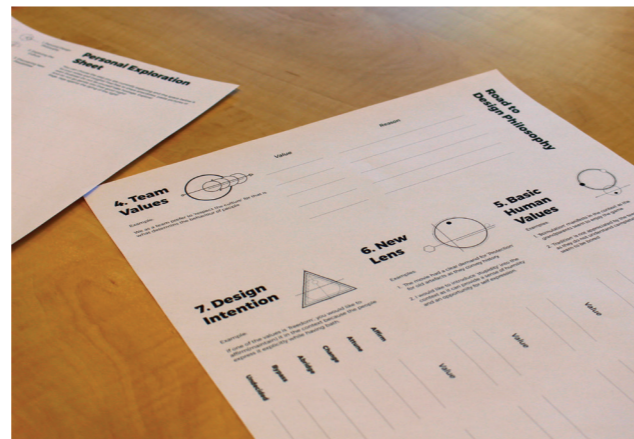
Fig 33: The personal exploration sheet and response sheets to be used for recording the responses of explorations and decisions respectively.

Fig 34: The final design philosophy response sheet which is used to record the final design philosophies and can be cut out/ separated from each other to be pasted on a wall

Fig 35: The three exploration folders which are used for personal explorations of self, the culture and discovering new possibilities in the culture

Fig 36: One of the exploration folders opened to reveal the questions

Fig 37: The block with the instructions. There are nine blocks in total with all the sides having instructions

Fig 38: The complete toolkit with the packaging, exploration folders, Introduction Manual and Glossary, the instruction blocks.

CAD Drawing

This is the CAD drawing of the instruction blocks and the base. The dimensions are as shown.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	Base		1
2	Solid cube		9

Brahma
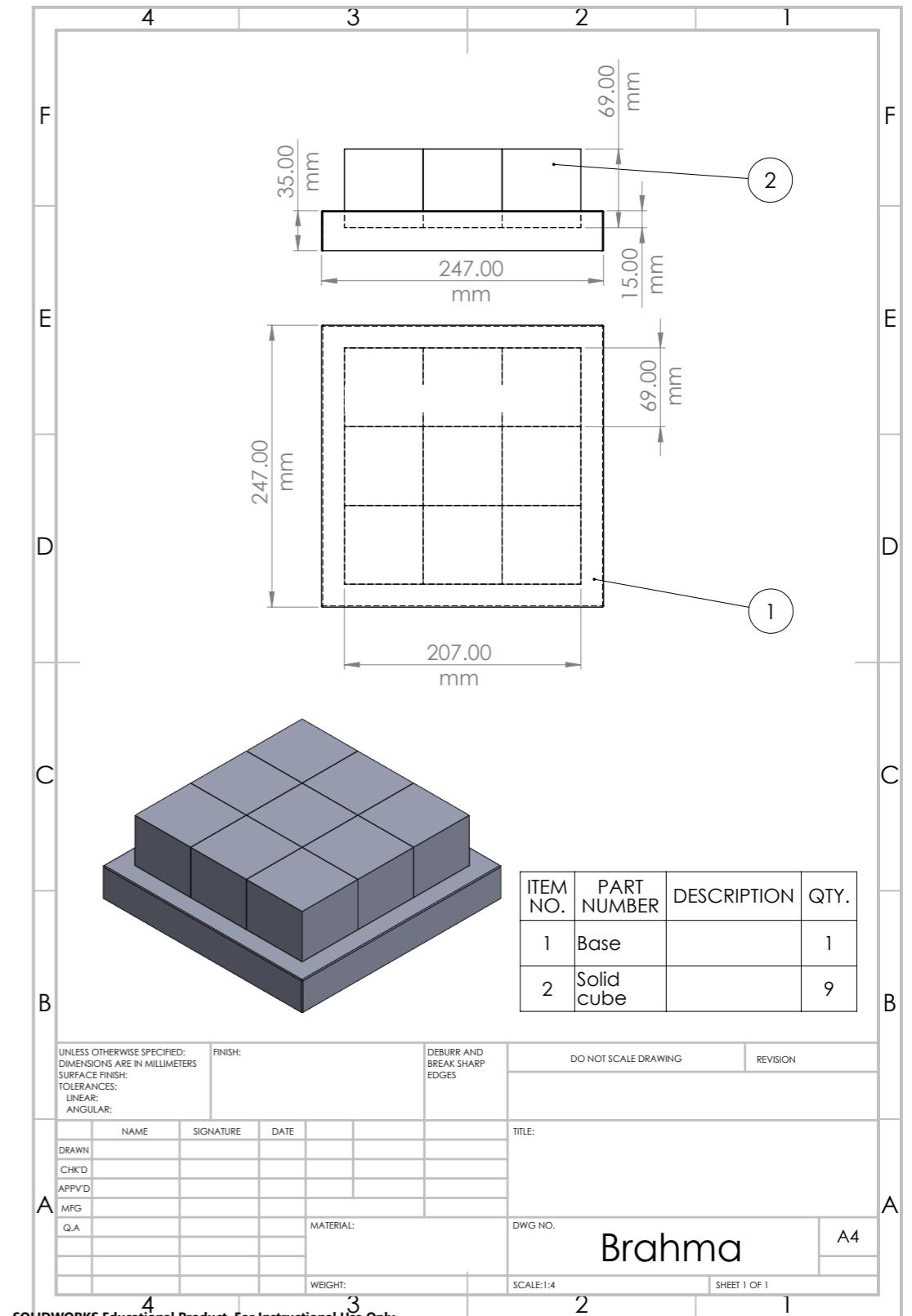
Material

Unfortunately, the material of the toolkit has not been tested completely. But one can speculate what the materials could be. The exploration cards seem to hold together with a thicker paper of 200gsm and this provides a sense of security that it can be handled well. Otherwise thinner papers have a tendency to tear apart.

As far as the blocks are concerned, the interaction with the blocks and wood material seemed to go hand in hand and very much feels like a toy.

If manufactured, this can be attempted at Channapatna, a small town near Bangalore which is well known for wooden toys for over 200 years (https://gaatha.com/channapatna-toys-history-process/). They seem to provide excellent lacquers and paints which would be highly beneficial for painting the instructions. on the blocks Instructions need to be extremely precise and so is the manufacturing. But this is just a speculation and personal opinion on the material side. The material definitely needs to be tested with people and designed for manufacturability.

5.3.4 Components and steps to developing Design Philosophies

The below *Fig 40* gives an overall view of the components and steps for developing the design philosophies.
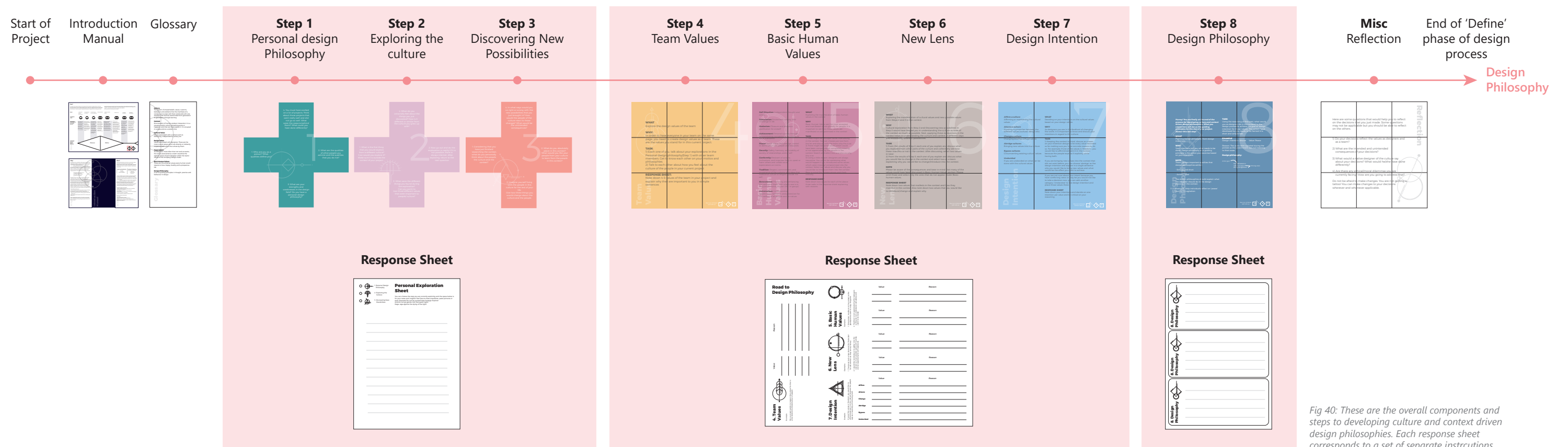
Fig 40: These are the overall components and steps to developing culture and context driven design philosophies. Each response sheet corresponds to a set of separate instrcutions

Introduction Booklet and Glossary

This is the introduction booklet which contains the introduction to Design philosophy. It explains the definition by giving examples and why the design philosophy is required. It also explains how this entire toolkit works with respect to the double diamond process. I.e it explains when to use the toolkit during the entire design process. This booklet also acts as a marketing material for why the toolkit is required and how its going to be helpful for the designers. Introduction Booklet also contains how the process of developing design philosophy weaves with the Double diamond design proces. More on this in *Section 5.3.5* (Storyboard).

Glossary is a list of defintions required for designers to be able to use this toolkit such as defintions for Culture, Design Value, Team Value, Context etc.
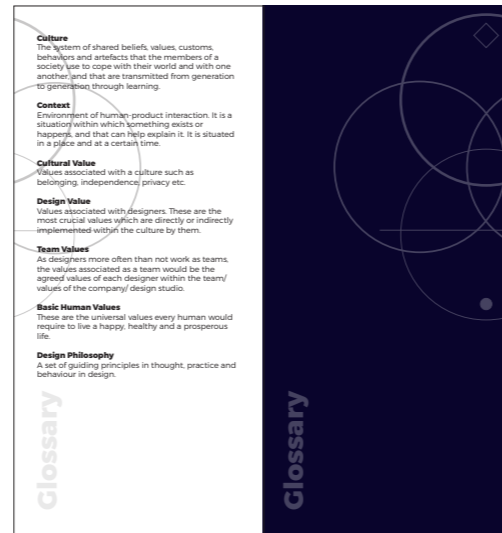
Fig 41: Glossary containing the definitions of various terms used in the toolkit. This will acquaint the designers and help in navigating through the toolkit

Fig 42: The front unfolded side of the Introduction Manual. This contains the complete introduction to Design Philosophy.
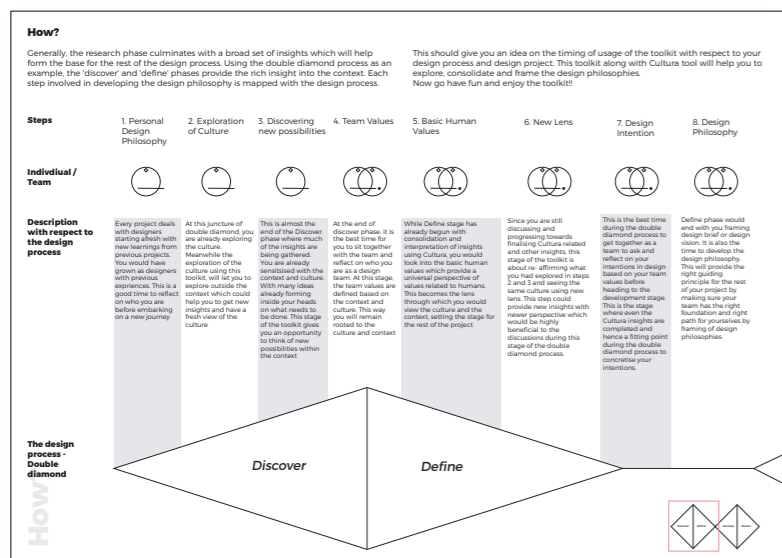
Fig 43: The rear side of the Introduction Manual with a clear depitcion of when and how the toolkit is to be used with respect to a design process

Step 1. Personal Design Philosophy

This is the first step to developing a design philosophy. The introduction booklet would have provided a basic foundation of design philosophy and the first task is for individual designers to understand their own design philosophy and their design identity. Designers need to reflect for developing their design identity (Tracey and Hutchinson, 2013). And designers need to access their prior experiences for successful outcomes. "Designers must rely on their design intelligence and intuition, derived from large pools of experience and lessons learned from prior success and mistakes, in order to arrive at meaningful and inventive outcomes." (Tracey and Hutchinson, 2013). Hence reflecting on prior experiences is a must for identity development.

In this step towards design philosophy, designers need to answer different questions. There can be a plethora of questions which is a major disadvantage in choosing, however, these questions were first introduced during the co-developing sessions which are effective in getting participants to discuss their explorations during team discussions. As shown below, the form is the open view of the exploration folder as seen in Mock-up 1.

Similarly the next two steps (2. Exploring the culture) and (3. Discovering New possibilities) have been designed which can found in Appendix .

Fig 44: The front and backside of the exploration folder which contains questions for the designers to explore individually

Step 8. Design Philosophy

The steps between Personal Design Philosophy and Design Philosophy (Steps 2-7) can be found in *Appendix H.*

Design Philosophy is the final step of developing design philosophy. Based on the model developed in section 4.2 Toolkit interventions where a theory was formed on how design philosophy can be framed from design intentions. This step provides instructions on developing design philosophy from design intentions by giving an example. For each design intention, a design philosophy can be framed. The team can develop as many design philosophies as they feel like. The designers need not necessarily have to come up with design philosophies for all the values generated. This is again reflected within the team after framing the design philosophies, which is indicated by the turning over of the blocks.

Fig 45: The instructions for the last step of developing design philosophy (Step 8)

Design Philosophy

Hurray! You are finally at the end of the process for developing culture and context driven design philosophies. What you create here will act as the guiding principles for the rest of your project. Savour this last step!

WHAT
Framing design philosophy from design intentions

WHY
Your intentions tell you what needs to be done. Design philosophy as a guiding principle is the action you excercise based on your intentions.

NOTE
There are two important quailties that design philosophies exhibit

- Simple and short

- Action / goal

The design philosophies should explain what the designer should do in the design process/ in the context.

Example: Help individuals reflect on 'peace' during the agitation.

TASK
Using the reasoning as the basis, what would you as designers do in the context/ in the design process to achieve the goal of 'design intention' for those 'values'. This action / goal developed by you needs to be framed in a short and simple text.

EXAMPLE
Design intention: Attune   Value: Peace

Reason: The users were agitated during the protest as the government was not listening to their woes

Design philosophy:

Action / goal

Help individuals to reflect on 'peace' during the agitation → Attuning values

Now turn all blocks right side up

Response Sheets

There are three separate response sheets depending on the step involved in the design philosophy process.
● Personal Exploration Sheet (Steps 1-3)
● Road to Design Philosophy (Steps 4-7)
● Design Philosophy sheet (Step 8)

Fig 46: Personal Exloration Sheet for Steps 1 to 3.

Fig 47: Road to design philosophy for Steps 4-7.

Fig 48: The last response sheet where the designers as a team would frame design philosophies and can separate them to be placed on walls or on desks.

Reflection

This is the step where the design team would end up after every step of the process. The small illustrations at the bottom of the instructions of each of the five steps (team Values, Basic Human Values, New Lens, Design Intention and Design Philosophy) will lead the designers to this stage. This is where the team reflects on the decisions they had just made. It is very important for the team to assess as much as possible on the consequences of their decisions and this is executed by asking themselves some questions. The instruction here includes certain questions which can help the team to reflect and make changes to their decisions or approach.

Fig 49: The instructions for reflection is as shown. Designers as team would reflect after every step of this process before developing the design philosophies

Here are some questions that would help you to reflect on the decisions that you just made. Some questions may not be applicable but you should be able to reflect on the others.

1) Do your decisions reflect the values as designers and as a team?

2) What are the intended and unintended consequences of your decisions?

3) What would a native designer of the culture say about your decisions? What would he/she have done differently?

4) Are there any ethical/moral dilemmas you are currently facing? How are you going to address that?

Do not be afraid to make changes. You are not getting a tattoo! You can make changes to your decisions wherever and whenever applicable.

5.3.5 Storyboard

This is the story that is created for designers to develop the design philosophies in relation to the double diamond design process. The time factor is explained in this section in the form of the position of the toolkit with respect to the double diamond design process. This can better explain the understanding behind the dynamics of developing design philosophies within the design process.

Table 5: This depicts the mapping of the two processes i.e design process and process of devloping design philosophy and how every step of the developing design philosophies augments the design process helps the designers have richer insights and experience within the culture and project

Step	1. Personal Design Philosophy	2. Exploration of Culture	3. Discovering new possibilities	4. Team Values	5. Basic Human Values	6. New Lens	7. Design Intention	8. Design Philosophy
Indivdiual / Team								
Description with respect to the design process	Every project deals with designers starting afresh with new learnings from previous projects. They would have grown as designers with previous experiences. This is a good time to reflect on who they are before they embark on a new journey	At this juncture of double diamond, designers are already exploring the culture. Meanwhile the exploration of the culture using this toolkit, will let designers explore outside the context which could help them get new insights and have a fresh view of the culture	This is almost the end of the Discover phase where much of the insights have been gathered. Designers are already sensitsised with the context and culture. With many ideas already forming inside the heads of the designers on what needs to be done, this stage of the toolkit gives the designers an opportunity to think of new possibilities within the context	At the end of discover phase, it is the best time for designers to sit together and reflect on who they are as a design team. At this stage, the team values are defined based on the context and culture.	While Define stage has already begun with consolidating and interpreting of insights using Cultura, the team would look into the basic human values which provide a universal perspective of values related to humans. This becomes the lens through which the designers would view the culture and the context, setting the stage for the rest of the project	Since the designers are still discussing and progressing towards finalising Cultura related and other insights, this stage of the toolkit is about re-affirming what designers had explored in steps 2 and 3 and seeing the same culture using new lens. New lens could provide new insights with newer perspective which would be highly beneficial to the discussions during this stage of the double diamond process.	This is the best time during the double diamond process to get together as a team to ask and reflect on their intentions in design based on their team values before heading to the development stage. This is the stage where even the Cultura insights are completed and hence a fitting point during the double diamond process to concretise their intentions.	Define phase would end with designers framing design brief or design vision. It is also the time to develop the design philosophy. This will provide the right guiding principle for the rest of the project by making sure the team has the right foundation and right path for themselves after framing design philosophies.

The design process - Double diamond

Discover   *Define*

5.3.6 Exploration of the toolkit with designers

This is the exploration and evaluation of the final design of the toolkit. The toolkit was explored with the designers via an online short questionnaire and a video. The video explained what the toolkit was about and the questionnaire requested for their thoughts and feedback on the toolkit. This method of evaluation through a video and a questionnaire was decided to compensate for unavailability of the designers to evaluate the toolkit physically due to Covid restrictions. This may not provide nuanced feedback (like physical interaction, process etc) but would definitely provide qualitative insights for later improvements. As this project has the TU Delft students as the target group, the questionnaire and video were sent to everyone who had participated in the co-developing and testing sessions. This survey and video were also sent to Design Studios I interviewed (Whitenoise Design Studio and Butterflyworks) for some recommendations.

The link to the video is here:
https://drive.google.com/file/d/1DkVr0pAjhruJycBikmd4PED4OmnC9S9x/view?usp=sharing

The questions asked in the questionnaire were simple and thought provoking. Here are the details of it:

● How would you paraphrase your understanding of the toolkit?

● If the toolkit was with you, why would you use this?

● In what context/ situations would you use this toolkit?

● Why would you NOT use this toolkit?

● Is there anything you would like to add or change in the toolkit? (interactions, aesthetics, process....)

● One word on your total impression of the toolkit!

● Any suggestions/ comments/ questions?

5.4 Evaluation of the toolkit

At the time of writing this report there were seven responses in total. Six from TU Delft Masters students and one from Whitenoise Design Studio. Here are the final remarks by the survey participants and the improvements that could be required further based on these remarks.

1) How would you paraphrase your understanding of the toolkit?
The reponses shared by the participants were pretty much on point in regard to the role of the toolkit as a shared or common design philosophy with respect to oneself, the team and the culture. They were able to understand that it requires a lot of reflection on who they are as an individual, as a team and the culture they are designing for. One of the responses:

"It opens me up to thinking about the culture I'm designing for while still retaining my internal design vision. The moments of reflection prevent any biased decisions I might take based on a tendency to stereotype"

These responses show that the video clearly explained the toolkit and its goal of helping designers to not sabotaging the culture and the self by going through a lot of reflections and discussions. It should be kept in mind that this is only based on a video and not on the actual interaction with the toolkit.

2) If the toolkit was with you, why would you use this?
The different reasons given by the participants tells the varied applications of the toolkit. Some commented on reflection as an individual designer.

"I would want to know what do I bring to the table consciously or unconsciously. I could bring in cultural, philosophical and ethical values. As I am the only 'I' and everybody is unique in this regard."

One participant commented on using the toolkit as a discussion tool:

"I would use it to engage with other designers and as a starting point. Since I'm introverted, I like to focus my attention on something that aids and develops the conversation"

Some participants mentioned on the usage of the toolkit to better understand the culture and context that is different from their own:

"Use when I work with people that I just know or not quite familiar with"

There was one last participant who mentioned that it is a useful tool to summarise the User Research phase. This is also depicted in *Section 5.3.5* (Storyboard), that describes how the design process is mapped with the process of developing design philosophies.

The applications of the toolkit are as expected. They are on the expected lines of understanding different cultures, knowing themselves as designers and the role of the toolkit compared to its placement in a design process. Last but not the least, the gelling of the design team using the toolkit and knowing who they are, their dynamics of working is also mentioned by one the participants as stated above. This clearly describes the intended results that the toolkit strives for. However, the participants only saw the video and commented, their comments might change when they truly test the toolkit. There might be more applications of the toolkit than what has been suggested perhaps in making people from other cultures feel at ease when interviewing?

3) In what context/ situations would you use this toolkit?
The participants mentioned that this is a team based toolkit and focuses on team dynamics especially when it comes to international or multicultural design teams. This is what the toolkit also intended for along with some fun interactions.

"If I am working with an intercultural team, I would want to understand in a positive way, what I bring to the table. In a similar way, i could understand what others do too. For instance, every person has their own cultural traits. I see this as a reflective exercise for international designers teams."

One participant mentioned that he/she would use it for internal purposes, as a team building tool and also for onboarding.

4) Why would you NOT use the toolkit?
The responses for this question varies but the most common comment used is the duration of the toolkit.

"I'm not sure how long it takes actually. But it may take too much time if I use it for every project. Especially when the efficiency is the key"

It would have been better if the video showed the mapping of the design process and the process involved in the toolkit with much more clarity. This would have helped the participants understand that this toolkit requires time and why it requires time and effort. Considering that there are other simpler toolkits out there, which was also mentioned by one of the participants, why this. This toolkit can get simpler, however, the time and effort cannot be. Getting to know the culture, understanding them requires time. It is a long process to get sensitised and this toolkit aids in having the sensitisation and becoming sensitive to the people of a different culture. But one thing is for sure, there is a lot of potential to make the process much simpler.

One participant mentioned stated:
"It is all paper - so hard to do remotely - so online variations would currently be helpful. And maybe more importantly: I would find a component of validation with the end users and other stakeholders important. It seems to miss input from the culture you are designing for. The steps and words seem vary abstract, requires quite a good understanding of english and design terminology, which makes it harder to apply in a more multi disciplinary team"

Goung through this comment one by one:

● **Online version than paper based:** There are many pros and cons for this. The toolkit has physical interactions because it is much more tactile, fun, makes people more focused on tasks and most importantly having team members around physically makes things much livelier. Of Course the downside of this is that most cultures and clients are not always available in person. Hence an online variant would definitely be useful to designers doing things remotely especially in times like Covid.

● **Inputs and Validation from Cultures missing:** Inputs from people from other cultures definitely need to be included in the toolkit. This toolkit targeted students who tend to go ahead with projects with different cultures and use it as a tool for reflection, exploration, discussion. However it did not concentrate on bringing new people on board. It surely is important to get them on board. The next version or recommendation is how do designers expand as a team, how do they facilitate the incoming of people from different disciplines, different cultures, how do they communicate with them.

● **Language usage:** Unfortunately, the video did not include the 'Glossary' part of the toolkit that included various definitions which would be helpful for people to understand and execute the tasks quickly.
English as a language is used here in the toolkit. If people from other cultures are joining the team and if they do not know English, then that surely is a problem. It is not in the scope of this project to deal with other languages that can be used in the toolkit. Considering this was for Masters TU Delft students, the university uses English as the language of instructions. It made sense to use English for the toolkit as well. If there was an online version, maybe online translation tools like Google Translate could have been used in the toolkit.

5) Is there anything you would like to add or change in the toolkit? (interactions, aesthetics, process....)
Many of the participants mentioned that the online tool could be useful for multidisciplinary teams. There was one comment regarding the size of the toolkit being a little problematic to carry. As seen in *Section 5.3.2* (Prototyping the interactions), the wooden prototype seemed to be quite big and a little heavy. This toolkit could get smaller without having to compromise on the readability of the text. One participants commented on the cards:

"I liked the cards used in the video. They take up less space. I might use both versions. One version in my hypothetical design studio and the other to carry to other places"

There was also a comment on the interaction with the blocks and the meaning of it:

"I am not sure that the blocks, it looks nice but the intention of why you make it as blocks. The interaction is interesting because it feels like puzzles. But I don't know why we need these puzzle interactions, maybe for having fun?"

The video could have explained, which it did not, the meaning behind the interaction with the blocks. It is a subtle message that before making a decision and placing them right side up, one needs to view all the sides of the block. This is true even for a culture. It is important to see and understand all the possibilities before making any judgements or decisions.

5) One word on your total impression of the toolkit:

"Guiding"   "Inspiring"   "Elegant"

"Interesting"   "Permeation"

"Awaken Dream"

Conclusion
The toolkit seems to provide the opportunities for designers to question their own assumptions and perceptions of the culture. It also helps the team to come together and ask themselves who they are as a team and what they stand for. Considering that this evaluation was based only on a video, there are, nonetheless, pros and cons to this toolkit. The toolkit could also be developed as an online tool for remote communication. There is a lot of potential to improve the size and content of the toolkit. Making the process simpler is the key for better and efficient engagement with designers and making the toolkit lighter would be useful for carrying it across continents. In regard to the team expansion and to include people from other disciplines, cultures etc, the next iteration of the toolkit should include these as without inputs from the target culture, this toolkit could prove redundant. Moreover, the inclusion of other members would also help Design Studios and Design companies to make use of this toolkit as well. Finally, the feedback on the interaction with the toolkit is missing.

The participants do seem to like what they saw on the video but in reality it could be different. On a broader note, the toolkit has all the right basics for carrying out a project in a different culture but still there is a lot of potential for improvements

6. Evaluation of the project

Considering that the final design was evaluated in the previous chapter, this chapter focuses on the limitation of the various stages of this project such as analysis during various design philosophies, during exploration of conceptualisation of the toolkit, ideation and most importantly the limitation of the toolkit. Following this is the recommendation for the research, toolkit and what constitutes a good team. Finally this is concluded with uses of design philosophy as explained by the participants, Cultura and its relation with the toolkit and some personal reflections in regard to this graduation project.

6.1 Limitations

6.1.1 Limitations during the analysis of different design philosophies

Cultures are quite difficult to understand and more so when one is sitting remotely and analysing different design philosophies of different cultures. During the analysis of design philosophies such as Japanese Design Philosophies, Bauhaus and De Stijl design philosophies, one of the main issues that seemed to plague was on validating the understandings of design philosophies by myself. With limited resources at hand and sitting in a different country (India), it was quite a task to understand the cultural principles that led to design philosophies. Before embarking on such a research, it would have been ideal to have different products in hand, different people to be a part of the exploration so that one can have an overall view and ask for feedback regarding the understandings of the culture and design philosophies. It was nonetheless, a wonderful exploration and insightful to really embark on such a journey of exploring other cultures.

In regard to the interviews with Studios, there was a point when it was still not clear what was the design philosophy they had, did they even consider design philosophies. Because of the fact that they do not have clear design philosophies such as Japanese design philosophy in the form of aesthetics, it was troubling to pinpoint the actual philosophies. But with better understanding of what a design philosophy is, it became clear that design philosophies always exist but people may not call it that way. The design philosophies heavily rely on the activities they do (facilitation), tools they use (Archetypes) and so on. There might be other ways of understanding design philosophies of people, studios, companies, however, for this project it seemed to provide enough insight into what design could be and when it can be called a design philosophy.

6.1.2 Limitations during the exploration of conceptualisation of the toolkit

The participants for co-developing sessions used sensitising material to get sensitised regarding a culture (Chinese student dormitories). This sensitisation did not happen with at least half of them, due to time constraints, or the sensitising material being dry. The participants of Session 2 were able to undergo sensitisation and clearly helped them to develop the design philosophies. So it is important to get sensitised of the culture before designing / developing design philosophies.

I wanted to get the participants to develop design philosophies as quickly as possible, because of which, the sessions were 'one time sitting' with three hours to spend. This was obviously tiring to the student designers. However there was no other possibility as I could get the students to be a part of the sessions only once (due to multiple people and their schedules).

And this was a hypothetical project of designing for Chinese students in dormitories and not a real project. So dedicating time for this over multiple days was a big no-no from participants. There might have been other ways of exploring the conceptualisation of the toolkit. For example, contacting and discussing with people executing real projects in different cultures. This way the people would have dedicated more time and the insights would be spontaneous and fresh. For the next iteration of the toolkit, perhaps, this could be used as a possible scenario for testing.

6.1.3 Limitations during the ideation

Ideating as a designer who is individually working on this project is a herculean task. There is not much room for discussions with other designers and one needs to deal with inherent biases that are sometimes not explicit. Designers need to be inspired from various sources and it was important as a designer myself to be able to ask other people for help and feedback. The brainstorming sessions with the supervisors and sessions with friends for aesthetics, greatly helped with bringing the toolkit to the stage for what it is now. Hence it is important to burst the bubble of being an individual designer in a project and seek help wherever necessary.

6.1.4 Limitations of the Toolkit

As it was seen in section 5.4 (Evaluation of the toolkit), the toolkit has quite some limitations. The target group is the Master's student group studying in TU Delft, Industrial Design Engineering department. This toolkit needs to be tested further to see if it can be used elsewhere such as in other universities, design studios etc. Having an online version of the toolkit would help for remote communications but the current physical toolkit will help in having more genuine and qualitative discussions with the presence of other people around. The size of the toolkit could be a bit of a concern but there is a possibility to decrease the size as the texts are still big enough for readability. And in regard to the manufacturability of the toolkit, it needs to be precise so that the text does not break from one block to the other.

6.2 Recommendations

6.2.1 Recommendations for the research

The research for a major part of this project was planned to be executed remotely. Due to covid restrictions and my likely travel to India, the Research was planned to make sure there is availability of resources and the tasks to be efficient. However, there are still a lot of improvements that can be made to the tasks executed.

● I had interviewed two design studios regarding their design philosophies. But I could have contacted them again when 'Team Values' of the toolkit was being drafted to seek for their feedback and inputs. This could have made the toolkit more practical in terms of what constitutes a team and the dynamics of it. Going a little broader, it is important to get various people on board to have various perspectives of what a team might be and how designers can make use of this for better information flow. This can be later incorporated into the toolkit.

● The design process for the toolkit uses Double Diamond. There are multiple processes employed at various universities, Design Studios and even individuals such as Iterative design (Enginess, 2018). This process of developing design philosophies could be tested and mapped with these other design processes so that the toolkit can work better for every possible design process.

● The co-developing sessions made use of a hypothetical project (Chinese student dormitories) which was already executed earlier. It is recommended that having a conversation with people involved in an ongoing project, the toolkit could be immediately tested with the same project. This would provide wonderful feedback and insights immediately and the toolkit would have been tested on the 'field'.

● The sensitising material used for the co-developing and testing sessions could be improved and made more appealing for better engagement with the target group (design students in this project).

● Lastly, having a physical product and testing it would require some time and planning. Designing physical products during covid times is a special case. It should be seen who would be available, how should one test it, when should the testing be done, what should be the measures to be taken for keeping distance and maintaining hygiene. All these needed to be planned and unfortunately this did not work out during this project. Moreover the toolkit required for people to be sensitised again before testing and the whole toolkit which spans half the design process could not be tested at once. Hence planning for testing is highly recommended before embarking on it.

6.2.2 Recommendations for toolkit

Many statements have already been made on the limitations and recommendations for the toolkit. Here are a couple of important points to be recommended:

● As this toolkit involves developing design philosophies, it is almost impossible to know if the designers would use the design philosophies as design philosophies once they come up with it. There is no way of validating if the designers would like their design philosophies they developed within this process. It would be ideal to include this validation within this toolkit as a part of the process.

● As far as teams are concerned, having people from different cultures, disciplines, clients would greatly help the discussions, and decisions. The next iterations could improve the team dynamics, facilitation and engagement with members from other cultures. Also this toolkit has not been tested with respect to the form/ aesthetics of the culture. It would be interesting to see how designers might bring aesthetics, experiences etc into this process of developing design philosophies.

● The timing of the each step is not recorded and tested. Even though this toolkit is used over half the design process, it would be better to provide the information for how long each step takes so that the teams can plan accordingly. This way it will not hinder the other processes or tools the teams use during a design process.

6.2.3 Recommendations for what constitutes a good team

As designers work in teams and across teams, there is always a question of what makes a team successful. Does that depend on the success of the project? Or does it depend on the means through which the team carried itself within the project? A team, more specifically, a design team needs to brave through many failures in a design process in order to have a shot at a successful product. It is not just the process that affects a team, the people and their roles, team members' objectives, tools and methods they use, and the project parameters they operate in (Brown, 2015, retrieved on 27 Jan 2021). This is a complex mix of attributes, tools and strategy that is at play within a team.

Taking the gaze towards what makes a good team, the dynamics of the team plays a major role. In many professions, teams can be hierarchical, inflexible and slow (Perkins, 2006, retrieved on 27 Jan 2021). But design teams are brought in for a short time, no two projects are the same, and the size and composition of the team varies (Perkins, 2006, retrieved on 27 Jan 2021) because of which the design teams have fewer rules and greater flow of information both of which are required for rapid innovation (Perkins, 2006, retrieved on 27 Jan 2021). The number of people in a team should not be too few or too many. Organisational experts advise that the effective size of a group could be between five and seven (Perkins, 2006, retrieved on 27 Jan 2021).

But the exact size of each team is determined by the number of separate skill sets required (Perkins, 2006, retrieved on 27 Jan 2021). And skills are related to the roles and responsibilities within a team. If a team requires a person who is skilled in ethnographic research, his/her skills are translated to the role of a researcher and responsibility of taking field notes, speaking to stakeholders and so on. Hence it becomes clear that skills, roles and responsibilities make the three most important aspects for forming a team. And a right mix of these in a team is what provides the right dynamics for a good team. This also needs to be coupled with the individual motivation of people within the team. Professional growth and project ownership form two major motivations for any member (Brown, 2015, retrieved on 27 Jan 2021). It is important for members to know the feeling of having a stake in the success of the project, and this inturn provides a purpose to them (Brown, 2015, retrieved on 27 Jan 2021).

It is important to ask who the members are within a team. According to Dan Brown in the book Designing Together, there are four major roles within a team(Brown, 2015, retrieved on 27 Jan 2021). They are:

Designers: People responsible for generating and documenting ideas about how the product works, looks, or behaves. In many areas of design, there are designer specialties viz. design researchers, user experience designers, product design engineers and so on.

Managers: People responsible for ensuring the project team delivers on its obligations, creates plans to do so, and successfully executes against those plans. Team leads and project managers tend to take up this role of managing projects.

Subject Matter experts: People — sometimes designers, sometimes not — responsible for contributing information to the design process. These may be people who are the users of the product itself or who have some special insight into the users or the project constraints. They can be designers, anthropologists, clients, activists etc

Stakeholders: People ultimately accountable for the success of the project. There are primary and secondary stakeholders. These people can be the end users, clients, project management, board of directors etc.

(Brown, 2015, retrieved on 27 Jan 2021).

In fact, there are a lot more variables which can make any team better. The dynamics, goal orientation, planning, progress moniroting and so on, can make any team thrive.

6.3 Conclusions

6.3.1 Why design philosophy? Uses of design philosophy as explained by participants

From the co-developing sessions, there were some points made by the participants which clearly states the uses of design philosophy. One participant of a session mentioned how he could have benefitted a set of guiding principles for his previous project.

"It's very funny to be writing this stuff, knowing the theme of your project (developing culture and context driven design philosophy), because I just realised I always questioned and missed a sense of principles to be ruling the development of the product and experience of the business and of course missed that in EI as well.."

Another participant too mentioned:

"I would benefit a lot knowing how to draw from my own philosophy as well and ....without having a sense of imposter syndrome, I really want to be able to articulate my cultural philosophy in my design process".

Moreover, in a design process, as mentioned earlier, the design philosophy can be used for communicating to the stakeholders. These uses convey that the design philosophy, through culture and context, is beneficial and applicable in a design process.

6.3.2 Cultura and Toolkit

Cultura tool was used in this project for its comprehensive themes. This way, the sensitisation of participants would be well rounded and equally informative for them. The first concept 'The Card Set' made use of the inputs from Cultura explicitly.
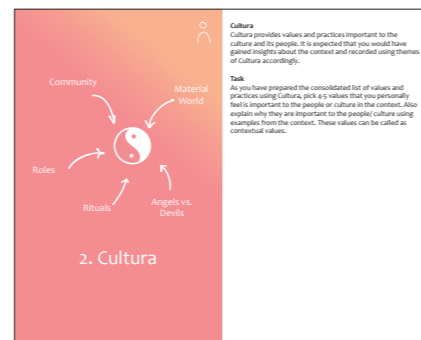
Fig 50: Cultura card in The Card Set concept being used explicitly

However, there was other information that came into picture such as Basic Human Values which already has its own set of values and a lens that can be looked into, because of which, the explicit usage of insights from Cultura was dropped. Now the final design of the toolkit does not have any explicit relation to the themes of Cultura nor with its insights.

However, there was other information that came into picture such as Basic Human Values which already has its own set of values and a lens that can be looked into, because of which, the explicit usage of insights from Cultura was dropped. Now the final design of the toolkit does not have any explicit relation to the themes of Cultura nor with its insights. But cultura has been mentioned in the Introduction Manual as a research tool. There is no information on how the toolkit would be used without Cultura insights. There could be a possibility of not needing Cultura as a requirement for designers before using the toolkit. Moreover, designers can start to use the toolkit from the beginning of the project itself without having to wait for insights from Cultura. But it would be ideal if Cultura is used for research because of its overall themes that could provide well balanced insights.

One more thing to be considered was, how would it be if Cultura was used to identify the culture of TU Delft and IDE specifically. Unfortunately this was not employed in this project. It could be a recommendation for future scenarios on identifying the culture of IDE or any university/studio using the Cultura tool.

6.3.3 Design Process of the project

There was a significant amount of discussions with supervisors in the beginning of the project to get this project going. Considering that this was about design philosophy, the process needed to be made very practical. Once the plan was approved, not much changed with the planning of the process and the execution. There were two important changes:

● Initially there was a plan of case studies where I would be using Cultura to learn about the culture of different communities. This would have taken a lot of time and hence to make the process more pragmatic, a hypothetical project of Chinese Student dormitories was made use of.

● I would have expected to test one more time before finalising on the design. This did not happen due to time constraints.

But looking in hindsight, all the phases of the processes as described in *Section 1.4* (Approach and Planning for the project), were executed perfectly well as planned albeit with certain changes in schedule.

6.4 Personal Reflections

Annemiek and Yvo in their book 'Culture Sensitive Design' describe three layers of designer related to his/her design culture which affects their way of designing (van Boeijen and Zijlstra, 2020):. Using this as the template for reflections:

Designer as an individual person:
I have always had some fascination over physical products. They make things more interesting, makes us stop and look at the beauty of it. The language and the feel of physical products can never be translated to digital ones. Language does not necessarily mean form or aesthetics. It is much more. I cannot put it into words for now. Maybe it is because of millions of years of evolution and having to deal with physical products over these years starting from tools for hunting. This toolkit manifests these inherent values. It is a physical product which requires a physical interaction to be able to use it. Although this co uld have been an online version, I personally refrained from this to make sure this toolkit still resonates with me as an individual designer. However, looking at the feedback of the final design, it is important to see how the physical manifestation of the toolkit can be combined with the online one. Maybe my own toolkit could have helped me in this project to be able to navigate through these personal values and values required to design for a different design culture.

Designer in a contextual scenario
Considering that I am an Indian studying in the Netherlands, the design culture in the Netherlands is completely different from the design culture in India. For some reason, I have felt Indian design culture currently is just an imitation of the design culture of the West. And my own sense of design has somehow been molded into this imitation. This can be clearly seen in the aesthetics of the toolkit where I have tried to bring the culture of Hinduism (Brahma)with the design culture of the west. Is there an authentic Indian design culture? There should be. If not, it needs to be designed. But there is still a lot to reflect and ponder who I am as a designer and what do I really value so that I can know where I stand as an individual, as an Indian, as Designer with an education from the West. The values I have as an Indian hasn't changed coming to the West. In fact I have grown to be a lot more Indian than I was ever before. This project truly fills me with joy that I attempted to do something with culture clashes. Getting education in a different country from a different continent opens a whole new world. It brings a mirror to one's face and say 'Now, look at yourself'. The design process, the people, the challenges in this project gave an opportunity to get to know design from a western perspective and my role as an Indian designer. This is probably the first step in a journey that will last for a lifetime.

Designer's historical background:
My Bachelors in Mechanical Engineering definitely had an impact with developing an interest with physical products. This truly is in stark contrast with the philosophy of Aham Brahmasmi(I am absolute / My identity is cosmic) where it talks about having joy with the natural things around you. I believe Design somehow molded these two together to bring a toolkit that is neither really engineered nor very spiritual in nature. It has given me an opportunity to tackle the subject of Design philosophy which normally is not very tangible and yet the toolkit is a tangible product. Considering that design philosophy turning out to be in a text based format was not something I was looking forward to.

However, the circumstance which involved giving the participants text based examples of design philosophies, the difficulty of developing other forms of design philosophies in short co-developing sessions all played a role in design philosophies being developed in a textual format. I would really wish to see if there are other formats out there that could help designers create design philosophies that are not text based.

6.5 Acknowledgements

I would like to extend my sincere and heartfelt gratitude to all the personages who have been extremely helpful for this project to be successful.

First of all, I would like to thank Annemiek von Boeijen and Marieke Sonneveld, for constantly supporting me, critiquing my project. It was really wonderful to have them both as mentors. They have encouraged me and provided me with different points of view which are invaluable in a big project like this.

I would like to show immense appreciation to Merel van der Woude, Creative Director at Butterfly works Netherlands and Ram Sunkara, Design Principal from Whitenoise Design, India for helping me learn about the various philosophies at their design studios. It was an eye opener on how they actually work in design studios such as them.

I would like to extend my thanks to my fellow friends Inês Theriaga, Maria Frediani, Henrique Meyrelles, Arun Abraham John, Wenying Chang(Ingrid), Felix Baumgartner, Jim Unterweger, Pelin Esnaf-Uslu, Deborah Mellado, Yeun Kim, Andre Riccio who were a part of this project through various co-developing sessions, testing and brainstorming session for aesthetics without whom the project would not have been possible. They were able to help me without me having to bribe them. True friends indeed.

To all the people who were directly or indirectly involved in this project I would like to extend the appreciation. And lastly to the most important people in my life, my mother and sister, I have been grateful for having them constantly supporting me in whatever possibility.

Sambhram Changavi Shivaprasad
18 February 2021

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8. Appendix

Personal Project Brief - IDE Master Graduation

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Developing culture and context driven design philosophies _____ project title

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple.
Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date   14 - 09 - 2020   19 - 02 - 2021   end date

**INTRODUCTION **
Please describe, the context of your project, and address the main stakeholders (interests) within this context in a concise yet
complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the
main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money,...); technology, ...).

Designers are constantly trying to challenge themselves by designing for cultures and contexts that are alien to them.
It becomes a necessity for them to capture inspiration wherever possible. The main context for this project is to help
designers find inspiration from the context and the culture they are trying to empathise and design for. In other words,
the main stakeholder is a designer who is using different design tools, methods etc in the process of designing. A
designer can be a design student, design professor/educator, designers in practice, design researchers etc.

During a design process, in order to generate ideas for a given context, designers tend to explore, scope and find
inspiration wherever possible. However, one area they tend to miss out on, is searching for inspiration in the culture
they are designing for. Inspiration can come from many places even within culture. However, for designers, this
inspiration mostly ends up as an aesthetic value like a style element or a form of ritual in the final design. I would like to
deepen the inspiration from the culture, based on their values, beliefs, needs, meanings etc and that which can be
expressed as design philosophies. This can be seen as an added opportunity that the design discipline can make use
of. Design philosophies have existed albeit mostly in a verbal, undocumented form. They exist among designers,
design agencies, product based companies and so forth as a principle. Design philosophy can be seen as a guiding
principle of thought, practice and behaviour for designers. They act as pathways for them to follow and remain
focused in their projects. They can be deeply personal or company established or shared by a group of designers such
as in the Bauhaus movement.

As most designers are unaware of design philosophies which might be hidden or unconscious, this project will
include research on definition of design philosophy and its purpose in order to understand and reflect their own
design philosophies. The final tool developed, could have examples of existing design philosophies such as that which
is used in Japan, in order to bridge and map new design philosophies. I find culture based design philosophy as a
guiding principle for designers to truly understand the culture and remain connected to it even during other phases of
the project. This can help them not only to empathise with the people they design for, but also with the culture of the
users or stakeholders they are a part of. On the other hand, this may even minimise misappropriating the culture for
design purposes. Culture based design philosophies extract cultural values, beliefs and convert them to design
philosophies which can act as guiding principles for the project. This helps designers to stay true and focused to the
culture and be inspired from it for the rest of the design process.

This project's limitations are as follows:
1. Subjectivity of designers as design philosophy is a subjective philosophy and the tool needs to handle or
incorporate this subjectivity.
2. The uncertainty of corona and its effect on stakeholder's lives.
3. Availability of the stakeholders due to corona.
4. A major limitation would also be to understand what inspires people from a cultural, philosophical or language
point of view to make a design philosophy an inspiring one. It needs to be emphasised that a design philosophy needs
to be inspiring to keep the designers rooted to the context and culture. This means that the project has to deal with
the 'experience' of the designers in order to develop an inspiring design philosophy for their project. There will be
more exploration in the topics of philosophy and inspiration in the initial phase of this project.

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Initials & Name   S   Changavi Shivaprasad   4403   Student number 4982134

Title of Project   Developing culture and context driven design philosophies

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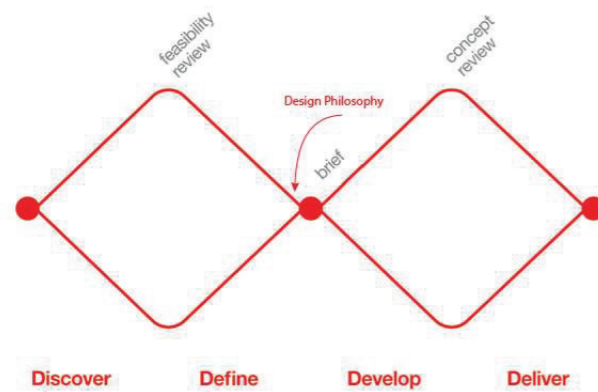
image / figure 1:   The placement of Design Philosophy in a Double Diamond[1] design process
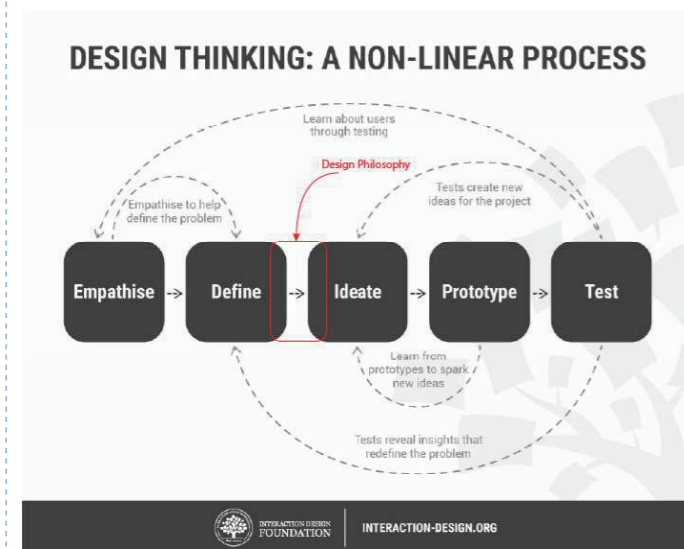
image / figure 2:   The placement of Design Philosophy in a Design Thinking process

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PROBLEM DEFINITION **
Limit and define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 30 EC (= 20 full time weeks or 100 working days) and clearly indicate what issue(s) should be addressed in this project.

During the research phase, designers explore and try to understand the cultural context as much as possible in different ways, using different tools. Once armed with the information and insights, they prepare/ refine a design goal, create a design vision and so on. During this phase, they transit from being an insider (within the culture) to an outsider (as designer). Furthermore, these design goals/ design visions become the goals or visions for the designers to reach in the project. They require pathways to reach such a goal or vision. These pathways, many times, are driven by their personal inherent design philosophy as a guiding principle to reach their objective. However, there might exist a conflict between the cultural values and the personal design philosophy when trying to transition from an insider to an outsider. Hence in this project, culture based design philosophy will be used to avoid the conflict and make culture and design philosophy a seamless transition for better, finer and more appropriate design results. The goal of this project is to provide a tool or method for designers to capture cultural nuances and translate them to design philosophies depending on the context.

ASSIGNMENT **
State in 2 or 3 sentences what you are going to research, design, create and / or generate, that will solve (part of) the issue(s) pointed out in "problem definition". Then illustrate this assignment by indicating what kind of solution you expect and / or aim to deliver, for instance: a product, a product-service combination, a strategy illustrated through product or product-service combination ideas, ... In case of a Specialisation and/or Annotation, make sure the assignment reflects this/these.

This project will entail in-depth research on experiences, cultural insights, and philosophies as guiding principles, in order to create a tool - and a method to use the tool - that can help designers gain cultural insights and form a culture based design philosophy. The solution space is a tool and method to convert cultural insights into design philosophies.

There will be two case studies. The first case study will be researched on Syrian refugee family's food culture at home in The Netherlands. The cultural values, insights, practices etc will be used to develop the tool for a design philosophy. A second case study will entail a Surinamese family's food/culture at home in the Netherlands. The cultural insights from these case studies will be used to test the tool developed earlier, with designers who are educated in TU Delft in the Design for Interaction Master.

The tool can be used by designers in a design process and more specifically at the end of the initial research phase. The results of a research phase, which would be laden with rich cultural and contextual insights, would be converted to design philosophies that act as guiding principles for designers to carry out the ideation phase with more enthusiasm and ultimately helping in generating more ideas.

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PLANNING AND APPROACH **

Include a Gantt Chart (replace the example below - more examples can be found in Manual 2) that shows the different phases of your project, deliverables you have in mind, meetings, and how you plan to spend your time. Please note that all activities should fit within the given net time of 30 EC = 20 full time weeks or 100 working days, and your planning should include a kick-off meeting, mid-term meeting, green light meeting and graduation ceremony. Illustrate your Gantt Chart by, for instance, explaining your approach, and please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any, for instance because of holidays or parallel activities.

start date   14 - 9 - 2020   19 - 2 - 2021   end date

Milestones	Week	Phase	Details
Kick Off Meeting ● 14. Sept	38	Preparation	• Preparation of tools, materials. Getting in touch with various stakeholders.
	39		
	40	Case Study 1: Research	• research based on themes of Cultura toolkit • Desk Research on cultural values, practices, experiences, philosophy as a discipline in the cultural context. • Interviews with stakeholders like designers, design studios, Syrian family • On field research
	41		
	42		
	43		
Mid-Term Meeting ● 06. Nov	44	Analysis	• Cultura based insights/values • Connect insights with 'Experience' of designers and philosophy • Develop design philosophy and its manifestational qualities
	45		
	46	Design and Testing	• Ideate, design and develop the tool • Test the tool with the stakeholders(designers)
	47		
	48	Case Study 2: Desk Research	• Research based on themes of Cultura toolkit • Desk Research on cultural values, practices, experiences, philosophy as a discipline in the cultural context and interviews with Surinamese community
	49		
	50	Analysis	• Cultura based insights/values • Redevelop the tool or make modifications
	51		
	52	Christmas Break	
	53		
Green Light Meeting ● 15. Jan	01	Design and Testing	• Redevelop the tool or make modifications • Test the tool with the stakeholders(designers)
	02		
	03	Final Design	• Redevelop the tool or make modifications • Prepare final design of the tool • Preparation of report
	04		
	05	Winter Break	
	06	Report and Buffer	• Preparation of report and submission
Graduation Ceremony ● 19. Feb	07	Graduation	• Final Preparation for graduation: videos/posters, presentation etc

The approach was to include the usual design phases into this project. Research phase, Analysis, Ideation, Testing and another iteration of the phases. Initially, there will be a literature study on design philosophies for example in Japan and The Netherlands. The case studies bring the project to a more focused design context. These case studies will make use of Cultura [2] for better understanding and delineation of cultural insights. The first case study with more elaborate and indepth research was to be used for preparing the tool. This results in more information and insights. More the information, better the clarity for designing. This newly developed tool and method, however, needs to be tested with the stakeholders. So, a second case was chosen for this purpose. Although this is a case study, the research for this will be limited to desk research in order to limit the time and resources. The insights from first case study would be helpful in the themes and patterns to look for in the second case study. The insights from the second study would be used for testing the tool. As multiple iterations take place, the tool is further refined.

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Title of Project   Developing culture and context driven design philosophies

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MOTIVATION AND PERSONAL AMBITIONS

Explain why you set up this project, what competences you want to prove and learn. For example: acquired competences from your MSc programme, the elective semester, extra-curricular activities (etc.) and point out the competences you have yet developed. Optionally, describe which personal learning ambitions you explicitly want to address in this project, on top of the learning objectives of the Graduation Project, such as: in depth knowledge a on specific subject, broadening your competences or experimenting with a specific tool and/or methodology, ... Stick to no more than five ambitions.

This project was initiated as an answer to an internal conflict I experienced as a designer in a previous course(JMP) where I was a part of the team designing for Indonesian teachers. The feeling of not mixing culture and ideation was disconcerting. The question of why designers do not see the culture as a source of inspiration but rather see them as a set of constraints to be used for designing, needed to be looked into. However, with the Japanese minimalism as a case study I carried out, it was understood that their design philosophy merges beautifully with their cultural values and design. A feeling of not making the best use of a culture seemed indigestible. In my opinion, culture can play a role in providing a trigger for generating ideas.

One of the other problems I personally faced was converting insights into ideas. Although there exists a lot of tools to generate ideas, it felt as though there was a certain gap between insights and ideas. In my Exploring Interactions project, this problem surfaced and I also heard from the coaches that this problem exists with many designers as well. In this project, I would like to bridge this gap between insights and ideas with the design philosophies.

As a final comment, designers employ psychological, behavioural, social, anthropological systems of thinking during a design process. However, in my experience, philosophy has not yet entered a mainstream designer's life. I would like to test and bring philosophy into the design discipline as well.

FINAL COMMENTS

In case your project brief needs final comments, please add any information you think is relevant.

References:
[1] Design Council (2005). The Design Process. Retrieved October 1, 2014, from: http://www.designcouncil.org.uk/about-design/How-designers work/Thedesign-process
[2] Hao, C., van Boeijen, A.G.C., Stappers, P.J. (2017). Towards Cultura: a communication toolkit for designers to gain empathic insights across cultural boundaries. In proceedings of IASDR.

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Title of Project   Developing culture and context driven design philosophies
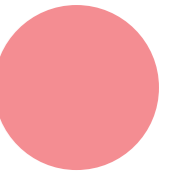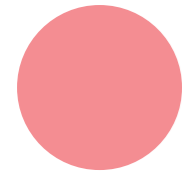
B. Cultura Themes

The Cultura tool is a tool of nine themes that is developed by Hao et al, 2017 for understanding a culture. The themes are as follows:

Sl. No	Cultural Aspects	Descriptions
1.	Socio-Cultural values	Values are the social standards concerning what is acceptable and what is unacceptable, important or unimportant, right or wrong, workable or unworkable, in a cultural context. Individual values may differ from those of groups.
2.	The Material World	The material world is composed of artefacts (products, or things which have been designed). These artefacts, also called material culture, not only have utilitarian functions, but also carry particular symbolic meanings. They have social significance that refers to a specific group of people, or a specific time and place.
3.	Community	A community is a group of people who have a shared concern or who wish to reach a goal, and interact regularly to do so. The community distinguishes who/what does or does not belong to the group. However, the scope of the community varies with different design projects. Designers need to decide how to delineate (set the border) for each project.
4.	Division of Roles	The division of roles describes how duties are distributed among community members. For example, what the activities are and how they are distributed according to people's position in the hierarchy; whether it is a collective or individual activity; and division of roles by gender.
5.	Rituals in everyday lives	Rituals are sequences of collective activities to reach desired ends, which are considered as socially essential. This also includes daily routines, special events, and activities in people's spare time.
6.	Knowing the rules	Rules, in the context of culture, consist of written and unwritten (social) agreements created by people during shared practices in order to achieve a goal. They deal with people's social relationships and are continuously being formed and changed, reflecting the nature of the culture.
7.	Angels vs. Devils	An angel represents a person (perhaps a super hero or celebrity) who is highly esteemed in the community, and who can also serve as a role model. Of course, the opposite can also exist – a devil (an enemy, or anti-hero). It is even possible for a person to be seen as both angel and devil by different parties.
8.	Goals of end users	The end users' goals describe the short- and long-term goals that users want to achieve, or personal intentions that are meaningful to them or their community (in a specific context).
9.	Macro developments	Macro developments describe contextual factors such as developments in demography, economy, and politics, including the composition of the population, geographical characteristics, development of infrastructure, and so on.

C. Sensitising Material for co-developing sessions

This is the sensitising material provided to the design students for the Session 2 of co-developing sessions. The previous version of the material and provided to Session 1 students was more bland and textual which had some flaws.

Hi,

Thank you for agreeing to help in my research. This is for my Master's graduation project on the topic of "Developing context and culture driven design philosophies".

This is a workbook that you need to fill in, which will be later beneficial for you and me to discuss your thought process behind developing a context and culture driven design philosophy(ies).

There are four sections included here in this workbook. I would suggest to complete one section a day which involves an activity, and the fourth and fifth sections will be completed in a group which will be discussed later. If you feel like completing the three sections in one day, please go ahead :-) Whatever fits your time and day!

For each day's section, instructions are described in that particular section. It would be highly beneficial if you could take a print of these sheets so that it becomes easier for you to engage in these activities but not mandatory. Once you finish the activities of the first three sections, the fourth section which would be on the fourth day will be carried out as a group activity followed by a short discussion. Our discussions will be used only for my research. No parties outside of TU Delft are involved apart from the graduation chair and mentor and our peers in the group activity.

You are free to explore or even stop performing the tasks at any time. There is no compulsion that you have to do all the tasks mentioned in this material. **Please do not share the materials I have provided for you with anybody else (including the Cultura insight cards PDF document)**

Also there will be no judgements from my end and no right or wrong answers. Your answer is what matters.

If you have any questions, please do not hesitate to contact me. Thank you!

Sambhram Changavi Shivaprasad
s.changavishivaprasad@student.tudelft.nl

P.S:
Here's the plan and duration for each section:

1. Introduction (Reading)	15min	Workbook	Individual	Day 1
2. Sensitisation of Chinese culture (Research and writing)	30 min - 1 hour	Workbook	Individual	Day 2
3. Cultura insights and reflection (Reading and writing)	20 min	Workbook	Individual	Day 3
4. Developing design philosophy (Discussion and writing)	1-2 hours	Verbal and Workbook	Group	Day 4
5. Final discussion (Discussion with Sam)	1 hour	Verbal	Group	Day 4

Page 1

Day 0

Do I know you?
Who are you?

What has been your guiding light in life? A motto? Or perhaps your own philosophy?

Do you have someone you look upto in life? and why? (Maybe a designer, family member, serial killer...)
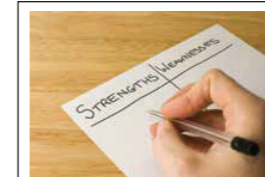
Elon Musk has his own stengths and weaknesses. We don't know what they are. But do you know yours? Lets stick to the design field for now and atleast one from each category.

Page 2

Day 1

Introduction [15 min] - Individual

My entire project revolves around the topic of 'Design Philosophy'. What is Design philosophy? Where does it come from? How does it look like? These were my initial questions. I realised through some research that all designers have design philosophies, whether it is their own or they stole it from somebody else. One thing you must understand is that design philosophy always exists. However, most people don't know that it does. It is very elusive. It is like navigating through Brightspace. If you don't know what you are looking for, you get lost, if you DO know what you are looking for, you would still get lost. But you know that something is always there! And that is the same way how design philosophy exists!

Design philosophy, in my opinion,
"is a guiding principle of thought, practice and behaviour in design."

Yes, I framed it myself!(With the help of literature ofcourse :-/) Design philosophy acts as a guide for how you should work in your design projects. This is based on your design values. And these values keep changing with time, context, field and so on. However there are certain design philosophies that keep true to yourself over time which may or may not change. Take Dieter Ram's 10 commandments for good design as an example. These were his design philosophies for most of his work and they acted as guiding principles in his design process. Down below are some more examples of design philosophies and not just from designers, but from different culture such as Japan and from design/art movements such as Bauhaus and De Stijl.

If you see, design philosophies of designers and design movements, they are mostly related to the form and function. On the other hand, design philosophies of Japan are very culturally intertwined. Although they stem from a cultural perspective, they still form a part of Japanese aestheticism(don't know if this word exists in the dictionary). Many of them are metaphysical in nature which may not appeal to everyone within or without Japan. This culture rich design philosophy from Japan is what drove me for this project. Also there were other reasons such as preserving cultural spirit in a process, taking inspiration from the cultural background for idea generation etc. In fact, the very reason that Japan being such a hub of their own design philosophy without really compromising on their values had a major inspiration to create a tool to develop culture rich design philosophy.

Now tell me... when we start ideating, after doing a lot of research, do we look for ideas in the culture of the context or do we end up looking everywhere else for inspiration like instagram, dribbble, other projects by other design studios? Take for example: if we are non- African designers designing in the African context, we would have completely discarded the culture of Africa while ideating because we only saw that culture as a set of insights or constraints but never saw any value beyond that. We would almost never take inspiration from the african culture, history but end up looking elsewhere for idea generation. And this is what I would like to change in this project and you are going to help me in achieving that. It is about time we took some inspiration from the culture and still retain that cultural spirit within the process without compromising on who we are as designers.

You might ask, why do we need to preserve the cultural spirit? And why in the design philosophy? This culture based design philosophy acts as a reference point for upcoming stages in the design process and to value the culture because it deserves it. And most importantly, users are living in that context. Their behaviours, decision making, ethics, morals are shaped by it.
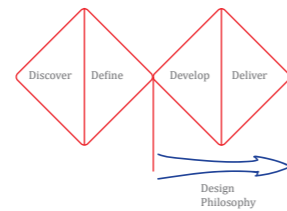
Now what is expected of you?
Nothing much actually. Just help me out.
I would love to see you develop a design philosophy that is truly yours and including the values of a different culture. There is no compulsion that you have to develop a design philosophy that is textual as seen in examples below. This topic "culture and context based design philosophy" is completely new. You want to have a dance performance as a design philosophy? Go for it and Go bananas!!!!! Its yours, truly yours and coupled with cultural values, it should inspire you to stick to it throughout the design process as a guiding principle if you were in a design project.

"Never work against the fabric, which has a life of its own"

- Givenchy
Fashion Designer

"The word 'fun' is inside the word function"

- Oki Sato
Industrial Designer

"Design is ambiguous, a celebration, a dialog with the cosmos and inner callings"

- Dr B K Doshi
Architect

"When I sit, I do not want to sit as my seated flesh likes, but rather as my seated spirit would sit, if it wove the chair for itself"

- Gerrit Thomas Rietveld
Furniture Designer, Architect

• *Plainness*
• *Straightforward simplicity*
• *Being conducive to mass production*
• *Retaining the integrity of craft materials (as in materials should be used in their honest and natural form and not altered)*
•*Streamlined aesthetics*

- Bauhaus design philosophies

• *Yugen: Suggesting things rather than completely revealing what is going on*
• *Wabi-Sabi: imperfection, impermanence, incompletion*
• *Miyabi: Elegance, refinement, courtliness. Elimination of anything vulgar or unsightly*
• *Shibui: simplicity, subtlety, unobtrusiveness*
• *.....*

- Japanese design philosophies

Day 2

Sensitisation of Chinese culture [30 min - 1 hr] - Individual

This section would give you an opportunity to have a glimpse at the Chinese culture. Here's the mantra: Learn about the Chinese culture in ways you find meaningful or from sources that you would love to explore. For example,
• Have a chat with your Chinese friend about Chinese food?
• How about reading some Chinese poetry? (translated ofcourse)
• Or watching campus romance dramas?
(https://tinyurl.com/y3uo3urj)

You   Bamboo Straw hat   You are wearing bamboo straw hat on your head! Metaphorically!
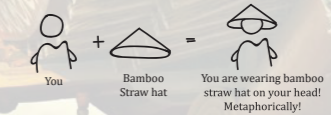
The goal is to experience the Chinese culture wholeheartedly as opposed to looking through 'designer lens'. Be free! There are no restrictions! And following your cultural exploration, please answer the questions in the box. You are free to add pictures as well! As mentioned earlier, there are no correct or incorrect answers. All that matters is who you are and what you like. Have fun!

• What was your source for learning Chinese culture?
• Why did you choose that source?
• What did you learn about the culture through that source? / Is it possible to mention what was important to people in that culture?
• How is it different(or similar) from the culture that you are familiar with while you grew up?

_____

_____

_____

_____

Space for pictures/images

Day 3

**Cultura insights and reflection
[20 min] - Individual**

What is this about?

Life of 26 students in same-sex dormitories of a university in China.

Where can you find this?

The cultural insights of the life of these students is available in *Cultura_insight_cards.pdf*

What do you have to do?

Reflect on the life of these students in China with your own experiences

What did you feel about the student life in dormitories in China?

_____
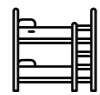
How common or different was/is your student life in dorms/shared apartments?

_____

What did you like or dislike about this situation in Chinese university dorms?

_____

Day4

Developing culture and context driven design philosophy [1-2 hrs] - Group

This is the most fun part of this workbook. Yay!!
All you have to do is develop a design philosophy(atleast one) based on the cultural insights from Day 2 and Day 3. You can have a conversation with the group on how to proceed. It should act as a guiding principle for a project if you were working on **Designing products/services enhancing university students' social relationships in China**.

And how do you judge if what you have is a design philosophy? **Make sure it is not too abstract or not too detailed. You need to be able to generate ideas based on the design philosophy.** The design philosophy can be of any form: illustration, video, texts, a song and so on. Use the workspace below to explore! **You can ask me any question for clarifications**. Go for it and don't be shy!

You can even write down some questions that come up during the group activity which might help you in answering during the process of developing a design philosophy.

Workspace

Q. _____

Q. _____

Q. _____

Q. _____

D. Consent form for co-developing sessions

This is the template of the consent form given to the participants of co-developing sessions and to the participants who tested the Card Set concept.

Photograph and Video Taping Release form

Thank you for agreeing to participate in this session. This session will be video taped and photographed. These tapes and photos will be used for research purposes only. They will not be used commercially.

Please indicate your permissions by choosing the statements below.

Thanks.

☐ I allow Sambhram to video-record this session for research purposes.

☐ I allow Sambhram to photograph this session for research purposes.

☐ I allow Sambhram to use the photos from the workshop for project promotion (presentation, articles, website etc)

Name _____

Date _____

Place _____

E. Co-developing Session 1 complete analysis

The first step to the analysis involved transcribing the discussion and recording themes and patterns. This was done to get an overview of the flow of the discussions and various elements that affected the discussion.

Fig E.1 : Transcribing the session and recording themes and patterns

This was followed by brainstorming with key elements. The problem with brainstorming is that there is a heavy chance of bias that would remain hidden because you are talking to yourself as this is a Master's project which is performed individually. However it is important to at least make sure there are no known biases by reflecting and asking questions to oneself such as: Whose opinion is this? Mine or the designers from the session? Is this the real source where the argument comes from?

Then the key elements such as basic needs, wellbeing, designer values, ethics, cultural values, ideology, Nazi regime, Authoritative, design philosophy etc from the discussion were written on post-it notes in order to connect the dots or patterns.

Fig E.2: Card Writing

These cards were further sorted according to several theme. The final themes that resulted are as follows:
Ideology, Cultural Values, Team Values, Designer Values, Sources, Time, Basic Values, Design Philosophy, Decision making.
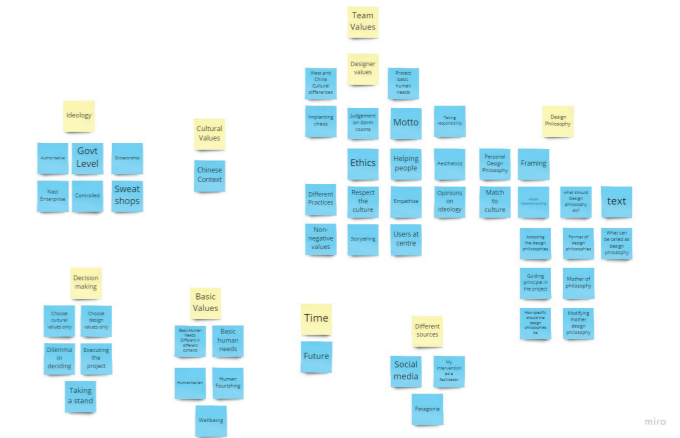
Fig E.3: Final Themes from Card Sorting

The card sorting helped to get an overview of various themes that cropped up during the discussion. Although the themes are seen separately as shown in the above images, but are not as mutually exclusive as they are depicted in the discussion which is explained below. These themes seem to be exhaustive however there are some elements such as team dynamics of the participants which were not a part of discussion during session rather their behaviour being observed by me, which also needed to be considered. This will help in programming the toolkit in such a way that it is beneficial for both designer as an individual and as a team as developing design philosophies are personal and yet a designer is never alone when doing a project. It is ironical this is being said considering the Master's project is an individual project.

The above mentioned themes are highlighted in the text below. The following explains how the themes are interrelated and manifest in the discussions:

Initially the discussion began with cultural differences on how the West is different from China with one of the participants mentioning 'how the dormitories are so controlled with small rooms and a lot of people. But the Chinese don't seem to mind that and once they come to the Netherlands they also don't mind living separately'. They were bringing Sources as evidence to confirm how the Chinese culture is different. For example, one of the participants mentioned about her project EI project on gym's changing rooms where the women move around without clothes and the Chinese users were very uncomfortable with this'

Combating designer values and cultural values took much of the time in the session. They started to provide justification on why cultural values are important. A conversation with an NGO (source as evidence to this argument) earlier by one of the participants "Biggest problem we see as western civilisation we are coming up with rules and designing for the people .. are based on our own values and goals but not in the goals of the target group.... The students need to be the owners of the project".
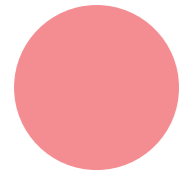
They came to the conclusion that it is more important to design with the culture of the target group in mind than the designer culture and it is almost impossible for a designer to experience what the target group experiences in real life. On the other hand, they said designer values too were important "Philosophy is something personal and how you experience reality influences your design". There were instances of discussion on what happens if a right wing designer is in this context of dormitories. "What if a right wing person puts his values in front of the values of the context?". Such scenarios were also at play in the discussion on how to decide the cultural and designer values and what if's. To add to this, there was a lot of back and forth of choosing either designer values or cultural values.

"Should you be impartial to the context or their values?"
"We can do something that goes against their values. Implanting chaos.... Design for provocation"
"Design should be authoritarian... as one of the points(design philosophies)"
"If our values do not fit with their values, we either go with our values or go with their values"
""We could give up momentarily our values for the users.... Skip the moral and ethics and experiment"
This decision making between choosing either cultural values or design values seem to be a breaking point. Again the sources they brought for the discussion were rich like previous projects, discussions with NGO, personal projects, alternate scenarios. These sources provide evidence for arguments.

Sources were not used only for justification. The sensitising material was used as an inspiration for the participants to draw on their own personal design philosophies. I had personally intervened before this in the session and asked them to have a look at Day 2 and Day 3 of the sensitising material. As I was the facilitator, I had seen that the conversation was stagnating on choosing designer values or cultural values and hence I asked them to have a look at the sensitising material for more ideas or inspirations. These forceful interjections as a part of the toolkit could be seen as a positive or a negative. If the discussion was stagnating as above, it could provide a newer material or perspective. If the discussion was going in a flow, it could put wrenches in the works and hamper the flow of the entire discussion. However, a newer source as a different perspective or as evidence to pattern finding for arguments, is always useful for a designer. It remains to be seen how this can be incorporated in a toolkit.

Personal design philosophies involved skepticism on 'what can be called as a design philosophy'. One of the participants had a strong principle of doing something socially "to help people in the struggles they are facing.. To give them basic needs to live a good life and not (designing)things accessorial". One of the other participants quoted "I dont know if it's a design philosophy but I like to make people feel better, I can help people in their life". The third designer wasn't quite sure what his design philosophy was but mentioned that he was surely attracted to aesthetics "Things should be pleasing".

All these can be seen as the extensions of their design values.
In order to combat the dilemma of decision making, they started to frame a basic human value like Wellbeing which is "neither harmful for designers nor the students in dormitories" as one of them stated. However one of the other participants explained "What is the type of wellbeing there? Is it like EU? How do they perceive it? Wellbeing could be staying indoors and not go out....will we be making them more lonely and anti-social (through design)?" It is seen here the basic human value of Wellbeing could be practiced very differently in those context. The values and practices are a bit tricky which will be discussed in the *Section 3.4.2* of analyses of both the co-developing sessions together.
This also led to discussions on Chinese ideology "When we are contributing to something, are you transferring those values of bigger picture like nurses and doctors working for Nazi enterprise? (source: history)..(Need to) disassociate responsibility of soldiers from Nurses". They were relating Chinese communist ideology and students with Nazi regimen and nurses. In fact the conundrum had begun when they were deciding to choose between designer values and cultural values "Putting myself(as a designer) in the context(Chinese dormitories).. With clash of values of feeling of being in a very authoritative place and probably even controlled by the govt, should we go for the project or not?" As a matter of fact, whether to do the project was an important topic. They were trying to create a story on why they should do this project (Chinese dormitories). Were they a design company? Could they choose to not do this project because it goes against their values? Or maybe they need to grow as a company and need money to sustain. Looking at this conversation made me think a couple of things.

● That I should have framed the design brief better for them. I had requested them to Design a better experience for the Chinese students in the dormitories. I realised I had made a mistake by not referring to the paper on Cultura and picked the brief from there. It seemed the brief given to the participants here in the session was too broad and they needed to narrow it down. The brief in Chen Hao's paper of Cultura was "Design products/services to enhance the social relationships of students in China"

● Also creating a story seems to be a wonderful idea for the toolkit i.e the story of a design agency working on a project. If this toolkit is used by students, then it would be a good roleplay. If it were a design company using this toolkit, it would be a nice reflection for them. Ofcourse it would depend on what is included in the toolkit.

When the participants were thinking about personal design philosophies, they were also jumping from one source to another (Italian designers, Bachelors programs in Italy, materials of tangible of products, digital media, social media, Book on Human flourishing). The sources acted as connecting nodes. Each topic acting as a trigger for another. This helped them to talk about human flourishment as one of the basic human values.

Another important pattern that came to surface was that the participants had referred to contextual values/practices i.e the practices or values of the Chinese students in the dormitories, in a very limited number of times but discussed Ideological values of Chinese govt more in the session. It is possible that since they were talking mainly in terms of ideological values that helped them to create a central based design philosophy. This central based design philosophy stemmed also from my intervention again in the session(Source). Due to lack of time, I had requested the participants to do two things:

● Frame a central design philosophy using Human flourishing and adapt to the culture
How do you address designer values and cultural values in a project

● This happened because of mainly lack of time during session and due to lack of decision making as they were stuck between choosing designer values or cultural ones.

This greatly helped them and decided on framing a central design philosophy and modifying it for the cultural context and made a decision on respecting the other culture without compromising on their own design values. They started to talk about how the format of design philosophy could be. Is it a list like 10 commandments (source)? Something that they can keep inside their head like a motto. Another reference to motto(from Day 0 in sensitising material, source) was made. This source acted as a reference. An example by one of the participants was "Aim high and Enjoy of little things". The team decided on having a one sentence design philosophy, like a punchline and needed to be strong. There were other formats also being discussed like podcasts where you talk to yourself, or a diary. However, they stuck to a textual format. There could be a couple of reasons for this:

● The sensitising material had provided design philosophies as examples which could have biased the designers into sticking to texts

● The time frame of having to develop a design philosophy in 30min. There might have been too less a time for exploration

They mentioned in the end that they would like to have something that can be put on a wall. And they couldnt think of a better way to express other than a text. Visuals could be misleading. This needs to be seen if its the same with the participants in second co-developing session.
The framing of textual design philosophy started to take shape. They said "Basic human needs and human flourishment need to be protected whenever we go to a different situation and not hurt their understanding of the same thing". They started to choose words and content of the design philosophy and wanted to make them with as simple words as possible that had the right meaning for the team. The content of the design philosophy was filled with designer values and basic values. Like "Should we use balanced? Open minded? Embrace?"
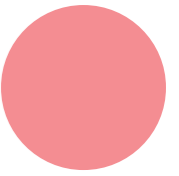
It would be useful for designers if the toolkit provided a reminder on what design philosophy should do. So it has to act as a guiding principle for the rest of the project. It doesn't have to be related to only the final design but something in terms of thought, practice or behaviour so that they can gauge their progress based on these principles.

The content of the design philosophy also included the future responsibility on the consequences created by the designer's design. This was a reference from Vision in Product design process. Time (in terms of future) as a separate theme is still unclear. It can also be a part of designer value or as a part of source. As a designer value: future implications of design; as a source: from the future where values are derived as a responsibility; or as a separate theme: Time

Also about taking a stand as a designer, one participant: "Taking a stand with your values.... If you take a stand, you bring your values to the game. But if you dont take a stand, it could be against you". Another participant went on to say "You are not neutral when you are designing". One of the questions posed by a participant was" Should the design philosophy be general or specific?" Again this was a difficult question to answer. However, having a design philosophy rooted to the context, culture and design values would be ideal but not mandatory as these participants were developing a general design philosophy and later modifying to the context. However, this did not happen in the session due to lack of time. But there were some questions posed. They were discussing that basic human needs is still human needs irrespective of the context but the value and the practice could be different in different context. The needs and culture are different but needs depends on the culture. This is more of values and practices. "A monk may not need a cushion, he might be happier with a cloth (we cannot force a cushion in this context) and be careful to not to impose or be insensitive to the local culture".
Their final design philosophy they developed is as follows :

Design promotes conditions in which basic human needs are met, and human flourishing is stimulated. Designers should take a stand on the future implications of their designs. Taking responsibility for the direct and indirect consequences.

F. Concept 1 (The Card Set): Inspiration, ideation and design

F.1 Inspiration and Ideation

From the toolkit interventions and requirements, it was seen that the process and the content needed to be designed with a lot of details. The Inspiration came from quite a few design toolkits that were available in the market.
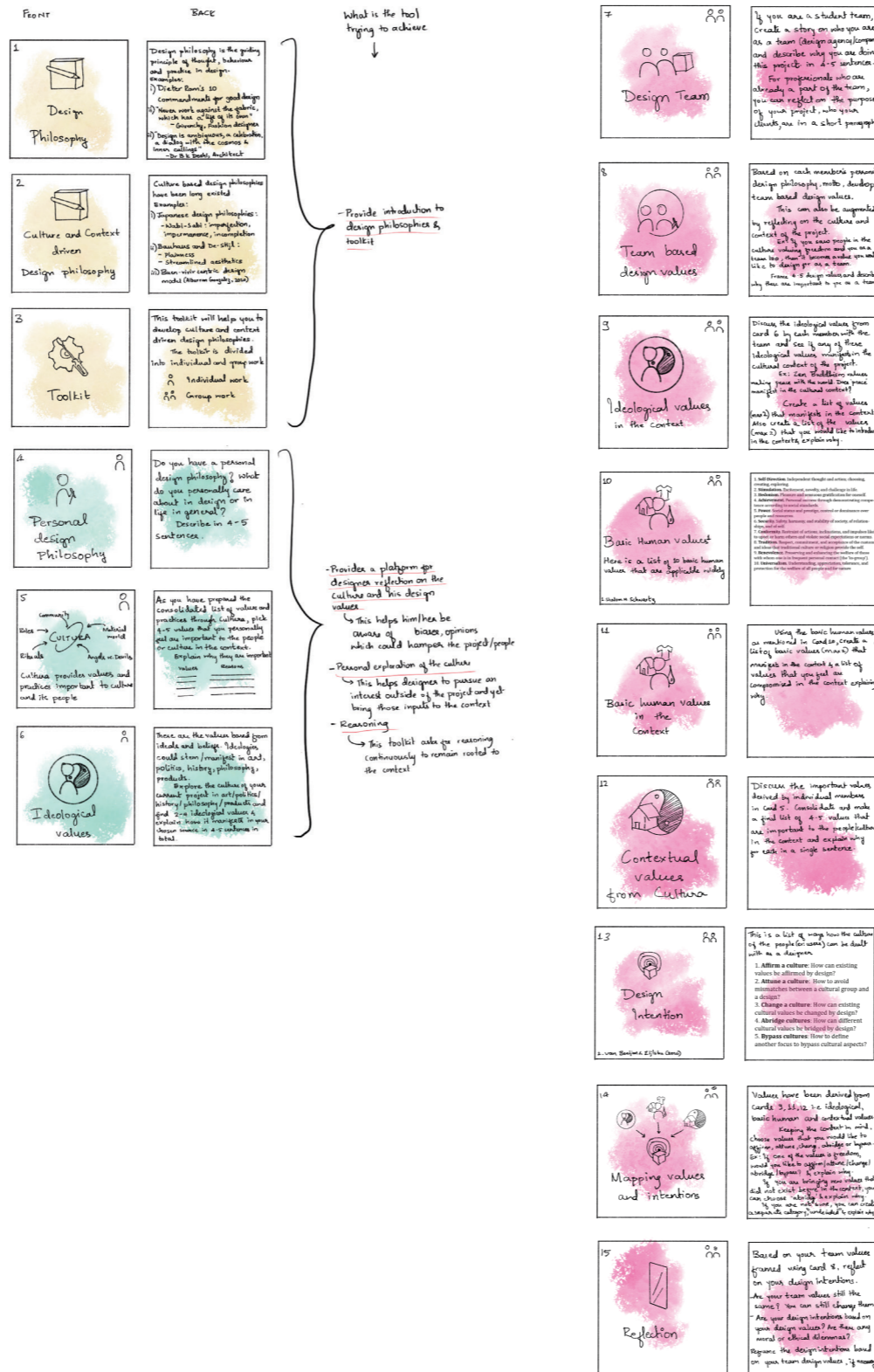

Fig F.1 : The design toolkit travel pack from Ideo.org
Source:
https://www.kickstarter.com/projects/581125890/design-kit-travel-pack

Fig F.2 : The design toolkit travel pack from Ideo.org
Source: Designercise: A Creative Thinking Game and Ideation Toolkit by Leyla Acaroglu — Kickstarter

It was decided at first that it was right to test the process developed in the toolkit and not worry about the form factor of the toolkit for this first stage of the concept. Hence all the effort went on to developing the content for the toolkit. On another note, The initial idea of having cards made sense as most design toolkits are in the form of cards which are quite simple and easy to handle. The following idea tells the tale of how the Card Set came to be

Fig F.3: Ideation for 'The Card Set' concept. This was based on the toolkit requirements and interventions.

F.2 Steps for developing Design Philosophy and Analysis

The following cards propose the flow of the process of developing the design philosophy. As explained earlier, only cards are used for the purpose of brevity and simplicity for this concept. Along with this the analysis of the testing is also included

Legend:

As it happened in the session	Improvements required for the next iteration

1. Personal Design Philosophy

2. Cultura

3. Ideological Values through exploration

The two participants did not have time to explore. But they were pretty much engaged in the conversation during testing. One participant was able to look up regarding Poems in the Chinese culture

There is potentila for exploration of culture in different fields according to their liking

4. Design Team

5. Team based Design Values

- Confusion b/w student team and professional
- Values developed in Card 4 not from Card 5,1
- Do not know what value is
- Combined cards 4 and 5
- Going for '4 values per person and connecting which is common and apply to the context"

- Need to explain what value is
- Need to make things more explicit and delineate
- Need to make the language simpler
- Combine these two cards

6. Ideological Values in the Context

- Considered values in the whole of China as Ideological values
- Extracting Ideological Values from Cultura
- Confusion regarding values to be newly introduced (exp: from cultural source)
- What comes under ideological values or just any value?
- Reasons missing 'Why transparency?'
- Rooted to the context

- Need to name the card in the description
- Need to ask for reflection from designers
- Incorporate values from other sources and cultures?
- Rename Ideological values?
- Explain more of Ideological values and provide examples of ideological values
- Ask questions about other perspective

7. Basic Human Values[1]

8. Basic Human Values in the context

- Rooted to the context
- Went through every basic value and checked if manifested in context
- Did not understand Compromise => values that do not exist in the context

- Need to explain clearly and succinctly
- Is compromise required? Or the values that do not exist
- Need to ask them to record their responses (how's and why's)

9. Contextual Values from Cultura

- Felt redundant
- Seem to get lost in the cards 'Are we in card 8 or 9?'
- Wanted to combine all the values so far discussed => In the next cards realised they did not have to.

- Ask for something other than what is already talked about in earlier cards
- Need to make the three (ideological, basic, contextual) combined?
- More efficiency with agility and clarity

10. Design Intention[1]

11. Mapping values and Design Intentions

- Good discussions
- Rooted to the context
- What is meant by bypassing a culture?

- Could require more reflections while deciding; Effects?
- Need to understand what Bypass means
- Need to ask them to record reasoning
- One value: One design intention

12. Reflection

- Good reflections
- The questions helped greatly
- Added new values to Team design values

- Need to incorporate questions than statements in other cards
- Include dilemmas?

13. Framing Design Philosophy

14. Design Philosophy from Design Intentions

- Rooted to the context
- Forgot the reasons "Why transparency?"
- The toolkit description and examples worked perfectly.

- Design brief was not used in the entire process and needs to be seen if design brief could have had an impact with the process.
- Use Cultura for reference

15. Design Philosophy from 'undecided' intentions

- The participants did not make use of this card as they did not have any 'Undecided' intentions

- This will still be used in the next iteration and later decide if this still requires.

G. Concept 2 (The Board Set): Inspiration and Ideation.

There were many positives from the Card Set and many improvements required. This resulted in further ideation from various sources of inspiration such as Pinterest, Dribbble and other existing board games.
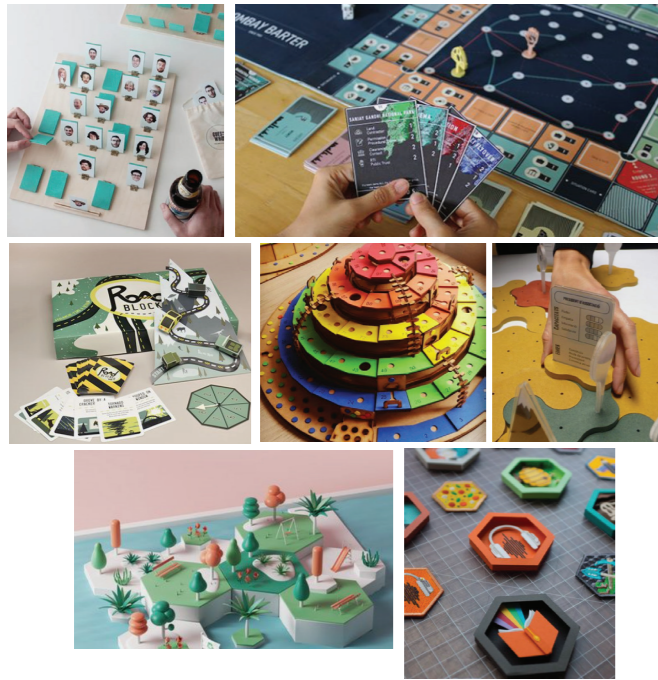

Fig G.1: The inspirations for the next set of ideations for 'The Board Set'

The ideation which followed the same language of a board and materials which complemented the board such as instruction booklet were included. The ideas were generated keeping in mind what the designers can do using the toolkit, the components that can assist the designers in using the toolkit and the process being much more refined.

Fig G.2: Ideas generated for the Board set from the inspirations above.
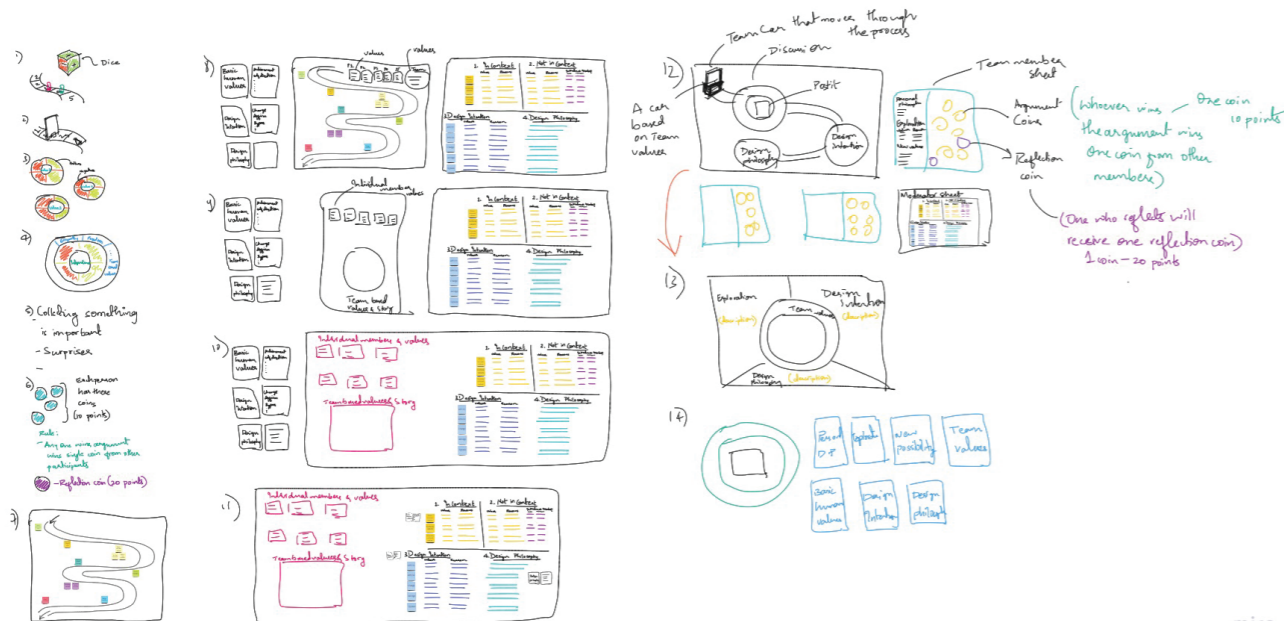
H. The final design of the toolkit

The final design of 'The Block Set' is explained below.

Step 2. Exploration of Culture
During this step, individual designers would explore the culture beyond the context. As most designers do want to explore different cultures this is an opportunity for them to explore any parts of culture and bring the same to the project. This is uncommon as designers always limit themselves only to the context many times because of feasibility issues (time, resources etc). Here the designers need to note down key values and reflect on their findings
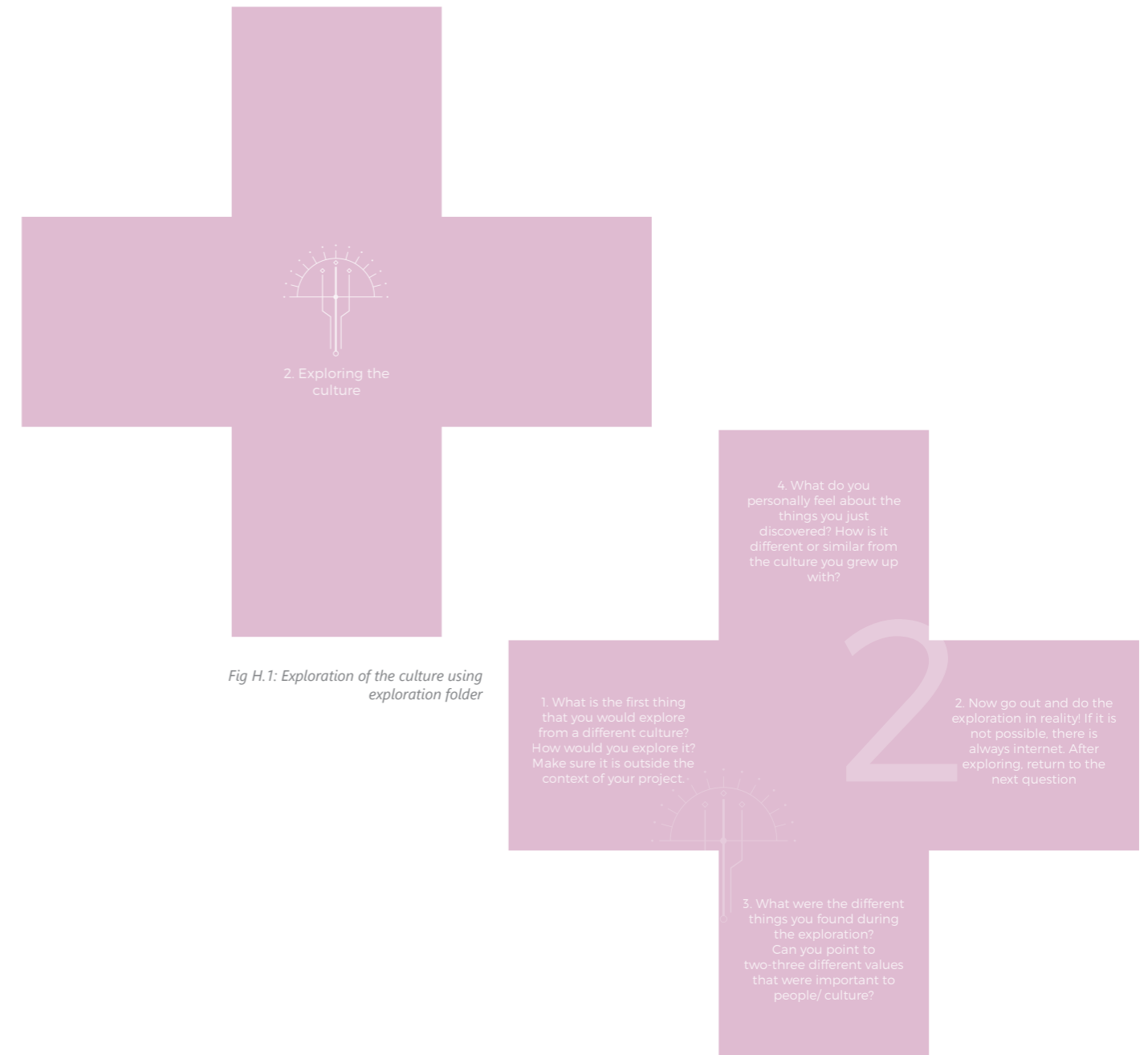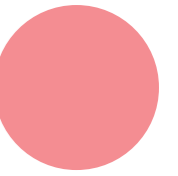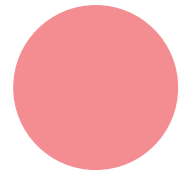

Fig H.1: Exploration of the culture using exploration folder

Step 3. Discovering new possibilities

Here it is all about discovering new possibilities. This is not to be confused with ideation. Designers will try to introduce new values and reflect on its consequences. The task of 'reflection' was again taken from the sensitising material of the co-developing session. And the introduction of new values was taken from the testing of the Card set where the participants were eager to introduce new values from different cultures into the context.
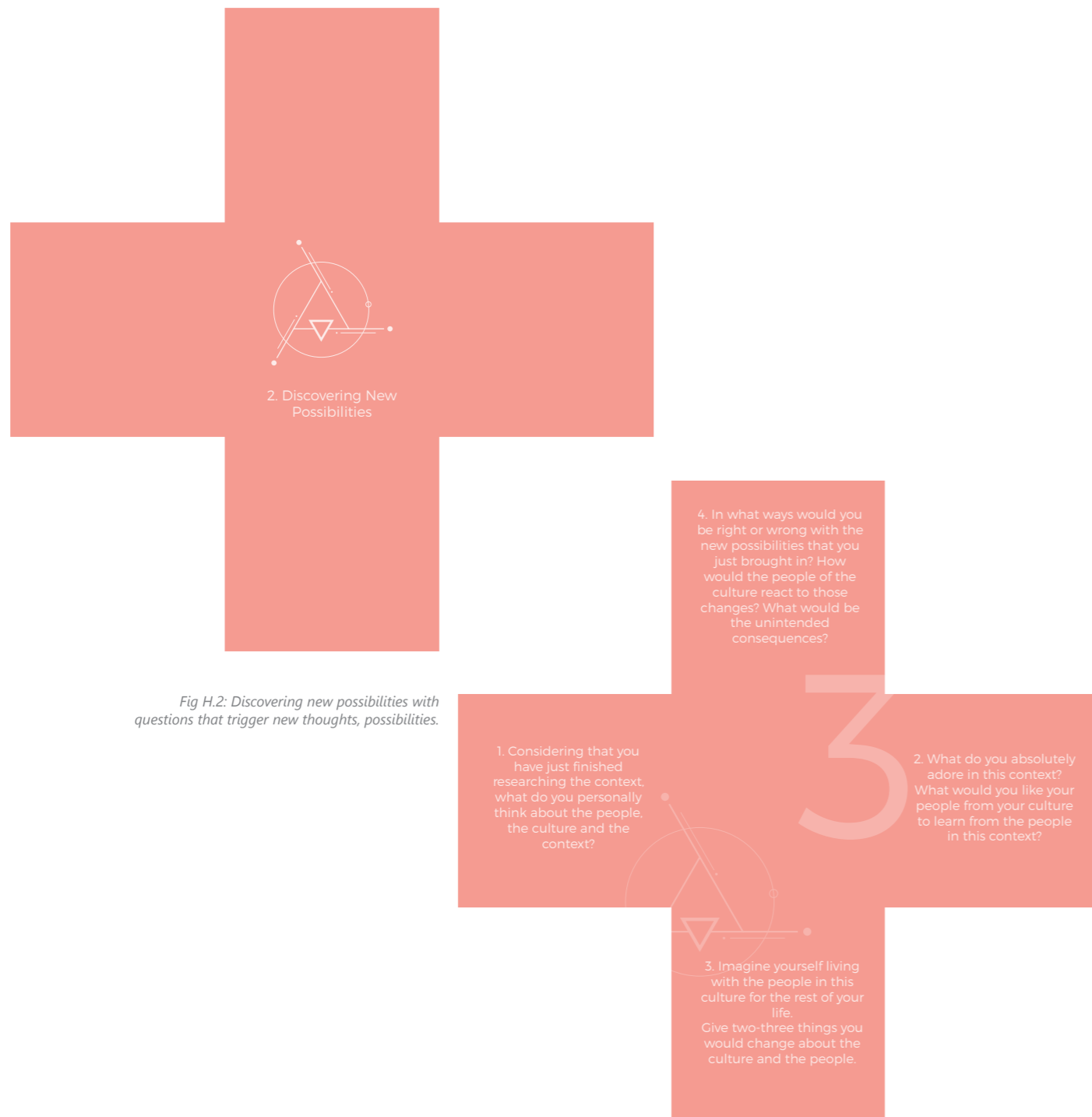

2. Discovering New Possibilities

Fig H.2: Discovering new possibilities with questions that trigger new thoughts, possibilities.

4. In what ways would you be right or wrong with the new possibilities that you just brought in? How would the people of the culture react to those changes? What would be the unintended consequences?

1. Considering that you have just finished researching the context, what do you personally think about the people, the culture and the context?

2. What do you absolutely adore in this context? What would you like your people from your culture to learn from the people in this context?

3. Imagine yourself living with the people in this culture for the rest of your life. Give two-three things you would change about the culture and the people.

Step 4. Team Values

Here the designers come together as a team and formulate their team design values. They would frame their design values based on the personal explorations of design philosophy. As the target group for this toolkit is designers as students or professionals in design agencies or companies, designers are normally in the form of teams. Many times different projects would have different teams. This requires for members to get together and frame who they are and what their values are in the current project. This step aids the team in formulating the team values. Now what forms a good design team and who would be ideal members are explained in *Section 6.2.3* as a part of recommendation.

The bottom right of the instructions as shown below asks the team to flip all the blocks in the same way. This way all the blocks next reveal the 'Reflection' side. This is further explained in the 'Reflection' as a separate topic in Step 9.

Fig H.3: The instructions for creating team values

WHAT
Explore the design values of the team

WHY:
In order to have everyone in your team on the same page, you need to create design values as a team. These are the values you stand for in this current project.

TASK:
1) Each one of you, talk about your explorations in the Personal design philosophy(Step 1) with other team members. Get to know each other on your mottos and philosophies.
2) Talk to each other about how you feel about the culture of the people in your current project

RESPONSE SHEET:
Note down 4-5 values of the team in your project and explain why they are important to you in simple sentences

Team Values

Now turn all blocks right side up
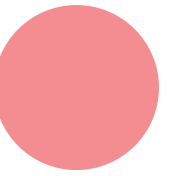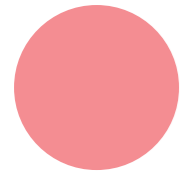
Step 5. Basic Human Values

As explained in section 4.2 Toolkit intervention, the basic human values play a major role in assessing different values which are universal in nature. Here the list of values are stated and instructed for the designers to check on their manifestations within the context. This gives the opportunity for designers to view the project through this lens first as this list encompasses much of the values. Again the instructions asks to flip in the end in order for the designers to reflect on the current decisions.

Step 6. New Lens

In this step the team would discuss their individual explorations in steps 2 and 3 (exploration of culture and discovering new possibilities). This is where the designers try to look for manifestations of values explored in the culture beyond the context, in the context. There is also the introduction of new values into the context as they would have explored in 'discovering new possibilities' step. This step will entail a lot of discussion on what could be introduced into the context and what not with clear arguments and counterarguments. Here it is imperative that designers not talk about values already discussed under Basic Human Values and go for the ones that haven't been discussed yet. The next step is to undergo the same reflection as done in previous steps.

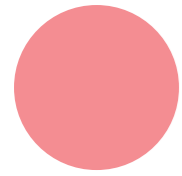*Fig H.4: The instructions for basic human values*

Self-Direction: Independent thought and action

Stimulation: Excitement, novelty, and challenge in life.

Hedonism: Pleasure and sensuous gratification for oneself

Achievement: Personal success through demonstrating competence according to social standards.

Power: Social status and prestige, control or dominance over people and resources.

Security: Safety, harmony, and stability of society, of relationships, and of self.

Conformity: Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms.

Tradition: Respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide the self.

Benevolence: Preserving and enhancing the welfare of those with whom one is in frequent personal contact (the 'in-group')

Universalism: Understanding, appreciation, tolerance, and protection for the welfare of all people and for nature.

WHAT
Exploring the manifestation of basic human values in the context

WHY
Basic Human Values are the most accepted and manifested values globally for people. It is important to see how these values are manifested or compromised in the context

TASK
1) There might be multiple values manifesting in the context. You can choose just two from the list and discuss with the team why this is so
2) There might be some values which could have been compromised, completely missing or not appreciated by the people in the context. Search and select two and discuss why this is so.
3) Going a little deeper, designers are always inquisitive. You might be wondering what would happen if you introduced some values which were missing/ compromised into the context. Select two values and discuss why you would like to introduce them into the context. Bear in mind the consequences and think critically.

RESPONSE SHEET
Note down two values for each of the above three tasks in the response sheet explaining with reasons

Now turn all blocks right side up

Fig H.5: The instructions for New Lens for designers to follow

WHAT
Exploring the manifestation of cultural values and new possible values from Steps 2 and 3 in the context.

WHY
Cultural exploration from Step 2 and Discovering new possibilities in Step 3 would have helped you in understanding the culture outside of the context as much as possible. Next, applying these explorations in the context helps in understanding the culture and context in different ways and envisioning different possibilities.

TASK
1) From the results of Step 2, each one of you explain and discuss what you explored from other parts of the culture and collectively see how these manifest or not in the context. After discussing, select two values in total.
2) From the results of Step 3, each one of you explain and discuss what you would like to change in the context and select two as a team explaining why you would like to change/introduce into the context.

NOTE
Please be aware of the consequences and bear in mind that many of the values could have been discussed in Basic Human Values section. Please omit those and select only the ones that do not appear under Basic human values.

RESPONSE SHEET
Note down two values that maifests in the context and how they manifest in the context. Also note down two values that you would like to introduce/change and explain why.
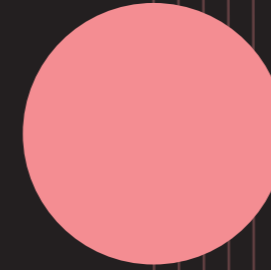
Now turn all blocks right side up

Step 7. Design Intention

Using Annemiek's Design intention for culture as the basis, the instructions are framed for designers to map the values gathered so far with the design intentions. As culture is a huge system, designers can offer to have intentions only in values of the culture but not for the whole culture itself. Hence in this step, the design team checks on its intentions with every value with deep discussions because what is decided here could change the way how the project progresses and eventually how the culture behaves.

Fig H.6: The instructions for Design Intentions

Affirm a culture
Affirming or maintaining the cultural values

Attune a culture
Avoiding mismatches between the different values (cultural, design etc)

Change a culture
Changing existing cultural values

Abridge cultures
Bringing new values into the culture

Bypass cultures
Circumventing existing cultural values

Undecided
If you are undecided on what can be done with the cultural values

WHAT
Deciding on your intentions on the cultural values based on your design values

WHY
As designers you are in the forefront of changing the world, it is important to know and discuss your intentions in regard to the culture.

TASK
1) Keeping the context in mind, discuss as a team on your intention designers for every value recorded so far making sure you have concrete reasons to do so. For example: If one of the values is 'freedom', you would like to affirm(maintain) it in the context because the people express it explicitly while having bath.

If you are bringing new values into the context that did not exist before, you can choose 'abridge' as the design intention and explain in a single sentence why you would like to bring new values and what would be the effect you want to achieve.

If you are not sure about your intent because you have conflicting views or may be you would not like to take a decision now, you can add another category 'Undecided' to the design intention and place those values there.

RESPONSE SHEET
Note down your intentions and decide on one intention per value and be critical on your reasoning.

Design Intention

Now turn all blocks bottom side up

Developing Context and Culture driven Design Philosophies

Sambhram Changavi Shivaprasad
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