

# P / REFERENCES OF DESIGN

## SITUATED KNOWLEDGES: VISUAL REPRESENTATION IN SOCIAL DESIGN EDUCATION.

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**ABSTRACT** | As a concept, situatedness has been influencing various disciplines, yet its potential in the practice and education of design in general and social design particularly has yet to be fully articulated. In this article, we will present a visual model of situatedness in social design education and practice meant to facilitate the communication of situated knowledges between various design partners. We do so through two main venues: first, from the student's point of view, we use our model to instigate and trigger a process of self-reflection and personal definition, on individual and professional levels. Conversely, this tool can help students in the classroom find suitable partners to work with for the duration of the course (either complimentary or similar potential partners). Second, from the teacher's point of view, we use our model for several goals: mapping the students in the classroom according to various attributes; managing the progress of the class in general, according to personal efficiencies; and using the mapping to generate richer and more diverse outcomes at the end of the course. We will also delve into the advantages of developing this type of knowledge through visual representation tools, triggered through visual communication and service design theory and practice. Finally, this approach will highly benefit designers embedded in working with communities through strategies of participatory design, due to its dialogue nature.

## 1. Introduction

“Every experience is a moving force. Its value can be judged only on the ground of what it moves toward and into.” (Dewey, 1997[1938]:38)

In the beginning, there was survival. In its early stages, design was focused on the primary mission of helping in the survival of individuals and communities through material objects. As surroundings and conditions changed, so did design shifted and evolved offering better solutions and influencing the ways we interacted with the world. The Industrial Revolution introduced deeply rooted changes that influenced not only the ways consumers interacted with designed products but also the ways designers influenced our daily lives. Mass production called for the annihilation of local differences and a direct connection of the craftsman with their designed products, in favour of short-term profit (Heskett, 2016). Building on this overpowering capitalistic approach, the second half of the twentieth century added another dimension of marketing-oriented design to differentiate between competing manufacturers, vying for the consumers' attention.

However, since the late 1980s, socially-oriented design approaches surfaced, opting for a more ethical and people-centred practice. Instead of fighting for ever-growing consumption, social designers (although perhaps, not defining themselves as such) started tackling the “wicked problems of design” (Buchanan, 1992). These were identified as broad, deeply-rooted and global challenges that designers traditionally ignored either due to their professional irrelevance, or due to their seemingly insurmountable difficulties.

Due to the complex and varied nature of design practice, designers need a complimentary expansive body of knowledge. Famously noted by design thinkers and researchers (Simon, 1996; Cross, 2023, among others), this knowledge is situated between science, art and craft and between the humanities and social sciences. Famously, designers specialising in social design tackle “wicked problems”, which not only lack a decisive or single solution but involve various points of view and a broad understanding of changing scenarios and situations. As a discipline (theoretical and practical) that presents a worldview rather than a specified subject matter, the knowledge designers need is even more complicated to define:

“This is the creative or inventive activity that Herbert Simon has in mind when he speaks of design as the science of the artificial. What he means is ‘devising artifacts to attain goals’ or, more broadly, ‘doctrine about the design process’. In this sense, Simon’s Science of the Artificial is perhaps closer to what Dewey means by technology as a systematic discipline of experimental thinking.” (Buchanan, 1992)

Alluding to both Simon and Dewey is extremely relevant to contemporary design education due to both the complex nature of design as a practice, and more so when dealing with social design education and working in a crisis-laden reality. Following this stream of thought, Suchman (2002) called on designers to acknowledge both the situated nature of our practice, as well as the intricate layers of this knowledge vis-a-vis working with and for communities. Naturally, this is even more relevant and important when working in the spheres of social and participatory design, in practice, as well as in education. Suchman continued to highlight two perceptions of designers' role in knowledge production. First, designers must pay attention and be aware of their own situated knowledge, values and rooted ideas they bring to each project (or to use another term, the so-called researchers' bias). This premise also holds significant political and sometimes critical aspects, as Haraway observed. Second, designers need to pay attention and highlight their positioned knowledge vis-a-vis other stakeholders in each project. Thus, their own set of values and attitudes need to be considered when presented with other, sometimes conflicting worldviews of community members, local government workers and other stakeholders.

Famously, Suchman (1987) juxtaposes planned action and situated action, meaning that the latter is more relevant to designers who work in ever-changing and complex environments than the former. Conversely, she (ibid: 188) defines situated action as “actions taken in the context of particular, concrete

circumstances [...] the circumstances of our actions are never fully anticipated and are continuously changing around us... situated actions are essentially ad hoc [...] local interactions with our environment, more or less informed by reference to an abstract representation of situations and of actions.” Conversely, Lave and Wenger (1991: 32-3) lament the extensive and somewhat over-used nature of the concept, claiming that “on some occasions ‘situated’ seemed to mean merely that some of people’s thoughts and actions were located in space and time. On other occasions, it seemed to mean that thought and action were social [...] or that they were immediately dependent for meaning on the social setting that occasioned them.” They add to Suchman’s important account the concept of “situated processes”, which allows for the integration of improvisation and bricolage as practices suitable for innovation in complex scenarios, which defines every act of design. While all these are true and have at least a layer of relevance to our research, we start our interpretation of situated practice in a political-critical stance, echoing the complex situation designers and educators find themselves in between students/novices, community members and other stakeholders in a social design setting. We can surmise then, that every practice of design, and especially so in social design, is an act of communication and an act of interpretation or translation. As in Clifford Geertz’s classic depiction of interviewing as a double act of translation (from their mouth, through our understanding and then into a research-oriented depiction of their narrative), the fluid and complex flow of the design process passes through the various stakeholders, navigated by the designer, aiming for a clear narrative that considers every stakeholder relevant to the project. This process is even more important when applying participatory design practices in a social context. Indeed, as is the case in situated knowledge, design is also temporal in that its understanding, interpretation and movement towards a proposed solution changes continuously as it faces an unknown future. Returning to the classroom adds another layer of temporality since we aim to educate professionals who would influence the discipline in the short and long timeframes.

## 2. Situatedness and Social Design Education

“Feminist objectivity means quite simply situated knowledges [...] Situated knowledges are about communities, not about isolated individuals. The only way to find a larger vision is to be somewhere in particular. The science question in feminism is about objectivity as positioned rationality.” (Haraway, 1988: 581, 590)

Relevant as ever, Haraway identified the need for situated knowledges, a need further heightened when dealing with social design. Not only is this knowledge necessarily situated, but the designer’s values, as well as the socio-cultural context of the community to whom they design, affect the design process and its outcome. As previously mentioned, design differs from other bodies of knowledge. As in anthropology, design is unique in its relative lack of specific subject matter in favour of broader worldviews or work methods. In other words, design is not about “what” but rather “how”. However, when adding design theory to the mixture, and when focusing on social design we add other layers of “why” and “who” (or rather “with whom” or “for whom”). Contrary to other classic design venues, social design revolves around several key layers that are crucial in our focus. First, social design is heavily dependent on collaborative work (co- and participatory design); second, social design is very much dependent on a specified socio-cultural context, of both the designer and the design partners. As previously mentioned, Suchman (in Ciborra, 2005: 10) defines a situation as “being the full range of resources that the actor has available to convey the significance of his or her action and to interpret the actions of others. Concern for the situation denotes the material and social circumstances of every course of action”. This definition is important in our context since it involves the resources available to the designer, an active act of interpreting others’ actions, and finally setting a creative act into motion.

When reflecting on the fluid meaning of ‘situated’ knowledge in action’, Gherardi (2008) offers several dimensions:

- Situated in the **body** - somatic materiality, gender-oriented design and general aspects of collaboration and ergonomics are all situated in the body.
- Situated in the **dynamics of interactions** - in social design, as in other broader venues of the discipline, communication is key, not only between the design partners but also with non-human partners (technological systems, environmental entities and more).
- Situated in **language** - ‘discursive practices’ are key in social design, as each design partner and stakeholder communicate with different discourse systems. Thus, when working with community members, the designer translates their knowledge and undergoes another stage of translation when communicating with other design partners.

These three dimensions are extremely important when conducting social design projects since the intricacies of a given socio-cultural context are embedded in somatic knowledge, interactions and used language frames. Rohlfig et al. (2003) propose looking at situatedness as a dialogue between context and situation. They continue to say that “a situation consists of the spatiotemporal ordering of objects and agents alongside physically given constraints or characteristics like gravitational force or light intensity [...] in our view, situatedness refers to special situations in which actions take place.” Indeed, this elaboration is interesting in our context for two main reasons. First, situatedness is a combination of space and time, as both influence it and second, it is a trigger for action, which is crucial in design as a practice. Moreover, the concept of context is rich and elaborate as well, including broad socio-cultural venues, such as language and narrower venues, such as local knowledge and norms. The importance of context, then, lies in the multitude of agents and stakeholders involved in social design projects, conducting multiple levels of interactions between themselves, and their individual situations.

Stoner and Cennamo (2018) describe situated learning as “learning theory and a model of instruction that focuses on learning through authentic learning environments in which students can immerse themselves in an academic domain and participate in authentic tasks.” Indeed, when embedding situatedness approaches in higher education and pedagogy we can address situated learning, which can be viewed as learning through authentic learning environments. Social, cultural and later on ecological and ideological context will render learned knowledge relevant for students on all learning levels. Therefore, understanding social practices, real-life technological knowledge, as well as the cultural essence of language is critical for the acquisition of knowledge. However, as Contu and Willmott (2003: 283) suggest, we should “focus not just upon cultural and organisational artefacts, but upon the embeddedness of learning practices in power relations, rather than the cognitive contents of individuals' minds”. As learning in general is located or situated within everyday practices, when dealing with design the issue is even more pertinent. Therefore, we can agree that “learning is conceived as an integral part of generative social practice in the lived-in world” (Lave and Wenger, 1991).

Moreover, design education is further unique in its ability and necessity to integrate situated knowledge aimed at various efficiencies. Aside from linking theory and practice, these situated knowledges are also stemming from a dialogue between ‘knowing’ and ‘doing’, in that design is based on understanding through dialogue and communication, but it is also judged by its ability to influence the visual materiality of our reality. Gherardi (2008: 519) traces the roots of this assertion to 1960s ethnomethodology and its ability to offer “understanding of how individuals successfully use indexical behaviours and expressions whose meanings are constantly negotiated and renegotiated in the course of interaction. One meaning of ‘situated’ regarding practices is that their performance depends on how indexicality is locally resolved.” Two other important traits of situated action, according to Gherardi, are reflexivity and accountability, which are a crucial element both in PD (participatory design) and social design education.

Situated knowledges in social design is especially important when practising it through the lens of participatory design. Focusing on values, various social groups, and often also political issues, the socio-cultural dimension of design practice becomes even more pronounced. Agid (2016: 81) describes this important connection between PD and situated knowledge:

“Here, I propose that a focus on designers’ positions, and how we make the relationships through which infrastructuring takes place, helpfully complicates what is at stake in both building and engaging with various infrastructures. This includes learning to design together with others through collective engagement in the work itself. Additionally, I suggest that how we understand, contextualize, and articulate the aims of acting on infrastructures, especially those with uneven material consequences for people living with them, is critically important to what it means to do infrastructuring in different contexts, and with whom. How we infrastructure is a political concern for PD that includes both the structural and systemic contexts of that work and the people and relationships with and through which it happens.”

Agid (ibid: 81, 87) continues to define infrastructures as “systems that are made up of continually renewing, complex socio-material relationships that form, inform, and shape their parameters and ways of working [...] infrastructuring helps to hold complex intersections between people, groups, technologies, systems, and ideologies in view as one means of seeing how they might work in and for designing”. While differing from classic industrial design, these definitions illustrate a majority of design practices and fall well between the parameters of contemporary design education. In social design, practitioners and educators navigate and bridge between various worlds of situated knowledges (the designer’s, technological attributes, and the community’s, among others), thus rendering the importance of mapping and grounding these various micro-worlds.

The combination of situatedness approaches in the classroom and participatory design values led us to develop a visual model as a reflection medium for all relevant design partners. Aside from it being more intuitive for designers, we surmised that complex issues are best presented in a simplified manner, specifically when working with partners from differing areas of knowledge and understanding.

### 3. Visual Situatedness in the Classroom

The last few years presented various complex challenges (wicked problems if you will) to higher education in general and design educators in particular. Ranging from communication issues stemming from the COVID-19 pandemic, through wars and political strife, as well as coping with immigration flows, ever-growing social exclusion and segregation and more. These complex challenges echo the necessity to reframe and redefine the role of design educators in society. As these changes bring our personal beliefs, core values and priorities to the surface, they influence our professional sphere as well. They also demand a departure from traditional linear educational models towards a deeper integration of diverse modes of knowledge production throughout the design process.

Considering the classroom as a complex system composed of teachers, students, and design partners can deepen our understanding of the intricacies and power dynamics within the social systems where the educational, professional and personal intersect. To support this shift in perception, there is an emerging need for new tools in design education. These tools should be capable of visualising and comprehending the complexities of individuals, social groups, and communities, particularly in light of their often-conflicting interests, assumptions, and backgrounds. In response to this need, we propose the 'Situatedness Model' - a visual representation of situatedness in social design education. This model aims to represent both individual and collective situatednesses within the learning and designing processes. Our objective is to design tools (in line with Buchanan's concept of 'devising artifacts') that will cultivate a design approach that is sensitive to the diverse needs, perspectives, and knowledges in the classroom while seeking to foster a more inclusive, empathetic, and pluralistic perspective in social design education.



### 3.1 Developing the ‘Situatenedness Model’

Mapping knowledge through visualisations is essentially a way of envisioning, interpreting, and spreading information. Tufte (1990) describes this process as a way of creating a multidimensional model of different worlds to better understand them. The primary value of visualisations is their ability to transform discrete sets of implicit knowledge into an explicit set of relational knowledge quickly and directly. Typically, designers tend to start using visualisations in an early phase of the design process. In this phase, visualisations are used either as tools for translating raw data into insights or as a way of communicating insights (Segelström, 2009). Yee (2012) categorises the use of visualisations in design into three purposes: “for reflection and exploration, as an analysis and knowledge generation tool and as a communication, facilitation and discussion tool”.

Indeed, reflection is a central activity in various creative practices. It is often viewed as a cognitive process that allows designers to develop new insights into their design, generate alternative solutions, reframe the design problem (Kinsella, 2007), as well as create a steppingstone for future projects. Reflection is also considered a form of design-embedded knowledge gained through practical experience which influences the creation of assumptions, methodologies, and decision-making. Schön & Wiggins characterise design activity as a “conversation with the materials” (Schön & Wiggins, 1992) associating the act of seeing with sense-making, sudden discoveries, and learning from the present situation. These activities are collectively referred to as “reflection-in-action” (Schön, 1983). In the classroom, as we shall see, reflection is doubly important, as both a professional way of navigating through the project, as well as an educational venue for self-understanding and situating one’s work in a broader community.

Using visualisations for analysis and knowledge generation represents a multifaceted approach; while words and numbers primarily cater to logical and sequential processing, visual representations engage the brain's capacity for quickly and intuitively perceiving patterns, relationships, and abstract concepts. This approach, which engages both analytical and visual-spatial intelligences, enhances comprehension, memory retention, and the ability to identify trends in data sets. This is extremely important vis-a-vis two key attributes of design practice - its temporal nature, previously discussed, and its tendency to work through iterative creativity, rather than linear reasoning. Creating visualisations from research material allows the integration of the material's heterogeneity into design decisions. In this context, visualisations are akin to what Geertz (1973) famously described as “thick descriptions”: the research phase focuses on (re)framing and understanding, necessitating clear articulation of assumptions and features, as noted by Segelström and Holmlid (2009). Thus, visualisations allow for interpretation and translation processes, necessary when shifting through various bodies of knowledge, typical to design practice.

Designers commonly use visualisations for communication and discussion, both within their teams and with external design partners or stakeholders, common in social or participatory design projects (Segelström, 2009). Visualisation of research materials facilitates designers in externalising their 'sensemaking' (Krippendorff, 1989), thereby fostering a shared understanding of the research insights. Yee (2012) describes the dual nature of visualisation in research, emphasising its role as a tool for internal cognitive processing by researchers and a medium for external communication and engagement with a broader audience. This dual functionality highlights the critical importance of visualisations in both the exploration and dissemination phases of design research (ibid).

The ‘Situatenedness Model’ draws inspiration from visualisation methods commonly used in service and systemic design practices. These fields are highly visual, due to the intangible nature of services and systems, and the diverse types of data involved in their conception and construction (Diana et al., 2009). Research on service design visualisations spans both academic and professional literature. Segelström (2009) characterises the use of visualisations in service design for three main communication goals, each differentiated by the intended audience: articulating insights (“communication within the design team”), maintaining empathy (“communication with one’s memory”), and communicating insights (“communication with stakeholders outside the design team”). Segelström & Holmlid (2009) suggest that

the visualisation techniques proposed by designers are not merely tools for mapping and describing the existing situation, but rather aid in interpretation and understanding. The choice of visualisation character (the “how”) helps to keep empathy with the user throughout the design process, particularly when engaging with different stakeholders who might not be familiar with the users’ perspectives. Diana and colleagues (2009) classify the types of representations according to a matrix with two dimensions: iconicity (ranging from abstract to realistic) and time (synchronic versus diachronic).

Common and popular visualisation methods are widely and almost universally used to enhance empathy with users by visualising their experiences, including the potential of different interactions and choices. In this category, we find tools such as personas (Pruitt & Grudin, 2003), cultural probes (Gaver et al., 1999), design documentaries (Raijmakers et al., 2006), mood boards, empathy maps (Xplane, n.d.), and user journey mapping (Parker & Heapy, 2006). Later adaptations have led to different techniques that represent the irreducible complexity of service organisations and make them more tangible, such as service ecology maps (Polaine et al., 2013). The web resources *Service Design Tools* (Tassi, 2009) and *This is Service Design Doing* (Stickdorn et al., n.d) serve as practical, open resources for presenting the most common and popular tools. Akama (2012) cautions against the oversimplification in visualisations sometimes found in service design, as they often lack the representation of complex and messy realities and the contextual knowledge grounded in action. She argues that service design methods should “never be severed from their complex human and situational contexts. Design that is generalised, sanitised, and exported out of its applied contexts loses its power and agency for potential interventions and transformations.”

As designers increasingly address complex and wicked problems, they are adopting new visualisation methods originally developed in systemic design (Besplemnova and Tassi, 2018), to convey complex ideas and solutions. Recent developments in systemic design emphasise generative and transformative values (Jones, 2014), stemming from the understanding that dynamic systems require equally dynamic tools for representation. Notable examples of these methods include Giga-Mapping (Sevaldson, 2011), Synthesis Maps (Jones & Bowes, 2017), Enhanced Service Design Tools (Tassi, n.d.), and Design Journeys Through Complex Systems (Jones and Van Ael, 2022). These tools prove valuable in highlighting intricate relationships and interactions among various actors, as well as the diverse ways they exchange values.

Building upon the foundation laid by a variety of visualisation methods in service and systemic design, our focus now shifts to social design education, specifically through the lens of situatedness. The ‘Situatedness Model’ draws inspiration from tools such as those found in the Enhanced Service Design Tools and aims to integrate the unique perspectives and experiences of teachers, students, and the community or design partners. It seeks to encompass the complex interplay of actors and values in socially oriented projects. In doing so, this approach extends the conversation beyond professional practices and into the educational domain, thereby enriching the learning process with a deeper understanding of real-world complexities. In this context, student situatedness emerges as a critical component of social design pedagogy, offering a more holistic and embodied educational experience that reflects the multifaceted nature of social design challenges.

### 3.2 Designing the ‘Situatedness Model’

In the following section, we outline our interpretation of the ‘Situatedness Model’ in social design education, describing and illustrating its key principles and stages. We identify three correlating and entangled layers: the designer-educator’s situatedness (who is both a practitioner and educator), and their own set of values, personal identity, and professional preferences. The student’s, in turn, profess their own educational, professional and personal attributes as well as societal identities and expectations. Lastly, the community with whom we work in these projects, manifests their own identities, desired outcomes, and socio-cultural context and relations. Some facets of the model are shared across the three spheres and others are unique to each one.



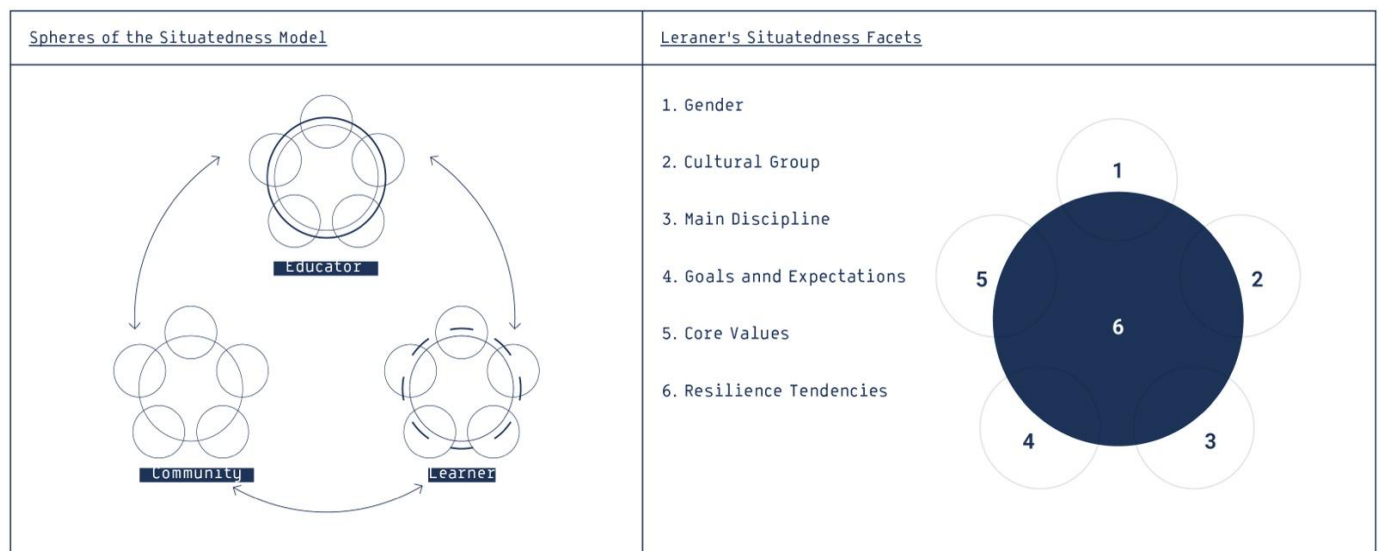


Figure 1. The three spheres of the Situatedness Model and the student's facet groups.

We based the design of the model on the geometric shape of a circle aiming to convey the continuity and relationality of the different attributes of situatedness to one another, as well as its a-hierarchical nature. We wanted to design a type of visualisation that serves as a symbolic representation of the interconnectedness of different perspectives and knowledges within individual and collective situatednesses. Our goal is to translate what is mostly perceived as abstract information within a class setting into visual representations that can be easily and meaningfully understood. We will demonstrate the different parts of the model by delving into the student's facet groups and attributes. This part of the model aims to describe the components that make up the student's situatedness at the beginning of a social design project. It does so by acknowledging the different facets that contribute to the knowledge, experience and expectations of each student. By doing so it places the design and learning processes in both the wider socio-cultural environment as well as the controlled design environment in which the project takes place.

Five outer circles represent the facet groups which are picked by the educator at the beginning of the course, in the current example - gender, cultural group, disciplinary background, goals and expectations, and core values. These may vary depending on the context of the course, student's background and project at hand. The inner circle represents resilience tendencies - it is the only constant facet. Each facet is categorized by a few attributes, and some may visually overlap.

The first three situatedness facets represent the student's background:

- **Gender:** Gender norms, roles and relations are powerful determinants of the health, social and economic well-being of individuals and communities around the world, as well as a central layer of our identity. In social design education, recognizing the student's gender perspectives can be pivotal; it can aid in integrating gender-based knowledge into the core of the design process, thereby facilitating the development of services and experiences that are more gender-aware and sensitive. In addition, when working with local communities, their perception of gender according to each socio-cultural context will dictate a different dialogue with the design team.
- **Cultural Group:** Typically, students' cultural backgrounds are not explicitly addressed in social design projects, with students more often integrating their cultural identities into personal or artistic briefs. By actively introducing cultural backgrounds into social design education, a more nuanced and context-sensitive understanding of design can be

fostered. This approach not only accommodates the specificities of different contexts but also helps in embracing diverse cultural identities and knowledge systems in design decisions. As social design deals in many cases with social justice, ethics and political issues, this is key to better defining the desired outcomes in each project. This aligns with Noel and colleagues' (2023) concept of a pluriversal design, where they advocate for a design environment where “multiple worldviews thrive and diverse lived experiences inform the entire field, as well as individual projects”.

- **Main Discipline:** The complex nature of social design projects often requires collaborative and interdisciplinary work. Understanding each class member's disciplinary background can enhance the diversity of professional competencies within groups. Additionally, aligning students' design competencies with the specific needs of various projects can optimise project outcomes and learning experiences. The most advantageous aspect of social design is that it relies on cross-disciplinary skills, both inside the discipline (visual communication, urban design, inclusive design, service design and more), as well as outside its classic boundaries (social psychology, design anthropology and more).

The next two facets in the model are future-oriented and dedicated to the student's development goals through the upcoming project:

- **Goals and Expectations:** This facet draws on Richard Buchanan's four 'orders' of design, which categorise the outcomes of a design process on a scale from simple to complex: (1) symbolic and visual communications, (2) artefacts and material objects, (3) activities and organised services, and (4) complex systems and environments (Buchanan, 1992). This categorization encourages students to contextualise their current project within a chosen order as a strategic approach to their creative intervention.
- **Core Values:** We offer another name for social design - value-oriented design - to signify the importance of core values in socially-oriented projects from the project's starting point. We incorporate five values in the model: commercial, participatory, glocal (focusing on combining the global and the local), ecological, and critical/speculative. Students are encouraged to select one or more values to infuse into their project.

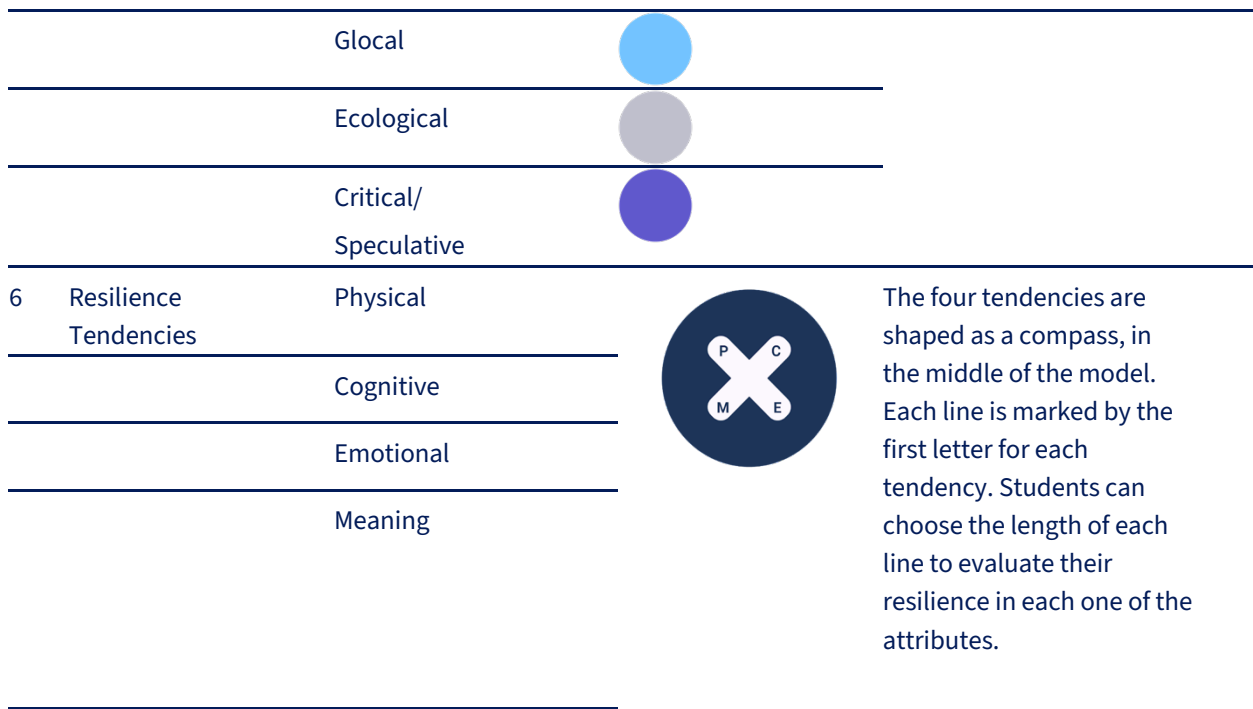
Mapping these values within the class serves dual purposes: to aid teachers in forming groups based on shared values, and to balance project expectations within each group.

The sixth facet in our model is **Resilience Tendencies**, placed at its core. The concept of resilience comes from the physical sciences, where it describes the ability of a system to create shapes, resist pressures, withstand challenges and return to its original form after a disturbance (Annarelli & Nonino, 2016). Resilience is manifested in times of change and crisis situations, denoting the capacity to remain in motion and to cope effectively. It is important to recognize that resilience is a dynamic and evolving attribute and can be strengthened through practice. In our 'Situatdness Model', we evaluate resilience, drawing on McGonigal (2015), within a holistic framework that encompasses four dimensions: physical, cognitive, emotional, and meaning-related tendencies.

We chose a visual code to highlight each of the facet groups in the model. Each facet varies by its colour, texture and size, as explained in Table 1:

Table 1. Visual Legend of the 'Situatdness Model'.

| # | Facet                  | Attributes       | Visual Language                                                                     | Possible Interactions                                                                                |
|---|------------------------|------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 1 | Gender                 | Male             |    | One option.                                                                                          |
|   |                        | Female           |    |                                                                                                      |
|   |                        | Non-binary       |    |                                                                                                      |
|   |                        | Fluid            |    |                                                                                                      |
| 2 | Cultural Background    | Atheist          |    | Students can change the size of the circle to mark their positionality between religious to secular. |
|   |                        | Jewish           |    |                                                                                                      |
|   |                        | Muslim           |    |                                                                                                      |
|   |                        | Christian        |    |                                                                                                      |
|   |                        | Undefined        |   |                                                                                                      |
| 3 | Main Discipline        | Visual           |  | Students were asked to choose one option.                                                            |
|   |                        | Product          |  |                                                                                                      |
|   |                        | Digital          |  |                                                                                                      |
|   |                        | Fashion          |  |                                                                                                      |
|   |                        | Other            |  |                                                                                                      |
|   |                        | Multi            |  |                                                                                                      |
| 4 | Goals and Expectations | Sign and Symbols |  | Students were asked to choose one option.                                                            |
|   |                        | Products         |  |                                                                                                      |
|   |                        | Services         |  |                                                                                                      |
|   |                        | Systems          |  |                                                                                                      |
| 5 | Core Values            | Commercial       |  | Students can choose a few values and arrange them by the degree of influence.                        |
|   |                        | Participatory    |  |                                                                                                      |



We used the MIRO collaborative online platform for the individual situatedness mapping activity of the model. This platform was selected for its user-friendly and collaborative features. On the MIRO board, a designated canvas (or 'frame') was provided for each student to construct their model. The board also includes an explanation of the model and a sample for reference. Following the mapping activity, students are required to complete a questionnaire to provide feedback for future iterations of the model. In some cases, this activity was supplemented with a group discussion to gather oral responses.

**Introduction**

Use the situatedness attributes to help identify your situatedness regarding this project and build you personal SIT map.

**SITUATEDNESS STRUCTURE: LEARNERS**



**Example 1:**

DANIELLA JOHN, Learner  
Name of course

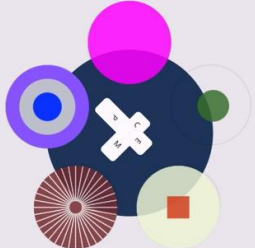


Figure 2. Details of the Miro board from the final project course (BDes) – HAC.

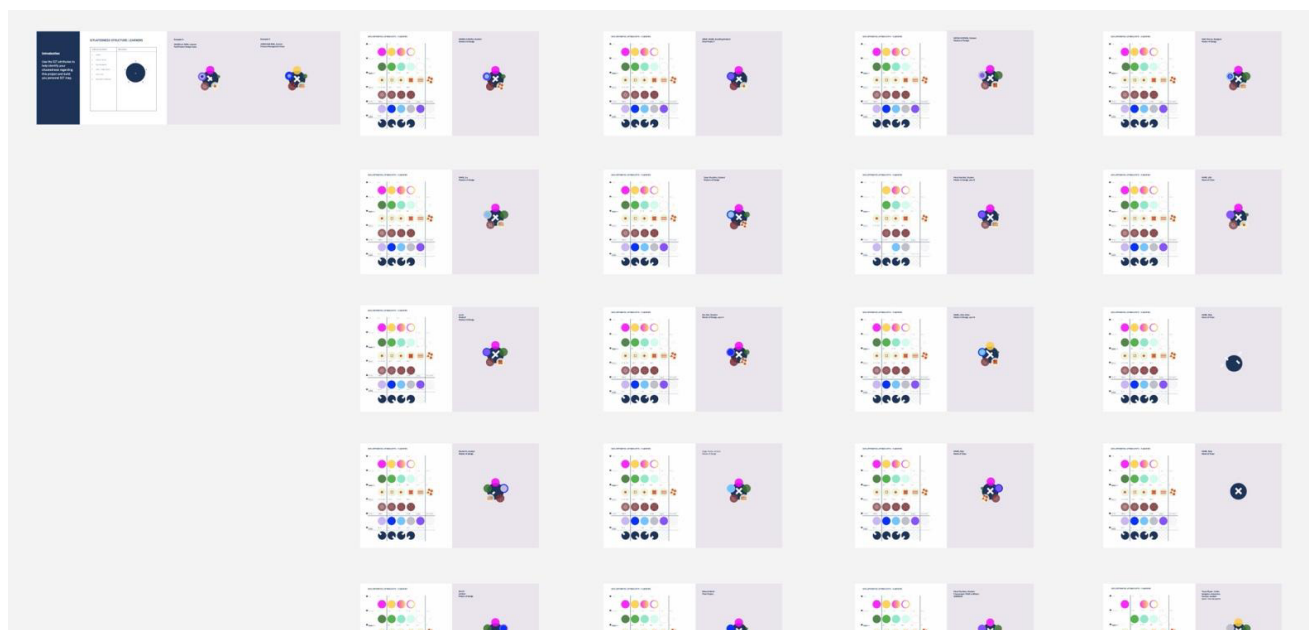


Figure 3. Details of the Miro board from the final project course (Mdes) – Shenkar.

The offered model is designed to work at two different levels. The first level focuses on the student's point of view - we use our model to instigate and trigger a process of self-reflection and personal definition, on personal and professional levels through a visual and conceptual model. Moreover, when introduced before choosing teams for a project the tool can help students in the classroom identify suitable partners to work with for the duration of the course (either complimentary or similar potential partners). The underpinning assumption is that there is an appreciation of expressed understanding through the visual model that triggers learning. Mapping, in this activity, serves as a platform for dialogue and reflection. This conversational approach plays a pivotal methodological role in enabling us to raise questions and address challenges that arise in the learning process. The second level focuses on the teacher's point of view - we use the model for mapping the students in the classroom according to various attributes; managing the progress of the class in general, according to personal efficiencies; and using the mapping to generate richer and more diverse outcomes at the end of the course.

### To summarise the process of using the model we identify 6 main stages:

1. Identify the Individual situatedness of educators, students and community representatives, and highlight possible trigger points.
2. Harness empathy towards co-design and participatory design strategies.
3. Create a common denominator situatedness view for the collaborative project, defining boundaries and expectations.
4. Evaluate the design situation through sharing knowledge and applying co-design and participatory design strategies.
5. Define the type of design intervention needed, through innovation, improvement or non-design.
6. Choose the best possible outcomes that reflect the accumulated situatedness of the specific group, in this specific place and time.

As this is not a linear process, the last step is reflecting on possible changes in the actors' situatedness.

### 3.3 Teaching with the ‘Situatenedness Model’

The first iteration of the model was held during a Health Design Lab course in the spring semester of 2023 at Shenkar, Israel. The second iteration was done within four design courses between December 2023 and January 2024 as represented in Table 2.

Table 2. Summary of Case Studies.

| #                  | 1                                         | 2                                                     | 3              | 4                                     | 5                                      |
|--------------------|-------------------------------------------|-------------------------------------------------------|----------------|---------------------------------------|----------------------------------------|
| Date               | May 2023                                  | January 2024                                          | January 2024   | December 2023 / January 2024          | January 2024                           |
| Location           | Israel                                    | Israel                                                | Israel         | Germany                               | Israel                                 |
| Program            | B.Des, Cross-Disciplinary Studies Shenkar | B.Des, The Department of Visual Communication Shenkar | M.Des, Shenkar | MA Transformation Design, TH Augsburg | B.Des, Inclusive Design, HAC Jerusalem |
| Number of students | 12                                        | 19                                                    | 20             | 15                                    | 30                                     |

## 4. Interpretation and Conclusions

Visualising processes and interpretative knowledge through design is hardly a new concept. Immerging sub-disciplines of service design and visual communication use methods such as data visualisation to imbue raw data with emotions and create a deeper experience. However, we believe that visualising individual and communal situated knowledges will help designers and design teachers in facing present and upcoming wicked problems, especially when working on social design projects. Shifting perspectives and converging bodies of knowledge fall within an interesting change we have witnessed lately in design education. While the history of design education far surpasses the scope of this article, it has been widely accepted in the last several decades that the design teacher deals with the dissemination of knowledge or instruction of pedagogic processes. These approaches, rooted in traditional modernist paradigms, often portray the designer as a solitary master who analyses the design challenge from afar. This perspective neglects the potential benefits of synergizing conflicting worldviews of various stakeholders from the outset of design briefs and as a central aspect of the educational environment. The absence of tools in design education for visualising and comprehending the complexities of individuals, especially when considering their often-conflicting interests, assumptions, and backgrounds, profoundly affects how students are prepared to become future practitioners.

As we have seen throughout this article, the growing awareness of designers in the ever-growing sphere of wicked problems led to reframing the very role of designers in their communities and society in general. As such, designers in social design deal primarily with reframing value-oriented design to create change and tackle these wicked problems. Therefore, as teachers, the emphasis should be on educating—not merely instructing—future practitioners to expand their potential for deep and much-needed change in design practice. Further expanding this sphere of education needs a deeply rooted socio-cultural context stemming from understanding our values and those of our students, colleagues and communities. The core idea is that designers, when attuned to situational factors within groups, can foster a collective sense of situatedness, thereby cultivating a synergistic design language that is reflective of these factors. This approach is expected to enrich dialogues, encourage the exchange of ideas, and, hopefully, lead to



outcomes that reflect the diverse backgrounds of their creators. Furthermore, as new technologies such as social networks and generative AI, stimulating at first glance and frightening at a second glance, influence our work in ways not entirely comprehensible yet, the need for particular knowledge, sharing and meaningful dialogues is becoming more pressing. Both could be achieved through tools such as the model presented here.

Moreover, the temporal nature of design, i.e., meaning that designers are situated in the present, rooted in their past but designing for an uncertain future, holds immense implications for the use of our model in social design projects. As the future becomes more uncertain and crises are ever-growing and expanding, the necessity of a clear value-based system of professional guidance will become a must for individual designers and design educators even more so. In addition, the ability to navigate these obstacles and conflicts through dialogue techniques would be aided by such visual tools.

Finally, as we expand the possibilities of this model through empirical data (questionnaires, visual content analysis and observations) we wish to stress we are not offering a finalised one-stop-shop for use on the go. Rather, we offer a first stage for a new way of starting a project and facing the new faces of a fresh classroom. Furthermore, this is a part of a broader view of the history of design (see, Gal and Ventura, 2023) and our agenda towards the role of design and the designer in society and the upcoming future. We believe that designers are not problem-solvers, nor are they 'educated carpenters', but rather highly-professionals, multi-faceted mediators and visual-material interpreters of practical ideas (see [www.socialdesignnetwork.org](http://www.socialdesignnetwork.org)). As such, we hope this model will help us better understand our complex present to better face the uncertain future.

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