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Social Design in Action A co-regenerative model for complex social systems

The case study of gender-based violence

Raquel Oliveira Lima



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Social Design in Action
A co-regenerative model for complex social systems –
The case study of gender-based violence

Disseny Social en Acció
Un model co-regeneratiu per a sistemes socials complexos –
Estudi de cas de la violència de gènere.

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Abstract

Complex societal transformations require multi-level participation and decision-making, transforming design into a more interventionist discipline. Social Design is proposed as a powerful driver of change, leveraging its adaptability and inclusivity to reimagine social structures, improve human well-being, and advance sustainable development on both local and global scales. It emphasises collaborative approaches and the participation of stakeholders in specific subjects. On the other hand, Design tends to follow a capitalistic formulation, which can accentuate individuality over collective capacity. Expanding Social Design interventions in different contexts and issues can help elevate a collective consciousness among design specialists and highlight its role as a strategic partner for global transition. This leads to the central question: ***How can Social Design help transition from an individualistic to a collective responsibility model, generating transformations, and empowering networks (through the case against domestic violence)?*** The present work aims to explore the systemic approach of Social Design addressing a specific topic of domestic violence, this issue being a complex structural problem with a lack of design intervention and potential intersection with multiple aspects of social life, particularly affecting women. ***It aims to develop a social design model capable of activating, supporting and orienting social dynamics based on a collective responsibility approach, through a case study with civil society players working on preventing gender-based violence in Portugal.*** The participatory nature of Social Design, combined with a system-oriented design approach, has the potential to foster a collective method that addresses diverse needs, cultures, visions, and skills. This creates an opportunity to develop an epistemology that aligns the potential of Social Design with a systematic and responsible model of intervention.

The results highlighted a siloed mindset that diminishes our ability to effectively tackle complex societal issues. On the other hand, it shows the prevalent role of design as an accountability enabler, critical conscious provocateur and relational tool that unites different backgrounds, raises awareness among the individual capacity to propel change and the power of transforming reality, like a dance that we can orchestrate. It is crucial to focus on genuine embodiment and perspective to enable transformative change from within—shifting from individualistic to collective world visions. A collective practice that can make individuals see and feel empowered to recognise change as attainable, relevant, and an everyday responsibility.

Key words: Social design; Complex theory; Systems thinking; Domestic violence; Participatory design

Resumen

Las transformaciones sociales complejas requieren participación y toma de decisiones multinivel, transformando el diseño en una disciplina más intervencionista. El Diseño Social se propone como un poderoso impulsor del cambio, aprovechando su adaptabilidad e inclusividad para reimaginar las estructuras sociales, mejorar el bienestar humano y promover el desarrollo sostenible tanto a escala local como global. Enfatiza los enfoques colaborativos y la participación de las partes interesadas en temas específicos. Por otro lado, el Diseño tiende a seguir una formulación capitalista, que puede acentuar la individualidad por encima de la capacidad colectiva. Expandir las intervenciones del Diseño Social a diferentes contextos y problemáticas puede ayudar a elevar la conciencia colectiva entre los especialistas en diseño y destacar su rol como socio estratégico para la transición global. Esto nos lleva a la pregunta central: ¿Cómo puede el Diseño Social contribuir a la transición de un modelo de responsabilidad individualista a uno colectivo, generando transformaciones y empoderando redes (a través de la lucha contra la violencia doméstica)? El presente trabajo busca explorar el enfoque sistémico del Diseño Social al abordar la violencia doméstica, un problema estructural complejo con escasa intervención de diseño y con potencial intersección con múltiples aspectos de la vida social, que afecta particularmente a las mujeres. Su objetivo es desarrollar un modelo de diseño social capaz de activar, apoyar y orientar dinámicas sociales basadas en un enfoque de responsabilidad colectiva, a través de un estudio de caso con actores de la sociedad civil que trabajan en la prevención de la violencia de género en Portugal. La naturaleza participativa del Diseño Social, combinada con un enfoque de diseño sistémico, tiene el potencial de fomentar un método colectivo que aborde diversas necesidades, culturas, visiones y habilidades. Esto crea una oportunidad para desarrollar una epistemología que alinee el potencial del Diseño Social con un modelo de intervención sistemático y responsable.

Los resultados destacaron una mentalidad compartimentada que disminuye nuestra capacidad para abordar eficazmente problemas sociales complejos. Por otro lado, muestran el papel preponderante del diseño como facilitador de la rendición de cuentas, provocador consciente y crítico, y herramienta relacional que une diferentes trasfondos, sensibiliza sobre la capacidad individual para impulsar el cambio y el poder de transformar la realidad, como una danza que podemos orquestar. Se evidenció la importancia crucial de centrarse en la encarnación y la perspectiva genuinas para posibilitar un cambio transformador desde dentro, pasando de visiones del mundo individualistas a visiones colectivas. Una práctica colectiva que puede hacer que las personas vean y se sientan empoderadas para reconocer el cambio como alcanzable, relevante y una responsabilidad diaria.

Palabras clave: Diseño social; Teoría compleja; Pensamiento sistémico; Violencia doméstica; Diseño participativo

Resum

Les transformacions socials complexes requereixen participació i presa de decisions multinivell, transformant el disseny en una disciplina més intervencionista. Com a resultat, el Disseny Social es proposa com un poderós impulsor del canvi, aprofitant la seva adaptabilitat i inclusivitat per reimaginar les estructures socials, millorar el benestar humà i promoure el desenvolupament sostenible tant a escala local com global. Emfatitza els enfocaments col·laboratius i la participació de les parts interessades en temes específics. D'altra banda, el Disseny tendeix a seguir una formulació capitalista que pot accentuar la individualitat per sobre de la capacitat col·lectiva. Expandir les intervencions del Disseny Social a diferents contextos i problemàtiques pot ajudar a elevar la consciència col·lectiva entre els especialistes en disseny i destacar-ne el rol com a soci estratègic per a la transició global. Això ens porta a la pregunta central: Com pot contribuir el Disseny Social a la transició d'un model de responsabilitat individualista a un col·lectiu, generant transformacions i empoderant xarxes (a través de la lluita contra la violència domèstica)? Aquest treball cerca explorar l'enfocament sistèmic del Disseny Social en abordar la violència domèstica, un problema estructural complex amb escassa intervenció de disseny i amb potencial intersecció amb múltiples aspectes de la vida social, que afecta particularment les dones. El seu objectiu és desenvolupar un model de disseny social capaç d'activar, donar suport i orientar dinàmiques socials basades en un enfocament de responsabilitat col·lectiva, mitjançant un estudi de cas amb actors de la societat civil que treballen en la prevenció de la violència de gènere a Portugal. La naturalesa participativa del Disseny Social, combinada amb un enfocament de disseny sistèmic, té el potencial de fomentar un mètode col·lectiu que abordi diverses necessitats, cultures, visions i habilitats. Això crea una oportunitat per desenvolupar una epistemologia que alinei el potencial del Disseny Social amb un model d'intervenció sistemàtic i responsable.

Els resultats van destacar una mentalitat compartimentada que disminueix la nostra capacitat per abordar eficaçment problemes socials complexos. D'altra banda, mostren el paper preponderant del disseny com a facilitador de la rendició de comptes, provocador conscient i crític, i eina relacional que uneix diferents rerefons, sensibilitza sobre la capacitat individual per impulsar el canvi i el poder de transformar la realitat, com una dansa que podem orquestrar. Es va evidenciar la importància crucial de centrar-se en l'encarnació i la perspectiva genuïnes per possibilitar un canvi transformador des de dins, passant de visions del món individualistes a visions col·lectives. Una pràctica col·lectiva que pot fer que les persones vegin i se sentin empoderades per reconèixer el canvi com a assolible, rellevant i una responsabilitat diària.

Paraules clau: Disseny social; Teoria complexa; Pensament sistèmic; Violència domèstica; Disseny participatiu

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Introduction

Introduction

Situating the study

The growing complexity of contemporary societal issues requires a significant transformation in design interventions. As challenges continue to evolve, there is a pressing demand for innovative and critical methodologies that effectively engage a range of stakeholders. This shift underscores the necessity of interdisciplinary collaboration and the integration of diverse perspectives, creating comprehensive solutions. By focusing on the interactions among different actors, design interventions can promote more adaptive and responsive strategies that address the multifaceted nature of modern problems. Therefore, a reevaluation of traditional design practices is vital to cultivate a more inclusive and effective approach to problem-solving in our interconnected world.

The impacts of contemporary phenomena have fundamentally transformed design into a more interventionist discipline. This evolution has not only prompted the emergence of new domains within the field but has also fostered a heightened sense of self-awareness and accountability among designers. As a result, practitioners are increasingly recognised as active agents in shaping societal outcomes, challenging traditional notions of their roles and responsibilities within the design process. This change highlights the need to incorporate ethical and social considerations into design practices to effectively tackle the complexities we face.

If all Design produces, affects human interaction, behaviour and presence on earth, it is certain that design responses possibly generate oppressive results. As Paulo Freire (1921-1997) defends, if something or someone oppresses, it suppresses the human capacity to thrive and the human ontological vocation of becoming more and developing further, making oppression a social relation that curtails this human nature. The necessity to find other ways to collectively act towards oppression and complexity will require multiple levels of consciousness, possible intervention and resilience to guarantee that collective intelligence is effectively applied to collective reasons.

To collectivise effectively, it is essential to recognise that our societal framework is underpinned by entrenched structures of patriarchy, which have historically delineated and segregated the spaces occupied by men and women within the collective. As both a product and a contributor to societal norms and cultural values, design is inherently influenced by these binary assumptions. Such assumptions often lead to the creation of solutions that not only reinforce existing gender inequalities but also perpetuate a male-dominated standard within various domains (Perez, 2020). It is crucial for contemporary discourse to challenge these frameworks and seek a

more equitable approach to design that genuinely reflects the diversity of human experiences, fostering inclusivity rather than exclusion.

Understanding that gender inequality intersects multiple areas of social life, from work to products and services, design has a huge responsibility in understanding and generating answers to tackle these issues. Nonetheless, acknowledging that leaving half of our society behind will hinder the capacity to fight the great fight against global collapse (Lima, 2024). The world urges for collective support for women's development, where multiple specialists from many areas must work in synergy to propel a transition from the current patriarchal system.

The concept of collectivism can only be fully realised when there is a shared consciousness, active participation, and a sense of responsibility among individuals. It is urgent to reflect on our individualistic social structures and new models to collectivise. Such a transformation is essential for nurturing individual capacities while enabling communal growth, particularly in addressing issues of gender inequality.

Numerous examples illustrate how collective action can instigate substantial societal change, drawing from various European and Anglocentric perspectives (Leitão, 2023). Moreover, contemporary discussions increasingly highlight the significance of indigenous wisdom, which emphasises collective responsibility and an interconnected worldview (Buckley, 2020; Escobar, 2016). This approach fosters a deeper understanding of social dynamics and encourages collaborative solutions to persistent societal challenges. By recognising our interconnectedness, we can cultivate a more equitable and inclusive society that values both individual and communal contributions, which can possibly enhance the path to Sustainable Development Goals (SDGs).

The role of Social Design in the advancement of Sustainable Development Goals has garnered significant attention within academic and practice-oriented discourses. Notably, Social Design emerges as a collaborative framework capable of fostering innovative solutions while activating cross-sectoral dynamics essential for addressing multifaceted social challenges (Manzini, 2017). Within this context, it is essential to highlight that systemic interventions in design represent a relatively nascent concept. However, the integration of systemic thinking into design methodologies and artefacts has experienced a notable increase in applications over the past five years (Midgley & Lindhult, 2021).

Research conducted by Chamberlain et al. (2020) illustrates the efficacy of iterative participatory design processes in mobilising community networks, thereby enhancing collective efficacy in addressing local issues. This participatory approach aligns with the findings of Dickinson et al. (2013) and Huysman and Wulf (2004), who argue that leveraging social capital through collaborative strategies not only fosters environmental stewardship but also facilitates shared

problem-solving mechanisms among diverse stakeholders. Additionally, the application of these systems-oriented frameworks in social contexts is demonstrated in several studies. For example, ÖZ (2020) applies a collaborative design approach with stakeholder mapping to address local production challenges in Kapıdağ, Turkey. This case study illustrates how systems-oriented design can be applied to specific social and economic contexts.

Furthermore, the works of Costa Junior et al. (2019) and Irwin (2018) underscore the importance of integrating whole systems and Transition Design methodologies. These frameworks serve to connect interventions across varied local contexts, legal frameworks, and global ecosystems, thereby promoting a holistic understanding of sustainable practices. The convergence of these perspectives affirms that the application of systemic thinking within Social Design not only enriches the discourse surrounding sustainability but also enhances the potential for impactful interventions across diverse sectors.

Within the Sustainable Development Goals, gender inequality serves as a critical intersection influencing and being influenced by various other objectives (Sachs et al., 2019). It is essential to adopt a holistic perspective that recognises the systemic and dynamic interactions among these issues. Understanding how gender equality intersects with other SDGs reveals the potential for significant ripple effects; actions taken to promote gender equality can catalyse positive changes across multiple domains.

The exploration of the Social Design role in activating pathways toward collective wisdom can be effectively illuminated by employing an empirical approach through a case study, in one of the most relevant aspects of gender inequalities, gender-based violence (GBV). This central and prevalent aspect of social life prevents most women from thriving in life. EIGE estimates that the costs of gender-based violence across the EU can reach €366 billion a year (European Institute for Gender Equality, 2021). Domestic violence is responsible for causing women to lose their jobs or give up on professional advancement, affecting productivity as a personal impact on nations. It is considered one of the epidemics of our century, as it makes people with less access to resources and responses even more vulnerable, increasing the costs of health services, justice and the entire legal and criminal system. It is also responsible for an incalculable psychological impact not only on victims but also on their children, reflecting 56% of the costs of governmental intervention (European Institute for Gender Equality, 2021).

Advancements in laws and policies have not been sufficient to eliminate cultural norms and social behaviours. The challenges in changing cultural patterns and transforming this paradigm directly impact our ability to address the underlying issues related to these norms (Shils, 1984). Additionally, the mechanisms to support and prevent domestic violence are siloed-minded,

managed by institutional interests and financially poorly served. Most groups of social support working in an integrated way run their networks independently with partners' donations of time, physical resources, and information. The system that was created to generate answers to domestic violence experiences a lack of synergy and more dynamic solutions to tackle the phenomenon in a systemic way (Lisboa & Pasinato, 2018).

In complex social problems, governmental, private and civic involvement are essential to achieve structures and long-lasting changes. Social Design has a historic role as an articulator and strategic discipline for social change. Its tools and methodologies drive transformative change at both personal and organisational levels (Chen et al., 2016; Manzini, 2017; van der Bijl-Brouwer, 2017). Hence, Social Design finds fertile land to contribute to social transformation by using its creative and innovative capacity to transform people into social agents, promoting community empowerment and equity (Ceschin & Gaziulusoy, 2020); Christakis, 1998; Cipolla, 2018; Metcalf, 2014). Its participatory approach serves as a powerful and effective tool for engaging individuals in situations where collaboration and co-creation are essential (Deserti et al., 2018; Heller, 2018; Manzini & Jégou, 2008). Moreover, rather than having a problem-solver mindset, design is driven by context (Buchanan, 1995), and from this perspective, adaptive thinking and learning by doing enhance the need for resilience in tackling societal issues (Escobar, 2018; Manzini, 2015; Stroh, 2015).

There is no such problem-driven approach to dealing with complex social issues. However, the demand for a multitude of interventions and a profound acknowledgement of the root causes and dynamics around the problem requires a new design approach. The participatory nature of Social Design, combined with a system-oriented design approach, has the potential to foster a collective method that addresses diverse needs, cultures, visions, and skills. This creates an opportunity to develop an epistemology that aligns the potential of Social Design with a systematic and responsible model of intervention.

To activate a collective practice, it is necessary to confront what makes us a part of the power relations. Foucault says that discourse shapes society, which directly affects the design construction of a problem and solution-driven science (Foucault, 1982). The prevalent discourse of design as a socially oriented discipline, focused on the concrete results, in products, services and visual artefacts, can sometimes hinder the capacity to disturb and provoke transformations in deepest levels.

This study acts towards three main levels of deconstruction. The first confronts the centrality and problem-driven core of design by activating a reflexive, critical and interventive role for design, where Social Design can embrace multiple confluences of knowledge and opens space for answers

or results. As stated by Haraway (Haraway, 2016), we must embrace trouble, rather than identify problems and provide solutions. In order to do that, it is necessary to build critical foundations, starting from providing sense-making and contextualization on a deep level, questioning even the oppressive role of design.

Secondly, opposing the logic expected for approaching social issues that prioritise marginalised individuals or specific problems for resolution. This paper seeks to expand our understanding of Social Design by examining gender-based violence through an alternative lens. Rather than positioning victims solely as the subjects of analysis, we aim to investigate the broader network of actors involved in this social issue. The study creates space to explore the collective meaning of Social Design through a case study to explore a model for collective action towards a complex social system.

Drawing on Foucault's concepts of power and subjection, we recognise that the dynamics of domination and exploitation persist within societal structures (Foucault, 1982). Thus, our inquiry does not rest on the portrayal of female victims as the central 'objects' of research. Instead, it encourages a dialogue surrounding the various stakeholders who contribute to and influence the responses to domestic violence. By exploring these diverse dynamics, we can better understand how societal mechanisms not only perpetuate violence but also shape the frameworks within which responses are developed. This study, therefore, aims to illuminate the complexities of Social Design within the context of gender-based violence, offering a more nuanced perspective that transcends traditional narratives centred on victimhood.

We challenge this prevailing logic by probing the foundational structures of the system itself, thereby fostering spaces for potential interventions informed by a critical perspective. This endeavour represents a significant effort to decolonise the dominant methodologies and cognitive frameworks entrenched within both academia and design practice, while also acknowledging the valuable contributions made under a problem-driven approach that is inherent to the field of design.

Third, by advancing the role of Social Design through the utilisation of emancipatory tools, this study seeks to facilitate a critical engagement with existing power dynamics. It aims to provide instruments that enhance the visibility of marginalised voices within the system, interrogate and illuminate potential perpetuations of inequity, and stimulate innovative interventions and speculative scenarios for future possibilities.

Social problems reside in the need to change the way we see the world apart from the Cartesian mode. A systemic logic that can congregate multiple visions, or as Morin (2006) says, "It will be necessary, finally, to see if there is a way of thinking, or a method capable of responding to the challenge of complexity. It is not a question of resuming the ambition of simple thinking, which is

to control and dominate reality. It is a question of exercising a way of thinking capable of dealing with reality, of dialoguing and negotiating with it.” (p.6). Or, as the project identifies itself along the research journey as Disturb, to catch people’s attention and to invite them to rethink the status quo related to this object of study. It is necessary to cause some kind of disturbance and propose mechanisms to see, interact and embrace to enable negotiation with the problem.

In this sense, the theories on complexity and transdisciplinary thinking of Morin (2006) encourage us to rethink not only how we approach knowledge but also how we engage with the challenges of the modern world. Its anthology-ethical approach believes that individuals must be aware of their own limitations, and the complexity of the human experience can evidence individual and collective barriers to thriving. Further, it leads to an emphasis on ethics, where decisions are made with a consciousness of interdependence and responsibility towards others and the planet.

Morin’s (2006) ecology of action is always embedded within a web of relationships and can produce unpredictable effects. Therefore, understanding the impact of actions requires thinking about their systemic context. Additionally, the transdisciplinary focus of his work is essential to approach the Social Design role in societal change.

To embrace the multidisciplinary and exploratory nature of this research, an ethnographic approach is proposed to understand the current status of the problem and its context, which will be better explored in the methodology chapter. Moreover, inspired by Gioia (2013), a qualitative approach is conducted due to its capacity to obtain relevant insights and an exploratory form, where the narrative of data analysis can be enriched from a multitude of informants (Chandra & Shang, 2019).

By using an exploratory and qualitative approach, under the theoretical and empirical perspectives, this research intends to design future bases for understanding and creating tools for practice in Social Design using domestic violence as a case for complex social intervention. Believing in the human capacity to persevere in the face of adversity, Social Design stimulates new forms to address solutions for gender-based violence by understanding its complex systems, regenerating collective responsibility and creating new spaces for action.

Problem Framing

It is well known that the gender gap affects mostly women's access to health, education, political power, work development and much more. The structural nature of societal problems related to gender inequalities is rooted in social norms and mental models deep in our society (Inglehart et al., 2017). Nevertheless, cultural patterns and norms are central in the perpetuation of inequalities, contributing to societies continuing to have stereotypical behaviours and enhancing patriarchal structures.

To face societal complex issues whose root causes are in crystallised cultural structures, models of problem-driven or reductionist mindsets are obsolete. This kind of problem requires active engagement from various spheres of society. The increasing challenges posed by pandemics, environmental degradation, forced migration, and other aspects of our time have had a severe impact on historically oppressed groups. In particular, women are among the most vulnerable in these chaotic contexts around the world. Design, on the one hand, is recognised for its ability to drive change and create products, solutions, and services to meet human needs. It emphasises collaborative approaches and the participation of stakeholders in specific subjects. On the other hand, the design has been criticised for potentially maintaining the status quo and reinforcing inequalities, particularly gender inequalities.

The so-called Social Design or design for social change, as an interdisciplinary approach, demonstrates a well-documented ability to traverse diverse domains of knowledge, effectively bridging disciplines and fostering integrative thinking. By articulating various intellectual, cultural, and institutional forces, it facilitates dynamic exchanges that transcend conventional boundaries, thereby enabling the co-creation of innovative solutions to complex societal challenges. Furthermore, social design enhances collaboration by establishing participatory frameworks that bring together a wide array of stakeholders, including researchers, practitioners, policymakers, and communities (Heller, 2018). Through this process, it generates synergies that amplify collective intelligence and shared agency, ultimately catalysing systemic transformations (Manzini, 2015). In this capacity, Social Design serves as a powerful driver of change, leveraging its adaptability and inclusivity to reimagine social structures, improve human well-being, and advance sustainable development on both local and global scales.

However, our greatest social problems require collective action. More than that, they require shared responsibility that will bring about new ways of acting and thinking, bringing a new

meaning to living on this planet. We need to find ways to bring together a multitude of diverse actors, their values and voices, awakening them to a new collective consciousness.

To show that it is possible to act from different perspectives, considering the complexity of social issues (Heller, 2018; Jones, 2014), this study will focus on one of the most overwhelming effects of gender inequalities, which is gender-based violence (GBV), to explore the capacity of social design to respond to complex issues and promote mechanisms for collective responsibility. The research selected gender-based violence, with a focus on domestic violence, because of its harmful impact on society and its development, it is a multi-level structure that comprises several actors that need to work in synergy, and, because there is a lack of design in facilitating mechanisms for change in a systemic way in this area (Heise et al., 2002; Murhula et al., 2021; OECD, 2021).

Design tends to follow a capitalistic formulation, which can accentuate individuality over collective capacity. Despite advancements in creating collective intelligence and action through design, there remains a lack of a real collective bond among multiple agents in addressing social problems and leveraging collective intelligence over time (Buckley, 2020). Expanding Social Design interventions in different contexts and issues can help elevate a collective consciousness among design specialists and highlight its role as a strategic partner for global transition. This leads to the central question: ***How can Social Design help transition from an individualistic to a collective responsibility model, generating transformations, and empowering networks (through the case against domestic violence)?***

Research Aims and Questions

The research lies in the intersection between Social Design (SD), System Thinking (ST) and Regenerative Design (RD) as a potential dynamic to structure intervention that can benefit a sustainable transition towards a more equitable society. However, the definition of Social Design is discussed to create room for a more critical approach that opens up possibilities a convergence of emergent design areas in the path for social change.

The present work aims to explore the systemic approach of Social Design addressing a specific topic of gender equality, which is gender-based violence (GBV) with a particular focus on domestic violence, due to its accessible data and worldwide work around the subject. **It aims to develop a social design model capable of activating, supporting and orienting social dynamics based on a collective responsibility approach, through a case study with civil society players working on preventing gender-based violence in Portugal.**

Thus, the first part of the research is dedicated to delving into Social Design's multiple layers to bring to the surface relevant aspects of this domain, and contextualising it in current times, as it is a relatively new area with prominent evolvement. On this path, the research contributes to enabling designers' adventure on social issues with a glance at how to better approach complexity with a Social Design perspective.

The empirical part of this research intends to enable system actors to better address complexity through the GBV case study, contributing to cultural changes using design methodologies and techniques. This thesis aims to emphasise Social Design's potential for social change and its importance in Sustainable Development Goals, SDG 5 – gender equality and the flourishing contributions of Social Design for gender equality that can be translated into a theoretical model able to activate, support and orient social dynamics between multiple actors for a significant synergy against gender inequalities.

The central question that drives this research is:

How can Social Design activate collective action towards social complex issues?

Sub-research questions follow the central one to a more in-depth perspective:

RQ1. How can Social Design enable people to reflect and act against a harmful culture that affects mostly women?

RQ2. Social Design itself is a systemic tool for social change; thus, how can design sub-disciplines give them the most to tackle complex societal problems?

RQ3. How can Social Design contribute to a more systemic intervention in gender equality issues?

RQ4: What epistemology can flourish from this perspective and exploration that could be used to address sensitive subjects, such as domestic violence?

Nonetheless, this research is also oriented to mapping and understanding the dynamics between civil society organisations' volunteers working on gender-based violence in Portugal. With a special focus on designing a model for this system, this thesis will revisit complex thinking and collective elements to find answers to people's behaviour. The study understands that people engaged with the cause in question and the role of civil society organisations, with the potential to boost network solidarity in a bottom-up approach by involving society more broadly and invitingly. However, the investigation explores possibilities that flourish through the process that can represent potentiality for research purposes.

Positionality Statement

Rather than situate personal interests in this research, I open space to the statement of presenting which personal elements in my trajectory can influence the overall research. The aim is a personal and academic reflection on possible bias production and awareness to prevent it.

According to Noel (2023), positionality involves reflecting on your unique social identities, personal experiences, and the way these shape your perspective as a designer. The author advocates for using this understanding to inform design strategies that are equity-focused and culturally relevant.

The concept encourages designers to critically examine their role in systems of power and inequity. By acknowledging these dynamics, designers can avoid perpetuating oppression and instead create solutions that are inclusive and just. Noel's approach ties positionality to strategies such as building critical awareness, deepening emotional intelligence, and envisioning equitable futures. This involves balancing a focus on both pain and joy in design and leveraging one's lived experiences to inspire transformative change (Noel, 2023).

Additionally, her concept of positionality is connected with broader themes like the pluriverse, emphasising the coexistence of diverse worldviews and practices in designing for equity. This concept invites designers to imagine and collaborate on radically inclusive futures that challenge existing power structures (Noel, 2023).

I'm a Brazilian woman who lived the greatest part of her life in one of the most dangerous countries for women and other identities that perform the feminine. I saw myself during my career performing male roles in managerial positions. I experienced fear almost every night when I was alone on the streets or even when I got a taxi. All those experiences made me question all that was behind my own and others' behaviour.

As a literature lover, I found comfort in books and sisterhood. From Margaret Atwood, Judith Butler, Angela Davis, Octavia Butler, Toni Morrison, Alice Walker, and Grada Kilomba, I gained courage and awareness. From my girlfriends, I gained a source of wisdom and information to walk in this unfriendly world dominated by males. And there were multiple instances of moral abuse in my

career in the communication industry. Learning how structural inequality works allows me to navigate with some confidence and pursue the desire to investigate and act more seriously within this path.

I can say I start unnoticed, as a whisper, inviting women to think with me about female roles in our society, through literature. I used to conduct writing workshops in feminism and literature that discussed women's position in relationships, about their bodies, their desires, perceptions and fears. It was a fresh breath of hope for me when I could share awareness and wisdom. Where I received much more than what I gave.

From this small journey, conducting internal transformation, I move to academia with the aim of building a more solid proposal to tackle gender inequalities. Thus, my master's degree in design gender inequality led me to this PhD and the herculean objective to contribute to social change in a more systemic proposal.

However, I'm not just a Brazilian woman and mother conducting research in another country; I'm a Brazilian woman questioning the status quo in this country. This other layer, a foreign one, was well received most of the time, but was very questioned on some occasions. The first question was why don't we research this subject in my country, considering that Brazil has huge numbers of cases of domestic violence. The second question was related to design outcomes and the expectation of a communication or service, designed to provide support. In this moment, I realise that I could contribute to this topic and to design by expanding design domains to present its critical capacity and tools to help decision makers to propel their work. Hence, design and gender inequalities became the subject of an entire life, part as a living system, part as an interventive person, which I wish to continue for many years more.

Overview of the Upcoming Sessions

Part I. Present the epistemology and ontology dedicated to Social Design (SD) and its multiple representations. It creates a prism around the state-of-the-art evidence of SD contribution in many areas of social change. This session exposes SD as a methodology and practice for approaching complex societal issues and addressing sustainable development goals. Explore the context of Sustainable Development Goals (SDG) and their intersections with SD and gender inequalities, focusing on gender-based violence as an introductory case study scope. It introduces the current SDG challenges and presents the paradigm around gender equality and Social Design issues. Moreover, evidence six Design domains that can positively contribute to a cross-intervention proposal in collective action. It unveils new perspectives necessary for effective social change in this area to finally propose a theoretical model of Social System Design to approach societal issues.

Part II. The methodological framework presented in this study utilises a multifaceted approach, aimed at thoroughly documenting the research process and enhancing the robustness of the findings. Each phase of the investigation is made transparent, elucidating the selection of methods and tools that align with the overarching research objectives. Emphasising the intersection of social sciences and design, this study highlights the importance of integrating Social Design principles—particularly those that are system-oriented—and participatory design methodologies in the context of cultural transformations and human subjectivities.

The inquiry delves into the dynamics of design research and the structured methods employed throughout the various stages of the study. By doing so, it fosters a deeper understanding of the contextual factors at play, thereby facilitating the exploration of innovative visions for the future. The synthesis of contemporary design practices and social theory not only enriches the research narrative but also presents opportunities for reimagining and reshaping societal narratives. Furthermore, this approach aspires to create inclusive spaces for dialogue, ensuring that diverse perspectives are valued and considered in the design process.

Part III. The present study undertakes an empirical investigation through a case study conducted in Portugal from 2021 to 2024, focusing on the contributions of social design in

addressing gender-based violence (GBV) and domestic violence (DV) as critical aspects of gender inequality. This research delves into the diverse array of stakeholders within the DV system, aiming to identify potential solutions and address existing deficiencies and gaps. Utilising a social design system thinking approach, the study offers a comprehensive perspective on the causal relationships among the myriad actors involved, as well as the associated issues and dynamics that permeate this complex social problem. The findings are organised through a continuum of learning, where each phase of the investigation informs and enhances subsequent steps.

The chapters of this study delineate specific design methodologies and practices intended to foster new perceptions within the context of prevailing cultural beliefs and causal frameworks related to GBV. The empirical data collected during this research underpins the theoretical discourse, providing robust evidence to advocate for the application of a Social Design model aimed at fostering collective action in complex social issues – here exposed in the case against gender-based violence.

Through the engagement of specialists and the employment of Transition Design tools, this session elucidates the primary findings from each phase of the investigation, highlighting the necessity for adaptive and responsive strategies in the ongoing effort to combat gender-based violence. The insights garnered from this research contribute to both the academic field and practical interventions, reinforcing the importance of Social Design in addressing pressing social issues.

The results of the qualitative and empirical investigation highlight significant findings in relation to the central investigation question. Central to this discourse is the recognition of relationality and the dialogical domain as pivotal elements of Social Design. Such elements facilitate closer engagement with the system, enabling designers and decision makers to interact meaningfully and grasp the intricate interrelations inherent within it. Moreover, the tension between problem-solving and the practice of "staying with the problem" emerges as a critical paradigm for designers to adopt. This approach encourages a deeper contemplation of the multifaceted nature of social issues, pushing designers to engage with complexity rather than seek immediate solutions.

Furthermore, the capacity to envision the entirety of a situation through design is essential, as it embodies a commitment to social transformation—a practice that necessitates a profound embedding within the societal framework. The investigation also sheds light on the fragilities associated with methodological design approaches within collective and systemic contexts. This fragility poses challenges that must be acknowledged and addressed in order to enhance effectiveness.

Ultimately, the empirical process yields innovative methods of addressing social system issues, exemplified through the case study of domestic violence. This case illustrates the importance of cross-sector collaboration in cultivating collective wisdom and sharing responsibility, ultimately enriching the decision-making process.

Part V. Conclusions are presented to evidence principal findings, barriers through the research and central learnings. The findings underscore the necessity for designers to navigate the frictions of relationality, problem engagement, and methodological rigour in their practice, thereby fostering more effective and nuanced approaches to social design challenges. Additionally, proposes further uses and possible new paths for this investigation and Social Design role in societal challenges to articulate a collective responsibility approach over complexity.

PART I

Theoretical Approach

"It matters what ideas we use to think other ideas." Marilyn Strathern (Donna Haraway, p.34, 2016)

1 An Ontology of Social Design and Gender

Understanding the intersections between Social Design and gender requires understanding when and why design started to be a science and practice for social change, or a socially oriented design. The beginning of the '60s was the moment in the history of a massive movement among social consciousness that evolved into the Club of Rome and *The Limits to Growth* and culminated in the 90, settling Agenda 21: *The Earth Summit Strategy to Save Our Planet*. The design followed this critical approach through its recognised schools, questioning its role as a science that directly interfered with humans' lives.

Buchanan (1995) talks about the evolving nature of Design and the constant movement of subjects, and this indeterminacy of a subject has been following the global development of human thinking and acting in the world (Demirel, 2019; Morin, 2006). In a proposal of Design as rhetoric, the capacity to produce plans, proposals, models, frameworks, and prototypes generated expanded articulated responses to political, social and economic needs (Frankel & Racine, 2010; Norman & Stappers, 2015). However, after the post-industrial hangover and the need to rescue the "soul of design", the contribution of machines to making art and fundamental human desires became a question over consumerism and injustices resulting from excessive materialism (Buchanan, 1995).

Added as a lexicon in 2007, besides the urge for social responsibility started in the 70s (Papanek, 1985), Social Design challenges the consumer norm of capitalist production and attempts to propose interventions on the original designations of Design by satisfying intrinsic human needs addressed for those of marginalised groups. As a social practice, its origins are close to those of social service workers inspired by ecological theories and collaborative approaches that require a multilevel perspective (Margolin & Margolin, 2002). Its practice is correlated to methodological terms and, for many, can also be redundant to Social Design when everything design produces should be social (Heller, 2018).

Margolin and Margolin (2002) made this evolutionary timeline in their book "The Politics of Artificial", reflecting on this evolution and representative design path. Papanek (1985) questioned the beauty over the function and the benefits to people, evidencing the work of designers expanding from industrial design to a more critical place, as he remembers Henry Dreyfuss's words: 'If the point of contact between the product and the people becomes a point of friction, then the Industrial Designer has failed' (Dreyfuss 1995, 25-26). According to the author, designers must be capable of recognising, isolating, defining and solving problems.

However, other forces can reduce the ability to expand creativity and solve problems correctly, such as the role of conformity in social structures and the reductionist approach. Papanek (1985) and Shils (1984) show how society tends to preserve the cultural status quo by exploring the difficulties of changing cultural patterns and transforming this paradigm. This approach affects the capacity to address subjectivity related to its root causes in complex societal issues.

All these movements from inside to outside Design areas lead to Social Design; even definitions of Social Design can be controversial. Some consensus definitions define Social Design as a systemic approach that proposes a collaborative and participatory intervention providing solutions for and with people and communities (Ackoff, 1974; Margolin & Margolin, 2002). However, an idealistic proposal also evolved into a practical and critical approach (Anheier et al., 2019; Costanza-Chock, 2018; Milic, 2021). Social Design proposes an interconnection of fields, learners and actors as a facilitator to improve people's lives (Manzini, 2014). In this session, the research navigates the multiple levels of Social Design that distinguish it from other material areas of this field.

Social Design also embraces an innovative field that allows people and communities to collectively develop solutions with scalability and multiple stakeholders' vision to benefit many. As Deserti, Rizzo and Cobani (2018) explain, Figure 1 illustrates how design practice approaches social problems to innovate through products and services. This approach enables a multilevel transformation in local contexts and developing community sense-making, as the authors explained by the example of Quarto Food Club¹ chain that involved the whole community to rethink the food system to help older adults.

¹ Quarto Food Club is a product service system that combines the need for affordable and enjoyable food access for older adults with the opportunity for young people to do practical training. The service is based on the agreement between the Professional School of Hotel Management, the Local Associations (Piazzetta Capuana) and the Municipality of Milano. (project partners: Politecnico di Milano, Comune di Milano, Archeometra S.R.L and the Quarto Oggiaro Associations in community representation).

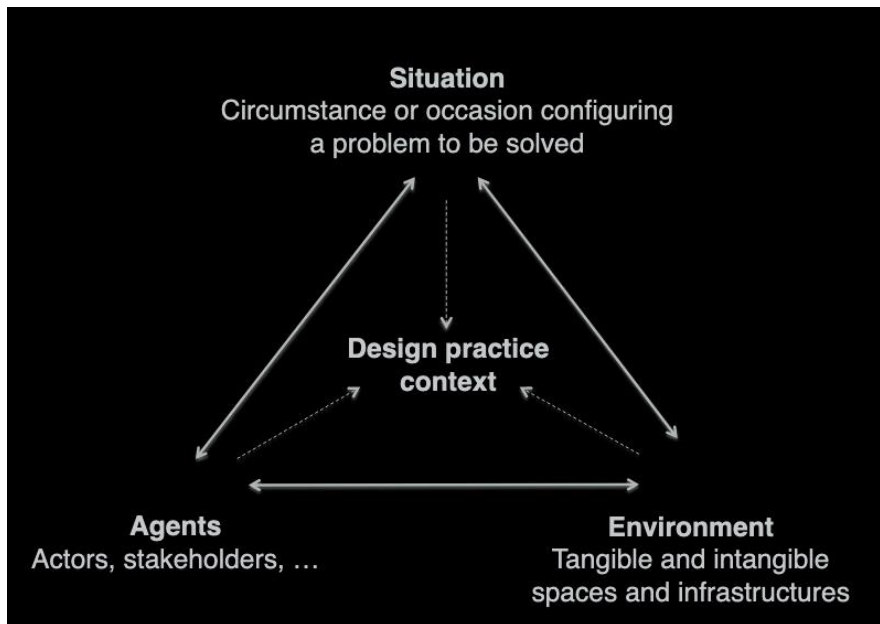


Figure 1 The situatedness of design culture. Source: Deserti et al. 2018, p 66-67.

Besides being a down-to-earth discipline with multiple recognised approaches, some authors argue its utopian standards, which distance the results from a critical point of practice and application (Koskinen & Hush, 2016). However, Manzini (2015) recognises the supportive role of design in enhancing people's perception and action for their benefit, whereas co-design has benefits beyond the material world. Design evolves by allowing collective participation, making the process a subject of effect in the collective steps of social innovation (Antoine et al., 2019).

Social Design works, particularly with the third sector, are well documented, providing conceptual and empirical foundations for its benefits (Deserti et al., 2018). However, besides the evolving discipline in this area, there are gaps in effectiveness and long-term outcomes in practice. To some authors, feasibility and imagination sometimes confront innovation in the third sector (Anheier et al., 2019). This confrontation made the field evolve to other dimensions of evaluation, governance and entrepreneurship, adding a business layer to what was previously considered a purely socially driven field (Avelino et al., 2020).

The design that once was intended to solve problems through the physicality of its artefacts now occupies a more subjective purpose — as an articulator, connector and coadjutant in social transformations, providing tools to create dialogues between actors that until then, they did not articulate (Cipolla et al., 2017). It is not just about methodological proposals, as exchanges and sharing in collaborative fields are also the domain of other areas, such as sociology and anthropology (Ventura & Bichard, 2017). What makes the design unique is its capacity to create visual and subjective dialogues that give its interlocutors the capacity for critical thinking, action and empowerment (Muratovski, 2016; Noel, 2023).

Not distancing the economic benefit of design, its synergy with the political context is also perceived in works of design for policy and participatory design as enablers for community thrive (Gaitto, 2018; Hekler et al., 2019). Design goes from a mere result and effect of capitalistic development to a symbiotic relation with all subjective or concrete it produces, elevating its responsibility and awareness in the current reality.

This call to action gained traction while the social results of design started to create relevant and positive benefits for communities. From the urban apparatus to social empowerment, the social domains of design started to embrace other perspectives from the global south, which enrich the way to approach problems, engage participants and stakeholders, inviting professionals to radical and critical interventions (Cipolla, 2009, 2018; Cipolla et al., 2017).

As Heller (2018) exposed, the Social Design intentions for more human agency, creativity, equity, resilience, and connection with nature reflect the urgency for a broad vision of the collaborative design apparatus for social change. Additionally, rather than evidence of the necessity of a congregation of what Social Design means, it is necessary to assemble the invisible and visible dynamics that allow us to create conditions for change.

Thus, design in socially oriented contexts assumes a supporting role in this social transition. For this reason, it is also necessary to deconstruct the sovereignty and supremacy of what one does, making room for an exercise in humility and vulnerability as tools of self-awareness and empathy (Cipolla, 2018). It is the work of Social Design in a place where the 'white saviour' complex gives way to a horizontality of knowledge sharing in which the designer is the apprentice of his interlocutors, and both lead the ecosystem towards change (Julier & Kimbell, 2019).

Finally, a discipline that entails social change must be reflexive, critical, emancipatory, and open to multiple visions of the world. Social Design is a place to reflect and act in unison in dealing with inequalities. Contrary to the congregation of values being a utopia, its collective practice offers this space where individual awareness can flow to collective responsibility.

1.1 When design meets gender

With the influence of other disciplines and the intense interventions of feminist movements, design started to interrogate its effects and roles on gender aspects. It starts to question its path on perpetuating and evolving social dynamics that eternalise gender inequalities from works that claimed women's presence in specific places of design around the world (Almeida et al., 2024) to evidencing the design of everyday solutions that contribute to reinforcing hegemonic male dominance (Perez, 2019). The importance of such intersections and the responsibility of design is a fact.

Following Simone de Beauvoir (1970) and Judith Butler (2017), gender per se is a cultural evolution constructed by experience and human development. Thus, design and design practice are constantly affected by and affect gender, either by their lack of addressing such an intersection, by evidencing or promoting dominant power dynamics, or by historically producing knowledge that privileged binary thinking over a more inclusive approach. In *Gender Design*, Brandes (2017) explores the lack of a correct approach to gender design, exploring how students create solutions to face the incongruences of design, addressing gender issues. A similar proposal was made in Brazil, with a strong decolonial perspective that evokes feminist theories from the global south to create concrete interventions, from product to design research (Almeida et al., 2024).

According to Almeida (2024), the '80s were when gender and design started to apply, as illustrated in Figure 2. The author evidenced the works of the anthropologist Lelia Gonzalez in Brazil and Cheryl Buckley in extenuating inequalities and embracing feminist intersections in design. Gonzalez (2020) provides insight into the importance of racial issues in the construction of feminism, especially in colonised countries, where the voices of non-white women were spoken and defined by others. Lugones (2010) reinforces this point by presenting coloniality as a tool of current domination shaped by power relations stipulated by European and American centralities. Both demonstrate how these structures contribute to the naturalisation of women's condition.

Estudos de Gênero déc. 80 Feminismo anti-essencialista	Estudos em Design déc. 80 Perspectiva feminista
1980. Sujeitos engendrados <i>Age, Race, Class and Sex</i> , Audre Lorde	1984. Mulheres no design <i>A Woman's Touch: Women in Design from 1680 to the present day</i> Isabelle Anscombe
1981. Mulheres negras e feminismo <i>Ain't I a Woman? Black Women and Feminism</i> , bell hooks	1986. Análise feminista no campo do design <i>Toward a Feminist Analysis of Women and Design</i> Cheryl Buckley
1984. Mulheres negras e feminismo no Brasil <i>Racismo e sexismo na cultura brasileira</i> Lélia Gonzalez	1989. Feminismo, mulheres e design <i>View from the Interior: Feminism, Women and Design</i> Judy Attfield e Pat Kirkham
1986. Gênero como categoria de análise histórica <i>Gender: A Useful Category of Historical Analysis</i> , Joan W. Scott	1989. Crítica feminista ao campo do Design <i>FORM/female FOLLOWS FUNCTION/male: Feminist Critiques of Design</i> Judy Attfield
1987. Conceito de tecnologia de gênero <i>Technologies of gender</i> , Teresa de Lauretis	
1988. Conceito de amefricanidade <i>A categoria político-cultural da amefricanidade</i> , Lélia Gonzalez	
1989. Conceito de interseccionalidade <i>Demarginalizing the Intersection of Race and Sex</i> , Kimberlé Crenshaw	

Figure 2 Comparative table with research developed in the 1980s within the scope of gender studies and design studies. Source: *Gender and Design*, 2024, p.40.

Buckley (2020) will state how exclusionary design can be by neutralising some rules to characterise good or bad design, which we can compare to the evolution of our market when the idea of human default and male default will culminate in multiple platforms and technologies interpreting gender-neutral terms and male (Perez, 2019). Even before Buckley formulated his perspective, Foucault theorised about universal narratives and the need for an egalitarian life (Foucault, 1982). It elevates the necessity of understanding gender as a critical perspective.

This idea of universality is the basis for confronting other visions of the world proposed by Arroyo (2019), which brings feminist waves to introduce a praxis of decolonial movement against the reflection of European and centrist feminism and the universalisation of gender perspectives. From the author's perspective, the universal proposed in the name of liberation of bodies and freedom are rights and citizenship for white males and do not represent what females have access to, nor underrepresented persons from indigenous cultures, who are historically not considered citizens.

Noronha (2024) stated that design constructs world visions and a strong capacity to intervene against prevailing dominated structures. According to her, the importance of critical theories applied to design remains to problematise the intersection between design practice and gender in a biocentric way, allowing universal voices to join in these practices (Noronha, 2024). In the same way that narratives and choices shape society, design needs to construct a critical base to dismantle socially oppressive structures.

The universal ways of design approach gender can be perceived in communication, design activism, crafts, and design with a systemic approach. Today, it is possible to approach the intersection of design and gender with some viewpoints or techniques, which are feminist design, women-centred design, design for equality, and Feminist System Thinking. Each one of those approaches is constructed to enable people, companies, and communities to embrace inequalities that directly affect women, as presented in Figure 3.

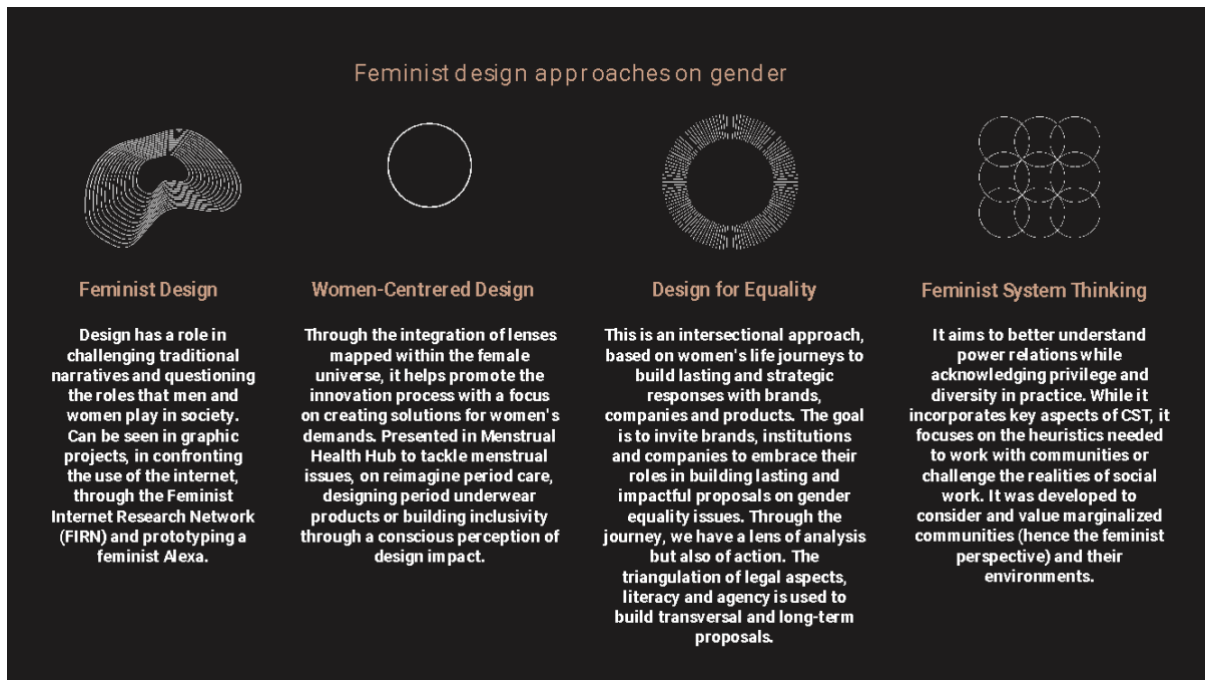


Figure 3 Feminist design approaches to gender. Source: Author.

With an evident influence of feminism, Feminist Design will capture the essence of activism to produce answers that provoke the status quo. They challenge the current oppressive and traditional narratives, questioning women's and men's roles in society. They embrace diversity on its intersectionality and voices. They propose transforming the way we work with others, giving them a prominent role and promoting a closer and more participatory approach. This approach also invites us to rethink power dynamics and ways to promote new synergies.

The book "Extra Bold: A Feminist, Inclusive, Anti-racist, Nonbinary Field Guide for Graphic Designers"² is an excellent example of how design using graphic tools has been embracing gender inequalities through feminist lenses. Another good example of design applied to technologies is the project Feminist Internet Research Network (FIRN)³ that proposes a transformation in gendered structures of power existing in the internet world. Additionally, Rhiannon Williams proposed "Designing a Feminist Alexa"⁴ at UAL Creative Computing Institute in partnership with Feminist Internet. During the workshop, students were encouraged to think critically about AI as a feminine supportive tool and to be unbiased in their perceptions of what a feminist AI should or could be, as Figure 4 illustrates.

² Lupton, E. et al., 2021 A Feminist, Inclusive, Anti-racist, Nonbinary Field Guide for Graphic Designers. accessed September 28, 2024, <https://www.feminists.co/discover/extra-bold>.

³ Association for Progressive Communications (APC). August 14, 2024. FIRN: Feminist Internet Research Network. Accessed September 28, 2024, at <https://www.apc.org/en/project/firn-feminist-internet-research-network>.

⁴ Feminist Internet. 2019. Designing a Feminist Alexa: an experiment in feminist conversation design. Accessed September 28, 2024, at <https://www.anthonymasure.com/attachments/slides/img/2019-04-hypervox-paris/feminist-alex.pdf>.

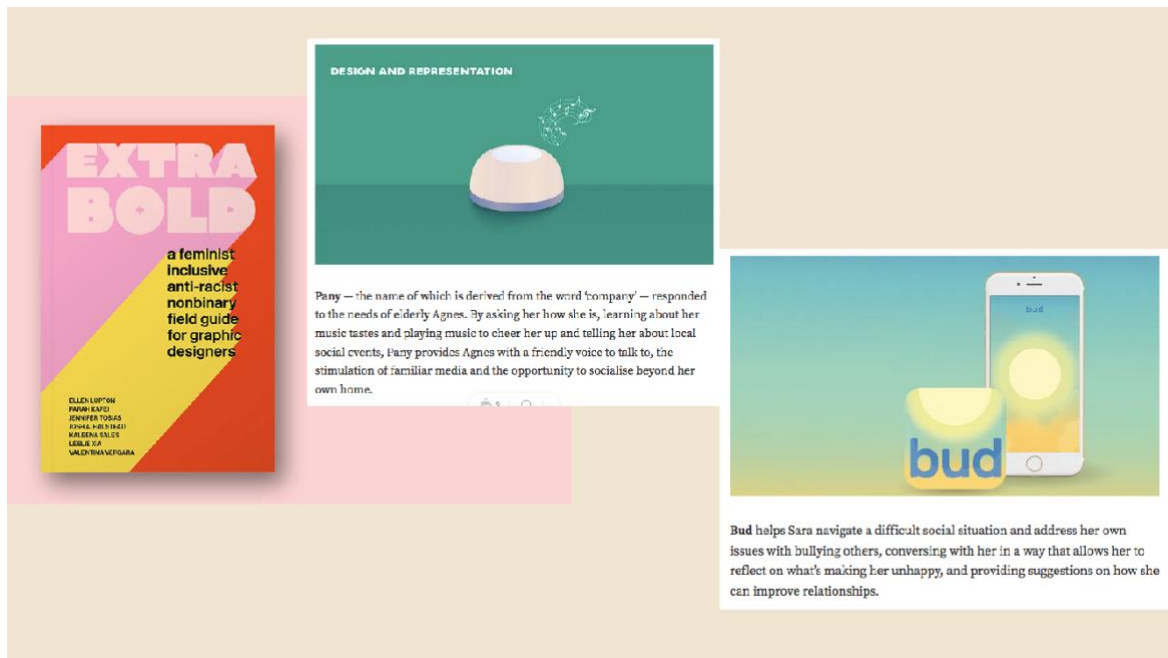


Figure 4 Extra Bold book and Designing Alexa Feminist. Source: personal.

Embodying feminist internet values such as education, collaboration, and redefinition, participants considered issues and requirements outside their own experiences. They could carefully craft empathetic PIAs (Privacy Impact Assessments), which are assessments conducted to identify and mitigate privacy risks associated with information systems or activities, that projected alternative identities to the submissive woman and responded constructively rather than shutting down or deflecting human emotion or distress. Intensive collaboration, frequent group feedback, and a wealth of helpful resources helped students produce four individual, forward-looking prototypes demonstrating their capacity for empathetic design and that technology and individual, intersectional, and emotional human requirements do not need to exist in separate spheres. The results were proposals from voice assistants with more empathy, to an AI that helps to navigate through fake news and abusive language.

In women-centred or women-centric design, some authors explore how to build solutions that help designers create more equitable worlds; thinking about women's necessities and experiences is what Mansi Gupta⁵ focuses on in her tools and practices. Based on practical toolkits, she invites the development of a world designed with and for women, activating awareness, holism, and innovation in products, services, and communication. In Gupta's proposal, presented in Figure 4, the four areas help designers create new narratives and definitions, understand and build women-centred root causes, and create impactful outcomes for many others. It also explores the centrality

⁵ Women Centric Design. (n.d.). Women Centric Design. Accessed September 28, 2024, at <https://www.womencentricdesign.org>.

by asking what else belongs here and what is missing? The proposal established Non-Negotiables spheres of action that are a good source to drive innovation and co-create.

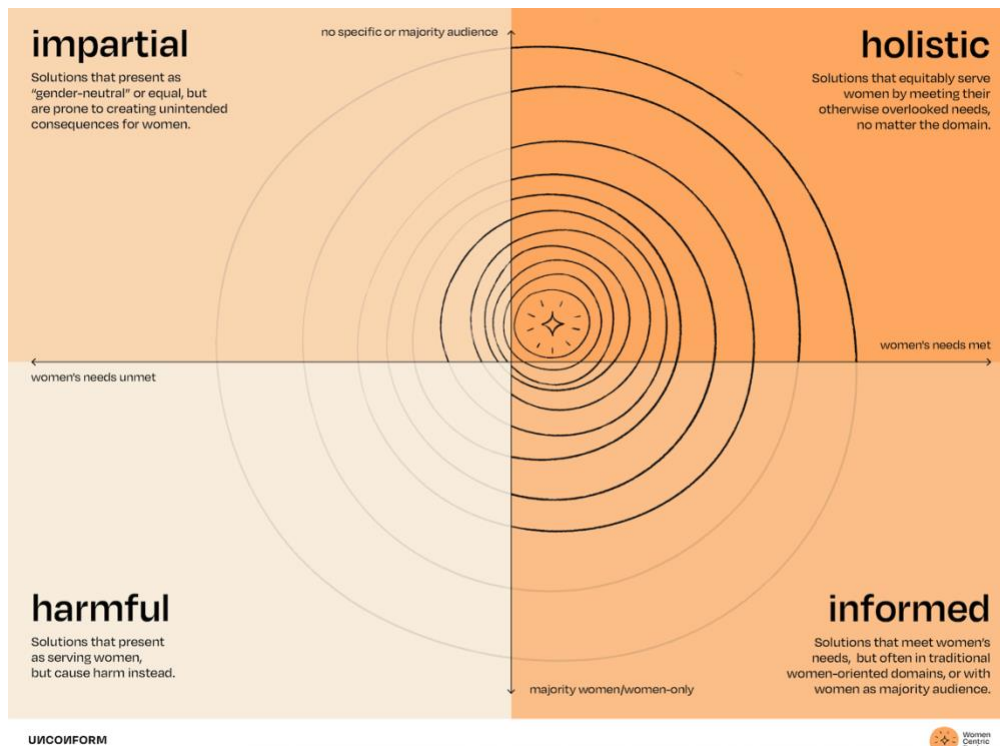


Figure 5 The women-centric eye. Source: Gupta, M.(2022) www.womencentricdesign.org

Another women-centred proposal comes from Almeida (2018) that "explores how the design of technologies and interactions can act critically in the ways that they serve, refigure and redefine women's bodies in light of what woman is" (Almeida et al., 2018, p. 1). The proposal considers four elementary areas composed by the lenses of sociocultural, which helps us understand the context; economic, which situates the need in the universe of economic responses to promote a positive power dynamic; biological, which considers the holistic aspects of being a woman in her life cycle; and environmental, which makes us understand in which environment and with which resources women live and benefit and how these impact them. A similar proposal is made by period

aisle when reimagining period care with an inclusive proposal of life-changing products from underwear to period pads⁶ presented in Figure 6.

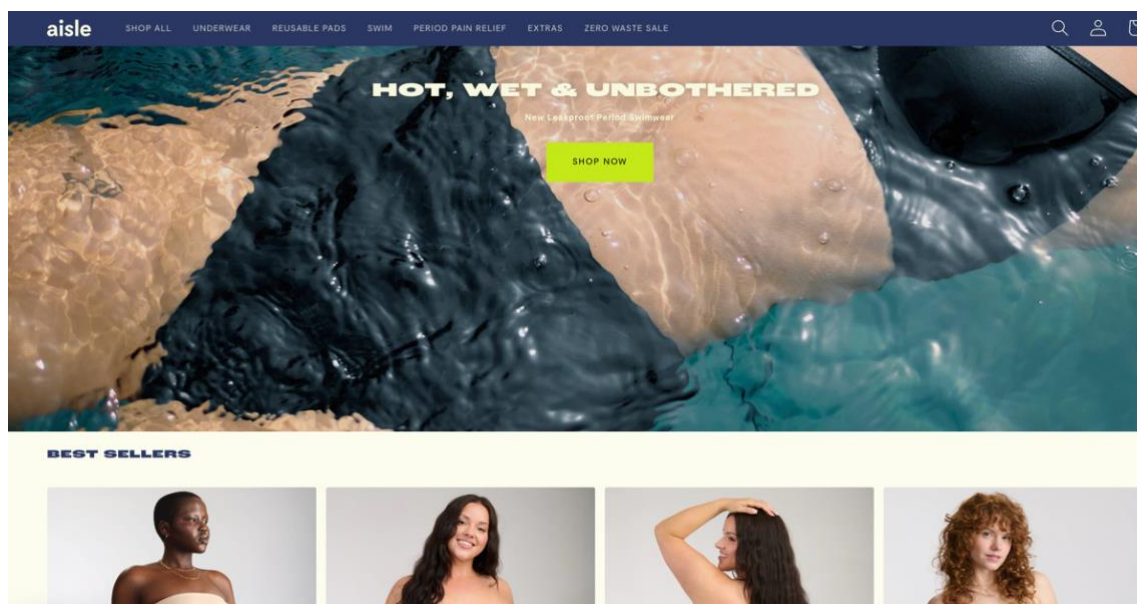


Figure 6 Period aisle products. Source: <https://periodaisle.com>

Another proposal of design to tackle gender issues is presented as Design for Equality in my master's degree, using an intersectional approach to follow women's journey to critically think about barriers and opportunities to thrive from school to university and work life, as shown in Figure 7.



Figure 7 Design for the equality approach. Source: Lima, 2019.

The central objective of this proposal was to invite universities and other institutions, like private companies, to rethink their roles in gender equality and the construction of long-lasting

⁶ Aisle. (n.d.) Planet-friendly Periods. Accessed on September 28, 2024, at <https://periodaisle.com>.

proposals. The approach followed Walker's (2016) work, which explores diversity in design disciplines and investigates effective strategies to expose African-American and Latino youth to design careers. This process considers four phases of life: foundation, proficiency, workforce, and influence. Barriers and opportunities are worked collaboratively to create tools and initiatives for women to thrive with the support of universities and their partners (Lima, 2019).

Finally, feminist system thinking aims to understand power relations while acknowledging privilege and diversity in practice. While it incorporates key aspects of Critical System Thinking (CTS), it focuses on heuristics that enable working with communities or challenging the realities of social work, as the framework in Figure 8.

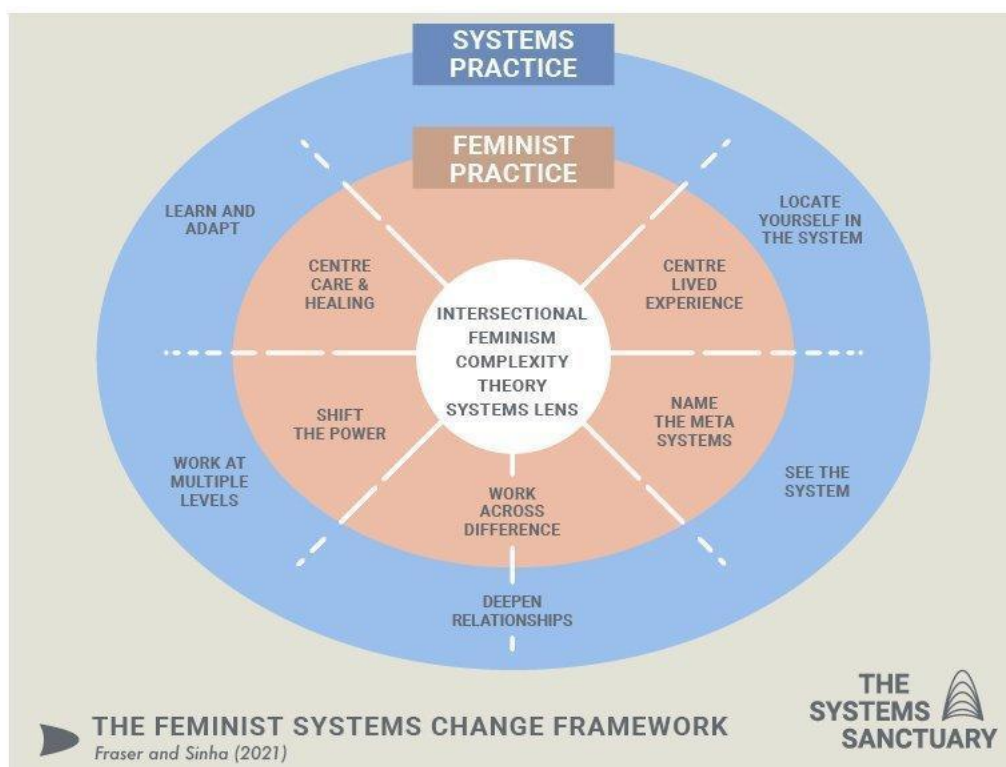


Figure 8 The feminist systems change framework. Source: Frase and Sinha (2021).

This theoretical approach was developed to consider and value marginalised communities (hence the feminist perspective) and their environments. Its creators adapted this approach to 'action-based research' from an Indigenous Australian perspective to create a more critical and universal approach to the relationship with what is created, with whom and its impact, role and interaction with the whole (Stephens, 2011). Their tools help people and companies to navigate through its principles: adopt a gender-sensitive approach: be careful when using gender-neutral language that can completely ignore hierarchies; value voices from the margins; try to look beyond structural privileges and seek out "non-experts"; incorporate the environment into research: expand the field of vision by observing nature beyond the anthropocentric lens; select appropriate

method(s): pluralistic thinking is key because perceptions vary based on sociocultural context – practice critical reflection of communication to adapt to context; and, invest in research that pluralistically promotes desirable and sustainable social change (Stephens, 2023).

1.2 Design contributions to gender-based violence

It seems a natural evolution for design, with the appropriation of feminist movements that started to embrace gender-based violence. As the need for new responses grows and innovation and technologies become increasingly widespread, it is expected that design also begins to act critically, whether through its approaches, tools or products, in an attempt to appease, understand and question the status quo in the violence against women.

Nowadays, domestic violence and violence against women are considered epidemic. The numbers are alarming, and the effects are vast in personal and collective terms (Lima & Guedes, 2024). The article for the Sustainability Journal introduces the fundamental aspects that make gender-based violence a central topic for social change. Its effects can reverberate in multiple areas, impacting the economy, environmental transition, personal development, wealth and health, with long-lasting effects on mental and psychological health (Lima & Guedes, 2024).

Before COVID-19, design was relatively hesitant to address domestic violence. Since then, there has been an increase in solutions. Governments have been struggling to answer and combat violence during this period, while societies have been active in several issues with the impetus of social movements and digital and technological accessibility. As a result, many responses have been created to generate knowledge on the topic. During the first wave of the pandemic in China, the hashtag #AntiDomesticViolenceDuringEpidemic⁷ emerged to break the silence and expose violence as a risk during the lockdown. In Spain⁸, an instant messaging service with a geolocation feature offered an online chat room with immediate psychological support for violence survivors. In Argentina, as well as in France⁹, pharmacies were declared safe spaces for denouncing victims of abuse. In Brazil, the increase in violence cases propelled NGO ThinkOlga¹⁰ to modify its Isa.bot chatbot, which enables women to discover violence cycles and access foster homes and protection agencies, such as police and prosecutors.

⁷ <https://www.healthig.ca/diseases-and-conditions/coronavirus/how-to-help-victims-of-domestic-violence-with-covid-19>.

⁸ <https://www.theguardian.com/society/2010/dec/14/spain-domestic-violence-women-more>.

⁹ <https://edition.cnn.com/2020/04/02/europe/domestic-violence-coronavirus-lockdown-intl/index.html>.

¹⁰ <https://www.isabot.org/>

Mechanisms have evolved to support victims and different channels for complaining about aggression. The number of complaints is low. There are many reasons why victims do not report and remain silent for years. Proof of this is represented through the hashtag on social networks, "Why I did not report", which was born in response to Donald Trump's tweet in response to his question: Why didn't you say something sooner? The project on Twitter and Instagram in 2020 collected 135 posts with messages from victims about the reasons why they did not report the abuse they suffered. It is common to see phrases written there like "I am scared", "Because I loved her", and "Because I was drunk and did not think I had the right to say no". In the same Instagram profile, it is possible to observe that fear and shame are constant and decisive feelings when reporting violence. When questioned about the feeling that most justified not denouncing the aggressor, 52% point to fear and 48% to shame. Furthermore, it often takes time to realise that what women are experiencing is abuse, as mentioned by university student Leong Through in a tweet¹¹.

1.2.1 Design againsts gender-based violence: a state of the art

To better comprehend the academic production addressed by design around the themes of domestic violence, intimate partner violence, and gender-based violence, a literature review was conducted during November and December 2024 using Scopus and Google Scholar to map the state-of-the-art and understand the recent contributions that occurred during this research.

The research was centred on collecting academic production in Social Design and system thinking intersecting the themes of IPV (Intimate Partner Violence)¹², GBV (Gender-based Violence)¹³, and DV (Domestic Violence)¹⁴. The objective was to find similar studies that provide

¹¹ Fortin, J. (2018). #WhyIDidntReport: Survivors of Sexual Assault Share Their Stories After Trump Tweet. New York Times, NY. Retrieved from <https://www.nytimes.com/2018/09/23/us/why-i-didnt-report-assault-stories.html>
Also here <https://edition.cnn.com/2018/09/21/health/why-i-didnt-report-tweets-trnd/index.html>.

¹² According to European Institute for Gender Equality Intimate Partner Violence (IPV) refers to violence or aggression occurring within a romantic relationship, encompassing both current and former partners. It's a significant issue, with the most common form of violence against women being violence from a male intimate partner or ex-partner.

¹³ Gender-based violence (GBV) is a pervasive human rights violation in Europe, affecting a significant number of women and girls. It encompasses physical, sexual, and psychological violence, often disproportionately impacting marginalized groups, including forcibly displaced women. It can encompass Physical violence: Includes acts like beating, strangling, pushing, and using weapons. Sexual violence: unwanted sexual acts, including rape. Psychological violence: Involves controlling, coercive, and economically violent behaviors.

¹⁴ Comprehends all All acts of physical, sexual, psychological or economic violence that occur within the family or domestic unit, irrespective of biological or legal family ties, or between former or current spouses or partners, whether or not the perpetrator shares or has shared the same residence as the victim. Council of Europe (2011). Convention on Preventing and Combating Violence against Women and Domestic Violence. Council of Europe Treaty Series No 210.
https://eige.europa.eu/taxonomy/term/1232?language_content_entity=en

information about their investigation process, focus, and domain of intervention, whether it was dedicated to prevention, support, or action towards these social phenomena.

By doing this, it was possible to find recent work dedicated to a system approach to tackling domestic abuse and sexual violence. It collects works exploring systems, evidencing what works in policy and practice in this field (Adisa & Bond, 2024). This finding exposes the increasing relevance of systems thinking in complex societal problems and the necessity for a more critical application and development of processes towards GBV.

After separating the documents representing our intentions and excluding other fields that more often approach gender-based violence subjects, such as medicine and social work, we arrived at a modest number of twenty-seven (n:27) academic productions from design and system fields. Of these documents, the field of Social Design is focused on 12, design and product design on 9, and systems thinking and system modelling on 6.

Of those evaluated as Social Design, six were dedicated to constructing a proposal using narratives and communication as central elements; three focused on technologies and digital tools, and three on services.

In Social Design, the primary focus of attention in these projects was to support victims of the institutions related to them (n:7). In contrast, others focused on prevention (n:2), creating ways to provide information about the subjects, and others centred on action (n:3), providing tools to act accordingly. The projects in product design were balanced, with three dedicated to each focus of attention. Most studies provided tools or approaches to action in system thinking or system modelling, one to support and two to prevent, as shown in Table 1.

Table 1 Focus of attention in academic production focused on gender-based violence and design.

Social Design	Support	7
	Prevention	2
	Action	3
System Thinking	Support	1
	Prevention	2
	Action	3
Product Design	Support	3
	Prevention	3
	Action	3

Another relevant piece of information regards the methodological approach, evidencing the use of qualitative methods, co-creation, and the participatory approach. However, there is a prevalence of co-creation to address the issue. Eleven of the 27 articles analysed used co-creation due to its digital nature and focus on enhancing victims' capacity to cope, get informed, and understand GBV. Additionally, the design way of thinking and its problem-solver proposition focused

on some specific part of the problem; trying to solve it was the primary approach, while framing a systemic problem was not used to explore solutions in most findings.

Moreover, most studies were dedicated to solving some victims' issues, whether to inform, prevent, cope, get better services, or provide a tool. There were 19 victim-centred studies, three dedicated to how designers approach these subjects, just one study focused on perpetrators, and four explored the systemic and multiple actors facing GBV.

By doing this, the research arrived at two works considered similar to this approach; in a way, they explore systems thinking to propose innovative ways to tackle gender-based violence with a holistic worldview. However, none of these proposals presents new methodological approaches to the problem. The most similar study is the project handled by the New Zealand government, university and social innovation organisation, focused on child abuse and family violence (Foote, Jeff et al., 2014). Moreover, other studies are considered complementary sources because exploring system thinking contributes to domestic abuse and sexual violence (Adisa & Bond, 2024).

The project lead in New Zealand focused on addressing family violence (FV) and child abuse and neglect (CAN) and used stakeholder engagement, systems thinking, and interdisciplinary analysis as methodologies. The investigation used theoretical research and qualitative data collection through interviews with specialists and co-creation sessions. The project used these methods to engage stakeholders from different perspectives in a dialogue with each other. These methods also focus on how a whole system of interactions produces outcomes (Foote, Jeff et al., 2014).

The approach included, as a secondary method, the analysis of system improvement suggestions from the people's Inquiry. Consequently, they developed a transformed systemic model through collaborative workshops with sector experts (Foote, Jeff et al., 2014). The process encouraged stakeholders and experts to think creatively about the elements of a transformed system. It was recognised that such instruments helped participants share learning about the future that attempts to move beyond entrenched views and build on the significant systems at the national and regional levels.

The outcomes related to this project included the development of critical properties for a transformed system, specific areas for improvement or innovation, which were translated to seven actionable points: to improve the situation of those affected by family violence, including those vulnerable to abuse, those who have perpetrated abuse, and those vulnerable to doing so; to monitor performance by incorporating evaluation evidence (outcomes data) and the experiences of individuals and communities; to include in governance decisions balancing expert advice with communities and practitioners; focus on prevention, response, and recovery, involving stakeholders, using the best evaluation evidence, and balancing central control with the local context; accurate

documentation and culturally responsive evaluations; have cross-party political commitment and government capacity to advise on direction and interventions; to be based on commitments to the dignity of persons, human rights, and respect for all (Foote, Jeff et al., 2014).

Recently, Catherine D'Inazio's project Counting Femicide, held at MIT, focused on data feminism and constructing an AI-driven platform to help grassroots initiatives make visible all women assassinated by violence based on gender. The project started with D'Inazio's work on data feminism, which evidences how activism and feminism shape social action and how, with design, widespread collectivism is possible (D'Inazio, 2024).

The book evidences the contribution of grassroots activists and institutions in tackling femicide worldwide. Moreover, it explores the contributions of design, highlighting the need for a critical and nuanced approach to design, ensuring technology supports activists' efforts to challenge power and create meaningful change. It also highlights some barriers in addressing intersectional realities for underrepresented groups of women and the need for a deep understanding of local contexts, cultures, and power dynamics. According to the author, the design must engage with these power dynamics, ensuring data is used to challenge the status quo and not reinforce existing inequalities (D'Inazio, 2024).

That said, the societal conditions are a fruitful place to design and enhance its social change capabilities, with emphasis on the areas of intersections of gender and oppression arising from the structures that operate our daily lives and which we contribute to supporting or, by choice, that we choose to begin to deconstruct by proposing new ways of being and doing design.

1.3 Contextualising Gender-based Violence and Domestic Violence

Gender-based violence (GBV) has its roots in social, historical, and cultural structures, and its mental models are shaped by gender inequality; this situation is exacerbated by the fact that it affects the vast majority of women, regardless of age, class, race, or origin. However, it affects the historically oppressed more strongly. Therefore, this section will provide a brief overview of the general scenario of GBV to contextualise the potential of Social Design to tackle the problem systemically..

Even though the Declaration of Human Rights guarantees equal rights regardless of gender, it is necessary to consider gender in its multiple spheres as a performative and cultural attribution, including gender identity and gender expressions. However, in a binary world, the prevalence of male and female attributes can exclude non-binary and trans people from this protective perspective. Without the intention of erasing or disregarding other expressions of gender, but by

considering the limited access to data in this sector, this research focuses mainly on violence against women as a primary force that hinders the potential for half of society to thrive.

It is essential to address gender issues, as many women suffer daily oppression simply because they are women or because they live in a position where they have been historically and culturally assigned to a social model of behaviour and subjugated by men. It is worth mentioning that violence against trans and non-binary women has been experiencing high rates of domestic and sexual violence in many countries due to transphobia and prejudice. According to the review, improvements in public resources and health investments are not enough to fight the discriminatory behaviours that prevent those women from living their choices freely.

Violence can have many forms, but when related to gender, no social group, culture, race, or age qualifies or typifies the phenomenon. According to the United Nations, the end of gender-based violence is crucial for managing global crises and for thriving societies (United Nations, 2018). As a violation of human rights, violence against women and girls has been alarming since the pandemic. The efforts to mitigate the impacts of GBV are varied and come from legislation related to social movements. However, the mechanisms we know are ineffective against gender-based discrimination and other obstacles to gender equity (Heise, 2011). Inequalities are rooted in social and cultural norms solidified in our society. Thus, transformations need social cohesion and commonality that can create flourishing social roles on the side of the oppressed. As quoted by Paulo Freire (1921–1997), "Washing one's hands of the conflict between the powerful and the powerless means to side with the powerful, not to be neutral"(p.122).

Despite all the efforts to deconstruct these structures over the generations, the numbers do not appear to fall. According to the United Nations, one-quarter of women around the globe suffer some violence in their relationships. According to recent reports, one in every eight women and girls aged 15-49 was subject to sexual and/or physical violence by an intimate partner (UNWomen, 2024). This fact impacts the development of their potential and affects them psychologically, physically, and emotionally, not to mention the fact that almost 40% of femicide occurs in an intimate context (United Nations, 2020).

In Europe, research conducted with 42,000 women showed that 55% of them had experienced sexual harassment at least once since age 15. Alarming cases also happen in the work environment, where 75% of women have been sexually harassed, primarily by their bosses, colleagues, or customers (32%) (Shreeves & Prpic, 2022). Sexual harassment, including in education and cyber-harassment, affects young women's participation in social life and in being politically active (Faith, 2022). Additionally, incidents like homicide, sexual assault, and rape are commonly

committed by intimate partners or members of their family, showing that even their homes are not safe places (UNODC, 2018).

The consequences of any act of violence can be perceived as physical, but they have significant psychological effects. However, the side effects trespass on the survivors' sphere, entailing the expenditure of money on prevention and health, impacting economic development for companies and countries, and interfering with social progression. Moreover, themes that seem far from this phenomenon, like climate change, have inferences related to violence against women. Recent research points out how climate change propels violence against women and girls when they are forced to leave their lands or face severe water scarcity situations. Their vulnerability presents an emergent negative impact and a lack of supportive structures and initiative (Desai & Mandal, 2021).

According to independent consultant Astrid Puentes Riaño, there are reports where women were victims of violence inside those institutions that were supposed to protect them and when the institutions reported those women as prisoners (United Nations, 2023). The field of domestic violence goes beyond areas and interests, entering the most diverse spheres and populating our days in newspapers, television news, and social media. What we are experiencing today reinforces the humanitarian character of the issue, which, in 1990, at the Conference on Human Rights (Vienna, Austria, 1993), brought discrimination and violence against women to the centre of the United Nations activities. It was in 1993 that the Declaration for the Elimination of Violence Against Women brought the foundations and new commitments to member states; the 4th Conference on Women's Rights (Beijing, China, 1995) strengthened these new commitments, which evidenced the discrimination and violence against women and placed them as being the result of constructions of social gender inequalities based on noticeable differences between the sexes (Lisboa & Pasinato, 2018). The ecological perspective of gender-based violence, curated by Heise (Heise, 1998), visually presents the interrelated aspects and effects of the phenomenon in personal and environmental life. This approach helped to develop contributions regarding the primary prevention of violence against women, where the community has a vital role in promoting non-violent behaviours and positioning itself as an ally against public abuse (Michau, 2005). Thus, mobilising civil society figures is a valuable way to achieve social transformation in this field, which benefits from social cohesion and synergy among the other participants in this system.

That said, a multi-angle observation of the phenomenon is crucial to better situate its transversal and multi-linearity structure. Thus, briefly, it makes some aspects of the compound GBV (Gender-based Violence) visible by presenting central elements, ideas, and concepts from sociology, anthropology, psychology, and law.

From the sociological angle, the comparisons between men and women have remained prevalent and have naturalised men; lately, the sense of neutrality has been attributed to them. To women, the attributes of fragility and incompleteness are solved only in the presence of men. The gender scripts are heteronormative cultural practices based on a binary perspective of behaviours that settle inequalities (Butler, 2017). The dominance over women's bodies promotes continuous segregation and oppression, reproducing legitimisation among male acts, whether manifested or institutionalised (Butler, 2017).

Through the decades, gender roles have shaped society, defining spaces, places, and behaviours. Lindsey (2016) states that socialisation is central to societal disparity structures. To the author, it is not hormones that could be responsible for acts of aggression, as this is unclear and well-proven, but "The cultural features of the context are powerful forces in determinants of aggression"(Lindsey, 2016, p. 45).

Additionally, masculinity practice has been reinforcing violence. Depending on what type of masculinity is performed, violence is sometimes accepted and even celebrated, which legitimises and reproduces dominance (Butler, 2017). For men, gender norms are more rigid in some ways, adding to the lack of emotional encouragement and to men being unable to express insecurities and being constantly pushed to be aggressive and to receive social approval.

From a psychological perspective, the China Convention has shed light on the impact on women's lives, which can decrease their self-esteem and confidence, acting powerfully on their health (World Economic Forum, 2023). Despite the evolving methods of psychological support for victims, COVID-19 was able to show the fragile system of interventions and the lack of mental support. Exposed to their abusive partners and obligated to stay at home, many women faced solitude, the incapacity to find help and a latent rise in injury risk.

Additionally, with unemployment and instability, women were more exposed to relational conflicts. According to Walby (2014), gender-based violence directly affects wages, absence, and work incapacity, reflecting productivity losses. However, it is to be added that costs can also be reflected in health systems, given the need to provide mental and physical support for victims. In addition, costs can also be reflected in the legal and criminal justice system, as well as personal costs, social welfare, and other psychological costs. A case study estimated the total cost per year to be around EUR 13,732,068,214.00 (Walby et al., 2014).

From a legal perspective, it took many decades for the phrase 'Women's rights are human rights' to become a statement absorbed by law. The Declaration of Elimination of Violence Against Women, from 1993, was the first instrument to define and address forms of violence against women. The Beijing Declaration and Platform for Action consolidated this Declaration in 1995,

settling 12 critical areas and introducing significant advances in women's rights (United Nations, 1995).

The UN Millennium Declaration also set goals for 15 years, whereas the gaps and barriers could be addressed by the agenda of the Sustainable Development Goals (UNODC, 2018). Despite advancements in law and politics, the legal system is made by people with biases and beliefs, influencing results and advancements in this field. In many places worldwide, judges are not expected to consider offenders not guilty of domestic violence, elevating the perception of impunity (Katirai, 2020). Moreover, a legal apparatus is only sufficient for treating the root causes hidden in our culture and the elements perpetuating the status quo.

This subchapter is an excerpt from the article Sustainable Development Goals and Gender Equality: A Social Design Approach on Gender-Based Violence published in January 2024 (Lima & Guedes, 2024). It intends to contextualise this complex issue on multiple levels, creating a better understanding before we continue to see the themes related to this research.

1.4 A resounding call for comprehensive systemic interventions in GBV

The field of domestic violence goes beyond areas and interests, entering the most diverse spheres and populating our days in newspapers, television news and social media. What we are experiencing today reinforces the humanitarian character of the issue, which, in 1990, at the Conference on Human Rights (Vienna, 1993), brought discrimination and violence against women to the centre of the United Nations activities. It was in 1993 that the Declaration for the Elimination of Violence against Women brought the foundations and new commitments to Member States, strengthened at the 4th Conference on Women's Rights (Beijing, 1995), to evidence the discrimination and violence against women, placing them as the result of constructions of social gender inequalities based on noticeable differences between the sexes (Lisboa & Pasinato, 2018).

The 2023 Agenda for Sustainable Development Goals highlights the transdisciplinary effects of gender inequalities, positioning it as a fundamental aspect of achieving Sustainable Development. This global commitment underscores the need for systemic interventions to address gender-based violence.

The Women's Empowerment Index (WEI) and the Global Gender Parity Index (GGPI) are transparent: "No country has achieved high women's empowerment while maintaining a large gender gap. This suggests that women's and girls' empowerment will remain elusive until gender gaps are eliminated" (United Nations Development Programme, 2023b, p. 1). Additionally, the report informs that neither a higher level of human development nor women's empowerment is

translated. Empowerment and Gender equality are virtuous circles when one receives positive reinforcement and actively propels positive transformations in another.

Challenges in addressing gender inequalities are becoming more complex, and their interrelations are increasingly difficult to intervene. Recent work has analysed SDG interdependencies and elaborated on six transformation points: 1. Education, gender, and inequality; 2. Health, well-being, and demography; 3. Energy decarbonisation and sustainable industry; 4. Sustainable food, land, water, and oceans; 5. Sustainable cities and communities; and 6. Digital revolution for sustainable development (see Figure 3). Gender Equality (SDG5) is evident in almost every transformation element, highlighting the centrality of this element in every intervention point (Sachs, 2019).

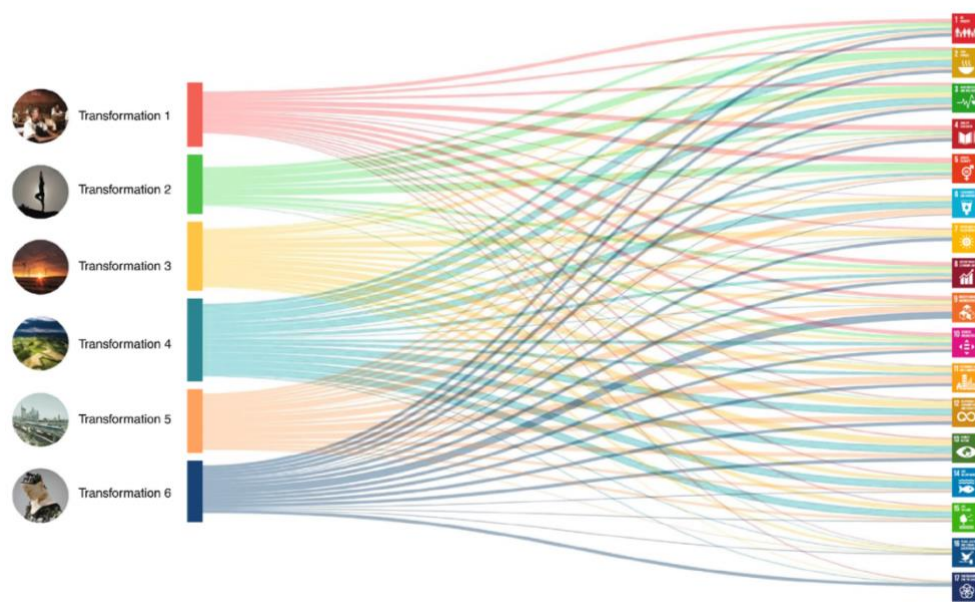


Figure 9 Contribution of each SDG transformation towards the 17 SDGs. Source: Sachs et al., 2019, p. 810.

The call to recognise the interdependencies of the SDGs has been sounded since the 2030 Agenda, which is based on targets for prosperity, people, the planet, and peace (Weitz et al., 2019). It is an exercise in understanding the ripple effect of certain areas that undermine or highlight policy investments (Lewis, 2016). Studies show that achieving policy coherence requires a systemic articulation among multiple stakeholders (Collste et al., 2017; Weitz et al., 2019). This is not just a necessity but also an opportunity, as research has identified potential SDG areas (1, 4, 11, 12, 14, 16) that, if approached, can enhance SDG5 investments and promote equality and other related areas for sustainable development (Leal Filho et al., 2023). It's a collective effort, and each stakeholder's role is crucial.

The increasing complexity and growing importance of gender equality among the SDG pillars underscore the urgent need to dismantle inequalities against women. The persistent question that

remains unanswered is why gender inequality persists despite numerous efforts to address it? Why does an unequal relationship between men and women continue to prevail across generations? As the United Nations (2023) points out, 'Progress towards achieving the gender equality goal has been slow and insufficient'¹⁵.

The Women's Empowerment Index (WEI) and the Global Gender Parity Index (GGPI) tools show that there is a need to balance the distribution of power so that women have full conditions to exercise their citizenship and life in general (Félix De Souza & Rodrigues Selis, 2023).

Legal mechanisms and public policies were created to redistribute power so that the sustainability agenda, referring to SDG5, is fulfilled (ILO, 2020; Pulay, 2018; United Nations Development Programme, 2023b). Among these mechanisms, education, work and participation in decision-making stand out. These spheres are interconnected and interdependent, where investments in education lead to better job opportunities and greater participation in decision-making, whether at the individual or collective level. The opposite is also true; giving women greater decision-making power gives them better chances of accessing work and investing in their education (OECD, 2018).

However, regardless of the area in which gender inequalities operate, the stereotypes against women and the rejection of change persist. Research evidence shows that 9 out of 10 people have some prejudice against women and believe that men play a better role as political leaders and business executives (United Nations Development Programme, 2023a). These beliefs demonstrate how challenging oppressive cultural norms are and how much is necessary to challenge this harmful social behaviour.

A normalisation of women's vulnerability over life persists. And common sense continues to address the issue of women's salvation. In agreement with Fatou Wurie¹⁶, empowering someone puts another person in a position of vulnerability (Amatullo et al., 2021), and particularly with women, this comes from a place of subjugation. Rather than being saved, women need tools and support to find their agency as humans who thrive.

The biggest paradox in SDGs is that they are far from being implemented, but they are the acceptance and cultural transformation of every sustainable goal (Soini & Birkeland, 2014). It relies on the cultural discourse and its resonance upon the multi-context in which the interconnections of multiple SDGs coexist. There must be a transition from concept to acceptance and application to

¹⁵ United Nations Women. The 2030 Agenda for Sustainable Development. Accessed August 30, 2023, from <https://www.unwomen.org/en/what-we-do/2030-agenda-for-sustainable-development>.

¹⁶ Fatou Wurie is a social justice advocate from Sierra Leone, who currently works in the innovation field for UNICEF HQ and participated in a roundtable that originated the book *Design for Social Innovation. Case Studies from Around the World*.

allow transformation. Thus, an integrated and self-managed society with correct sources and tools will be able to cross the cultural acceptance barriers (Montagud Rubio, 2020; Morin, 2003; Nayak et al., 2019). However, there is no way to have one culture, which could signify the death of other cultures (Light, 2019; Manzini & Thorpe, 2018; Wahl, 2016a). Hence, the understanding of multiple contexts and the ability to intervene is central to sustainable transformation.

Thus, strategies and action plans focused on behavioural changes in the socio-cultural paradigm must be thought for long-term action, with a perspective of continuous learning and exercise, because all revisions and adjustments in international policy proposals and demands for a more fabulous female presence in different environments will not help if this paradigm shift is not accepted. In this regard, greater awareness, accountability, and civic action must exist (Zia, 2008).

In addition, it must be born in mind that the multiple and interconnected changes in social, political and climate nature directly affect social participation, individual perception, and the return to the imbalance of gender inequalities, impacting collective actions to change the cultural paradigms and the 2023 Agenda for Sustainable Development Goals (Kwieciński, 2022; Sunstein, 1996). For as long as inequalities prevent them from achieving their fundamental rights, always putting them at a disadvantage to men, there will be no way to build gender equality or promote a transition to a sustainable and regenerative planet.

1.5 A model for resilience in disturbed times

Humanity faces unprecedented times with multiple challenges affecting people's wealth and lives. Forced migration, wars, poverty, and climate alteration are putting women and girls in alarming conditions, requiring that governments in local and global spheres adequately and rapidly adapt. To face these multiple disturbances at micro or macro levels, the ecosystem proposes an adaptive model to propel potential, connectivity, and resilience in the system when friction times or disturbances affect the capacity to thrive.

The context of social transformation requires radical, systemic shifts in values and beliefs, patterns of social behaviour, and multilevel governance and management regimes, which Olsson (2004) describes in three distinct phases: (1) preparing for change, (2) navigating the transition, and (3) building the resilience of the new trajectory of development (Olsson et al., 2004). To better approach transformation in social system design, we draw on ecosystem and ecology-inspired models to intervene.

The proposal created by Gunderson and Holling (2001) in Figure 10, called the resilience and adaptive cycle model based on ecological theories, says that change happens with periods of accumulation, growth, retention, and release, exposing vulnerabilities, but it also potentiates spaces

for transformation. To the authors, natural movement in change guarantees the maintenance of structures, resilience and diversity through their capacity to adapt to the environment. By acknowledging that system stability has multiple consequences, this model proposes to understand and manage complexity and resilience.

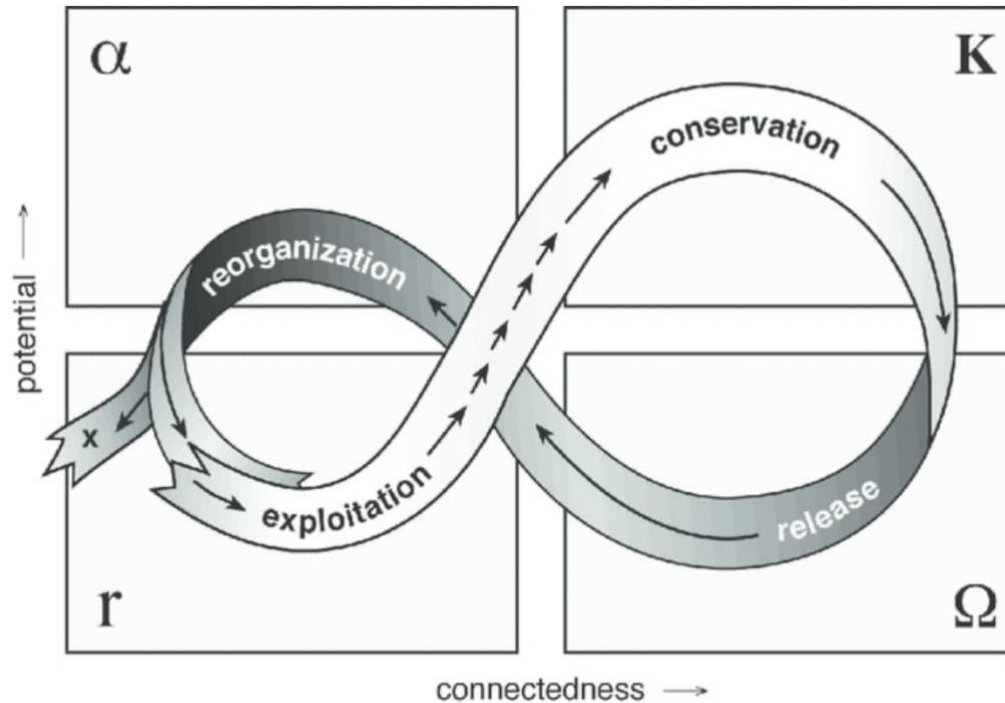


Figure 10 The adaptive cycle. Source: Gunderson and Holling, pg 34, 2001

In this proposal, resilience is responsible for working upon stability over time, and transformative resilience can react to changing conditions and disruptions, and both capacities generate the movement of regulation in systems. The loop proposed in the Adaptive Cycle has four areas: exploitation, conservation, release, and reorganisation. This model's potential describes the capacity for change and sets the limits for what is possible in the future. In connectivity, it is possible to perceive how well a system can adapt using internal controls instead of being influenced or regulated by external variables. For resilience, we understand how vulnerable a system is to unexpected disturbances that can push it past its threshold.

An initial establishment of a system recognises an exploitation or growth phase; innovation is perceived as an unlimited opportunity and the exploitation of available resources and growth. However, in terms of potential, it is declining because it presents the system's future in concrete forms as resources are explored and designated for use. Its connectedness is low because the system components are weakly connected, leading to low internal regulation. The resilience in this part of the cycle is high; the system can adapt well to multiple external variables.

In quadrant K, the conservation phase is known to decrease the growth rate, and the system approaches maximum capacity. The connections increase while the organisation is rigid and internally focused. The potential in this phase is high; presenting a storage of resources results in high capital. The connectedness is high because the connection within the systems is reinforced between system actors and feedback mechanisms. The resilience is low because the increased system connectedness leads to a more rigid structure, which weakens the system's defences against external disturbances.

The exploitation and conservation phases can present a slow sequence together. Systems spend most of their time here, connectedness and stability increase, resources grow and accumulate, and rigid structure, firmed connections, and abundant resources make the system friable.

In the collapse phase, we face a shock or outside disturbance that exceeds the system's resilience. The interactions and connections formed are broken or suffer considerable impact. The chaotic behaviour and uncertainty rules are imperative. In this moment of the cycle, resources are abruptly released or lost, and the potential declines. Connection and internal regulation controls are broken, affecting connectedness stability and making it decline rapidly. The resilience is low as internal controls break down, and the ability of the system to adapt declines.

In the quadrant Alpha, new as reorganisation, the system is open to reorganising organisations' uncertainty about options for the future, and the likelihood of creative change is highest. The potential is high, exposing the openness to future development and change. However, connectedness is low because the connections are weak, leading to internal regulation. However, resilience is high due to the vast region of stability that makes the system adaptable. The congregation of reorganisation leads to shorter and faster periods, creating opportunities for innovation, redesign, reorganisation and redistribution of resources.

Besides the lack of data to quantify and track system movements through the adaptive cycles and the complexity of modelling the scales, the panarchy model provides a framework for embracing and managing complex systems in a rapidly changing environment. This model evidences the importance of understanding cross-scale interactions and embracing change to propel the adaptive capacity to transform social-environmental realities.

2 What collectivises the collective in complex social issues

In complex societal issues, the collective force is responsible for raising awareness about the phenomenon and providing forces to act towards, as happens in domestic violence, where networks are created to protect women and girls, evidence of the need for governmental action, structuring answers for victims and much more. Whether from non-governmental institutions, associations, activists, or government organisations, there are no responses to domestic violence and gender-based violence without collective effort and organisation to tackle domestic violence and other kinds of gender-based violence according to capacity, social development and social engagement in Brazil, a collective force of citizenship pressures governmental action and in 2024, the first integrated complex for victims. The Casa da Mulher Brasileira¹⁷ is an innovation in humanising women. It integrates specialist services for the most diverse types of violence against women in the same space: reception and screening, psychosocial support, police station, court, public prosecutor's office, public defender's office, promotion of economic autonomy, childcare—playroom, temporary housing, and transportation centre.

It is part of the Women, Living without Violence program, coordinated by the Secretariat for Women's Policies of the Presidency of the Republic. It facilitates access to specialised services to guarantee conditions for confronting violence, women's empowerment and economic autonomy. It is a definitive step by the State towards recognising the right to live without violence.

In Spain, improvements have been made in the law and the assistance centres for victims nationwide. The specialised support guarantees full assessment of information and guidance during the processes, preventing and combating violence through allocated funds. The report from 2024 celebrates the Organic Law on the Comprehensive Guarantee of Sexual Freedom, "which criminalises acts with a person who has not given free consent"¹⁸.

Portugal established another proposal to develop networks rather than specialists. Specialised networks are managed mainly by city councils and cover multidisciplinary areas of intervention, such as police stations, courts, public prosecutor's offices, public defender's offices, the National Commission for Kids and Youth Protection, temporary housing and other partners from

¹⁷ Ministério das Mulheres. Casa da mulher Brasileira. Accessed, 20 January, 2025 at <https://www.gov.br/mulheres/pt-br/casa-da-mulher-brasileira>.

¹⁸ Council of Europe. (2024, November 21). *GREVIO publishes its first thematic report on Spain*. <https://www.coe.int/en/web/istanbul-convention/-/grevio-publishes-its-first-thematic-report-on-spain>

civic and solidarity associations. The structure of a collectivist proposal supports services and products from each area. Most of the partners in these networks are institutions that receive subsidies from social security or even European funds, which guarantee their existence (Comissão para a Cidadania e a Igualdade de Género – CIG, n.d.). Traditionally, governments manage complex problems through isolated interventions that address symptoms without tackling root causes. Their structures represent the linear mode of deeply complex social issues. To effectively address these problems, governments are investing in adapting well-established administrative systems, while Governance in complexity requires acknowledging the interconnectedness of actors and the system being governed.

This proposal requires a more active role in system change, embracing a system approach in contemporary policy-making and holistic intervention proposals. Additionally, citizen engagement and participation are fundamental for achieving impactful change. This involves expanding the peer community to include diverse actors with various perspectives, knowledge, and values. The Irish Citizens' Assembly was an opportunity to develop an active role of the population that developed not just constitutional interventions but an accurate sense of justice and shared decision-making. Another great example is the Austrian Klimarat, through a participatory assembly selected by civic lottery, scientific board, stakeholders advisory, and members of social institutions, proposed measures to reach climate neutrality in Austria by 2024 (European Environment Agency, 2024).

The challenge of breaking down silos and fostering collaboration across sectors is the current goal for governance in Europe (Cook & Tönurist, 2016). Overcoming the traditional division of problem spaces into separate departments, such as housing, energy, and human services, can enable more comprehensive and effective governance. It opens a space for individuals outside the problems to participate and contribute.

Collectivity presents a central role in challenging complex societal problems. In the place of collective arrangements, there is space for multiple formulations, as exposed by Kania and Kramer in Figure 3. The nature of each format is different, but the core of collaboration sets the direction for what matters. For the social sector, this is the main reason projects, initiatives, and institutions survive by enabling the power of integration and synergy to promote social change. The elevated role of synergy differentiates a collective proposal from a collective impact (Kania & Kramer, 2011). However, its centralisation does not guarantee the perfect functioning of all its apparatus.

Table 2 Types of collaborations

Funder Collaboratives	are groups of funders interested in supporting the same issue who pool their resources. Generally, participants do not adopt an overarching evidence-based plan of action or a shared measurement system, nor do they engage in differentiated activities beyond check writing or engage stakeholders from other sectors.
Public-private partnerships	are partnerships formed between government and private sector organizations to deliver specific services or benefits. They are often targeted narrowly, such as developing a particular drug to fight a single disease and usually don't engage the full set of stakeholders that affect the issue, such as the potential drug's distribution system.
Multi-Stakeholder Initiatives	are voluntary activities by stakeholders from different sectors around a common theme. Typically, these initiatives lack any shared measurement of impact and the supporting infrastructure to forge any true alignment of efforts or accountability for results.
Social Sector Networks	are groups of individuals or organizations fluidly connected through purposeful relationships, whether formal or informal. Collaboration is generally ad hoc, and most often the emphasis is placed on information sharing and targeted short-term actions, rather than a sustained and structured initiative.
Collective Impact Initiatives	are long-term commitments by a group of important actors from different sectors to a common agenda for solving a specific social problem. Their actions are supported by a shared measurement system, mutually reinforcing activities, and ongoing communication, and are staffed by an independent backbone organization.

Source: Kania and Kramer, 2011, p. 39.

As the need for multidisciplinary structures to take effective action grows, we must focus on preparing for social innovation and developing a comprehensive framework for addressing the social problems of the new era. This framework includes our own deficiencies, barriers, and vulnerabilities to dealing with sensitive topics, relational challenges, the persistent power dynamic, and so on.

The structures and investments proposed by Kania and Kramer (2011) are valuable in the third sector; however, they don't guarantee its efficiency and underestimate the capacity of making 'Five Conditions for Collective Success' viable. The typical agenda is basilar but requires a destructured siloed mindset and a shared visualisation embodiment. This does not rule out the need for a centralised role of trust that moves the collective feeling of identification and personification of this common agenda. Measurement systems are the Achilles heel to many complex societal problems, in particular, gender-based violence, where data all over the world are desegregated and pulverised (D'Ignazio, 2024). Collecting data and measuring have become central to those compromised with long-lasting impacts.

Regard diverse groups to reinforce their activities in the sense of working together to combine their strengths and efforts easily; besides being necessary and creating collective moments of action, this proposal faces the individual nature of each institution involved, requires extra time of commitment, and in some ways can trespass the scope of some institutions affiliated in this collective. According to the authors, communication is not a mere formality but a compromise of building trust and proximity through regular meetings and time. Finally, the authors reinforce the necessity of a supportive infrastructure that allows this collective action to succeed, which is not true in multiple third-sector or governmental institutions. Many of them struggle with a lack of personal and financial structure to have dedicated people exclusively to manage and report collective impact. The answer? Kania and Kramer (*Kania & Kramer, 2011*) suggest mobilising this specific collective goal:

This requires a fundamental change in how funders see their role, from funding organisations to a long-term process of social change. It is no longer enough to fund an innovative solution created by a single nonprofit or to build those organisations. Instead, funders must help create and sustain the collective processes, measurement reporting systems, and community leadership that enable cross-sector coalitions to arise and thrive (p. 41).

A few years later, the authors developed another article to review these assumptions to thrive in collective impact, adding the system's lenses in *Embracing Emergence: How Collective Impact Addresses Complexity* (Kania & Kramer, 2013). Besides the authors proposing a collective impact as a new way to approach collective social change, the collaborative approach to original people, in African ancestral and Indigenous wisdom, is a common sense of existence. It is not just a perception of a collective body or group working together, but a real embody of what it means to be part of the collective called nature (Sheehan, 2011).

When Kania and Kramer (2013) say, "Collective impact is not merely a new process that supports the same social sector solutions but an entirely different model of social progress" (p. 1), they are given space to the acceptance of emergence, the vigilant and actionable actor in the life of the collective, and to a continuous learning process, as a natural form of being. However, those changes don't come without a shift of mindset that allows people to learn by doing, act while critically observing, and embody change.

That is to say, collective impact needs to come with nourished collective responsibility in the sense of agency. Regarding social challenges, government and non-governmental institutions usually partner or fund problems as a common practice in policy implementation. However, in most countries, there is no such design approach during this searching, planning, and implementing

process. Some places have implemented hubs for social innovation in policy to combat policy or systems by default. London is a good example with its Public Policy Design¹⁹ that practice community-based approaches in thinking and implementing local transformations in the UK.

Besides the advances in integrating multiple stakeholders, a common agenda doesn't guarantee effective solutions to problems. Neither human nor financial resources are the key answers to solving the problems in collective ways to manage the resources and goals accurately in a way that is managed to achieve the expected goals. Invest in novel models to propel participation from people outside the system that could enrich the scope of action. Further, a transformation in the social mindset shapes everyday decision-making, demanding criticality and a deep level of the system's vision.

The collective force is well documented in multiple areas using community-based and participatory research (Gazulla, 2021; Hekler et al., 2019; Mannell et al., 2021). However, to navigate into a fluidity of solution building, there is a need to embrace the lack of solidity even in societal challenges and create space for exploration. This movement society, as stated by Bauman (2000), requires what Manzini explores in Social Design innovations when proposing a "collaborative living as a social form" (Manzini, 2017, p. 189). This idea of sharing the neighbourhood, the city, and the living spaces is a good call for collaboration and responsibility, where multiple stakeholders can participate and activate humans' togetherness and cooperative essence. If we can enable collaborative living through a food system or cohousing, why can't we improve how we approach gender inequalities? What could be possible to create with engaged people and the right tools to transform current systems?

Decision-makers must acknowledge the necessity of building strong and aligned networks to wave transformations along the systems. These collective structures can be activated through cross-sector participation (CSP), which enables participants from different segments – government, civil society and market – to collectively articulate shared resources, perspectives and common goals (van Tulder & Keen, 2018). CSPs can provide communities access to resources and expertise they might not otherwise have. For example, a local government and nonprofit organisation partnership could provide funding, technical assistance, and volunteers to support a community garden project.

By bringing diverse perspectives and knowledge together, CSPs can help communities develop innovative and practical solutions to complex social problems (van Tulder & Keen, 2018). Moreover, engaging community members in problem-solving is helpful, giving them a voice in decisions that affect their lives. This can lead to greater community buy-in and support for solutions, improving social cohesion and ownership.

¹⁹ Public Policy Design. Accessed on October 4, 2024, <https://publicpolicydesign.blog.gov.uk>.

Overall, it is important to notice that collectivists profoundly compromise in developing an equitable, inclusive, and accountable approach to guarantee fair and shared decision-making over the processes. Developing meaningful participation requires the full involvement of communities, from identifying the problem to developing and implementing solutions. Communication and transparency must be central to elevating trust, and the goals, roles, and responsibilities can be effectively communicated with each other and the community. Additionally, partners need to build relationships based on mutual respect and understanding.

When our lived experience of theorizing is fundamentally linked to processes of self-recovery, of collective liberation, no gap exists between theory and practice. Indeed, what such experience makes more evidence is the bond between the two – that ultimately reciprocal process wherein one enables the other. Theory as Liberatory Practice – bell hooks (hooks, 1992, p.2)

3 Emergent dimension in design for social change

As has been shown, there is a real need for collective interventions based on shared responsibility in facing complex issues such as domestic violence, whether to create responses for prevention and re-education for a less oppressive society. To address the necessity of multiple interventions on a critical approach due to the complexity of this problem, a condensed and static idea of a Social Design as one area or definition does not answer this reality. It is imperative to advance a non-exclusivist approach to Social Design—one that is inclusive of multiple territories, and grounded in multidisciplinary and multi-structural perspectives.

To approach such a complex societal problem, one needs to embrace trouble, as Donna Haraway (2016) proposes in *Staying with Trouble* when she evokes Anna Tsing, an anthropologist who uses a matsutake, a species of mushroom, to demonstrate how they deal with.

Blasted landscapes allow us to explore the ruins that have become our collective home. To follow matsutake guides us to possibilities of coexistence within environmental disturbance. This is not an excuse for further human damage. Still, matsutake shows one kind of collaborative survival (...) Matsutake tells us about surviving collaboratively in disturbance and contamination. We need this skill for living in ruins (Haraway, 2016, p. 37).

The author explores the potential of collectivism and speculation. Besides being a work that evidences environmental and multispecies collapse, it relates significantly to the way women are seen through the exploitative colonialism of the bodies, exhaustively explored by Lugones (2010), Segato (2003), and Butler (2017). Additionally, Haraway's approach sheds light on the potential of creating collaborative new worlds, a proposal by global south schools that progressively design adds influence such as pluriversal design (Escobar, 2018)—following Lucy Kimbell's interpretation of Social Design as "a set of concepts and activities that exist across many fields of application including local

and central government and policy areas such as healthcare and international development." (Armstrong et al., 2014, p.15).

All these emergent design domains follow the urgent calling for social transformation and the necessary rearrangement and realignment of epistemologies capable of embracing the multitude of layers and elements. Again, the idea of an immutable and cartesian Social Design gives space for a fluid and experimental of multiple domains.

From this perspective, Social Design benefits from the domain of system thinking, deepening understanding and visualisation and embracing complexity in social challenges. It gains the capacity to reflect critically through critical design approaches. It embraces the richness of connecting in relational and meaningful ways to thrive collectively. It gets tools for transitioning from current realities to desirable futures. Finally, pluriversal design challenges the status quo and current linear thinking, embracing acting with a whole perspective, like in the regenerative proposal.

3.1 System Thinking Dimension

Systems are everything one can perceive about the interactions between structures and behaviour, from people to organs and molecules. According to Meadows (2008), systems are not mere cases of cause-effect made by chance; as part of the system's human condition, they act as non-passive elements nor victims of systems. Alternatively, as the author says, "The flu virus does not attack you; you set up the conditions for it to flourish within you" (p. 2). This model operates against the reductionist basis on which our way of thinking is constructed. In Bertalanffy's theory system, the reductionist scientific position avoids a constructionist perspective where the subject can construct their reality (Von Bertalanffy, 1968).

However, our way of thinking and constructing thought has had its reductionist bases since the Industrial Revolution. The rational way of operating directs our responses into a cause-and-effect framework, reducing our understanding of parts of what the real problem to be solved is. In other words, we tend to avoid complex systems, but we are complex systems.

The development of thought is central to problem-solving, where the dissociation of elements is fragmental and superficial. As Morin says, "Effectively, the intelligence that only knows how to separate fragments of the complex world into separate pieces, breaks up problems, unidimensionality the multi-dimensional. It stunts possibilities for understanding and reflection, thus eliminating opportunities for corrective judgment or long-term vision" (Morin, 2003, p. 14).

Moreover, in system thinking, emergence appears from the interaction between parts and within these relationships, flourishing the loops responsible for making the systems operate. In social systems, this becomes evident when a group interaction can create cohesion. Additionally, it is

impossible to detach one element from the group; doing so could reveal a reductive approach, which is the opposite of system thinking aligned with Aristotle's iconic quote, 'The whole is more than the sum of its parts' (Meadows, 2008).

System Thinking theories invite us to disturb the systems to address systemic problems such as hunger, poverty, and climate change because these structures reflect how things are not working in our living system. Thus, its theory and application enable us to see the parts of an entire system and its interconnections and relations. Moreover, system theories deal with concrete structures and abstract and symbolic compositions (Ackoff, 1974).

This desirable outcome is not possible without a deep and sensitive understanding of a related context, as Jones (2017) explains when proposes an explanation of Systemic Design: "Systemic design frames a whole system from a human perspective and connects knowledge and insights from our learning in a social system to the human activities (placements) in product, service, and artefact design proposals " (p. 159).

Different approaches have been developed to understand the complexity of social systems. According to Ackoff, an intrinsic need exists to understand organised complexity and its interactions from the group perspective and its operative parts acting with a similar objective (Freire et al., 2011). Alternatively, as Morin clarifies, the benefits of complex thinking argue about the ecologic nature of thought when every part is interconnected in "inter-retro-actions"²⁰ (Morin, 2003, p. 25).

In many fields, social innovation evolved to embrace the systems perspective, moving from a product and service provider to a complex service system view, including public participation in private and citizen representatives (Nayak et al., 2019; Sadabadi & Aramipour, 2022; Veale, 2014). Thus, system thinking not only enriches Social Design practices but also propels the creation of more assertive and impactful proposals. Rather than a problem-solving perspective, the systemic design approach enables practitioners to navigate an exploratory journey for leverage points and emergencies that impact the whole (Metcalf, 2014).

According to Murray, Caulier-grice and Mulgan (2010), systemic change applied for social innovation is:

The ultimate goal of social innovation. Systemic change usually involves the interaction of many elements: social movements, business models, laws and regulations, data and

²⁰"Such a thought inevitably becomes a thought of the complex since it is not enough to inscribe all things or events in a "frame" or a "perspective". It is a question of always looking for relations and inter-retro-actions between each phenomenon and its context, the whole/parts reciprocity relations: how a local modification has repercussions on the whole and how a modification of the whole has repercussions on the parts. It is a question, at the same time, of recognising unity within diversity, diversity within unity; to recognise, for example, human unity in the midst of individual and cultural diversities, individual and cultural diversities in the midst of human unity (Roque, 2011)."

infrastructures, and entirely new ways of thinking and doing. Systemic innovation commonly involves changes in the public, private, grant, and household sectors, usually over long periods" (p.13).

Bijl-Brouwer and Malcolm (2020) elected four systemic principles that clarify Systemic Design and Systems thinking in social innovation in this path for the confluence of disciplines and interests. Each principle settles how a challenge should be approached and empathised with, how to build relationships to propel acknowledging and creativity, how to develop mental models that influence change, and which evolutionary design approach should be taken to activate social innovation (Bijl-Brouwer & Malcolm, 2020).

They explain the importance of the systems thinking perspective and how it focuses on relationships to explore the invisible possibilities and tensions. One central element of their discovery is about the importance of mental models as a leverage point for social transformation from the perspective of practitioners. This case study demonstrates that understanding mental models can provide practitioners with another opportunity to influence human beings within a system — alongside working with human relationships, cognition, emotion, experience, and values (Bijl-Brouwer & Malcolm, 2020).

From this perspective, systemic relational tools such as dialogues are practice fields for the designer's intervention. It starts from the principle that the actors in the systems are purposeful individuals acting in social systems, as proposed by Emery (2005), "one that can change its goals in constant environmental conditions. It selects goals as well as the means to pursue them. It thus displays will" (p. 31).

Human dynamics inherently impact emergent behaviour in social systems. As Bijl-Brouwer and Malcolm proved, stimulating these ways of thinking and the strengthening between individuals can unfold creativity, innovation and new patterns of behaviour more beneficial than top-down decisions (Bijl-Brouwer & Malcolm, 2020). From this perspective, how can mechanisms and behaviours capable of propelling emergency within the current system be designed in specific contexts of vulnerability, social inertia, and lack of resources? How can people be stimulated to act and contribute locally to social development in their communities?

At this point, system thinking approaches are not the solution tool for complex problems. Besides that, it contributes to giving a whole perspective of the issue and finding ways to intervene, points of leverage, and disruption. Rather than envision the future, it provides alternatives. From a systems thinking perspective, the interactions focus on creating conditions, mechanisms, infrastructures, or models that enable emergent behaviour. It can be learned between these dynamic interactions, promoting deep individual and system understanding.

Nowadays, some countries are developing system-thinking approaches to reduce the silo mentality and stimulate decision-makers (Costa et al., 2020b; Sevaldson, 2013) to a more proactive role in creating collaborative solutions with multiple sectors, as Banathy (2013) defines in cultivating a systemic co-design culture among the government and policymakers (Aguirre Ulloa, 2020). Prominent use of system thinking in Design for social change can be seen in the community (Hovmand, 2014; Seelos, 2020) approach to sustainable development goals and policy making (Nelson, 2004; Ramos et al., 2019; Weitz et al., 2019), and in gender equality issues (Carne et al., 2019; Lewis, 2016; Tracy et al., 2023).

Relies upon the potential of enabling change, that systems-oriented design applied to help decision-makers can act as a ripple tool to generate transformation in gender-based violence and violence against women and girls. On the one hand, networks are the basic pattern of living systems. On the other hand, when these networks are designed to solve societal problems by reductionist minds, the compartmented approach creates solutions restricted to those related areas. Thus, the ripple effect is a wave on a big ocean rather than a long-lasting intervention interrelated to many other areas.

The systemic non-linear approach looks for patterns, relationships, connectedness, and context among the living systems, where all properties derive from interaction, interdependency, and multidisciplinary dialogues from other parts. As Capra defines, all elements are in *mutually dependent coevolution* (Capra, 2007). The author argues that to access a non-linear mind, one must approach meditation, trance, rituals, arts, or ways of accessing our subconscious and non-linear living nature rather than our rational mind.

Hence, Social Design embraces complex dynamic networks and learns from system thinking effective ways to better approach a co-design intervention aligned with long-lasting solutions (Ramos et al., 2019). The idea is to deconstruct the persistent linear model and siloed structures and propose new meanings for existing systems.

System Thinking and Policy

Since the early 2000s, design domains have been spreading through governmental fields, helping countries evolve their services, products and, more recently, policy. The practice of collaboration, co-creation and co-design is a common approach in European policies. A great example of what design can do in policy is the Tech Design Policy Lab and its project, which helped to design recommendations for women's online safety against gender-based violence (World Wide Web Foundation et al., 2021). The study allowed developers, policymakers, and designers to confront their biases, generate outcomes, and prototype better and safer online tools.

As proposed by Kimbell, policy design has the aim to propose and propel a 'sense-making public manager', which means making actors able to embrace complexity, envision futures to solve problems, generate a system focus and citizen-centric perspective, facilitate the process, and creates a 'policy-as-impact' behaviour (Kimbell, 2015). With the improvement of collaborative tools and social participation, policymaking is being networked and open work demanding the creation of spaces where people can participate in the fluid existence of in and out governmental institutions.

Besides being a new mindset for many non-designers, some studies can show the relevance and benefits in this field (Htun & Weldon, 2012; Lindberg et al., 2019a; Mortati et al., 2022; Villa Alvarez et al., 2022) where the collective responsibility generated by design for policy is an open space for experimentation and social action. The exploratory sense of policy labs must be encouraged to bridge societal challenges that reflect people's necessities translated into practical solutions.

However, design participation in many parts of policy development and the decision-making process is still in the government's hands and politics. There is room for more social participation and an active role in design to find and build leverage points with multiple actors (Lindberg et al., 2019b). As proposed by the Policy Lab in the UK, the objective is to improve policy knowledge for designers and give policymakers expertise to do their jobs as a balanced ecosystem.

Rather than proposing innovation for complex realities, it is needed to increase awareness of other approaches, introducing to the public sector possible ways to approach systemically complex phenomena. It is possible to think of a "public systemic design", introducing it to new concepts, narratives, and visualisations, different from the Western application, proposing a shift of thinking and decolonising knowledge.

In order to do that, knowledge from ancient perspectives is presented by Indigenous people and First Nation communities. A field of learning can emerge when facing the tools our ancient people deal with complexity, as says Tyson Yunkaporta:

[yarning] has protocols of active listening, mutual respect, and building on what others have said, rather than openly contradicting them or debating their ideas. It references places and relationships and is highly contextualized in the local world views of those yarning." (...) "The end point of a yarn is a set of understandings, values and directions shared by all members of the group in a loose consensus that is inclusive of diverse points of view" (Yunkaporta et. al, p.106, 2020).

Colonising countries are looking forward to introducing indigenous perspectives and ubuntu concepts in design approaches (Goodchild, 2021; Sheehan, 2011). This approach also confronts the

role of design and designers in a more political responsibility, besides giving awareness for the oppressive forms of policy, design and governance.

Hence, proposing a different model to engage policymakers and governance is essential to thinking in systemic transformation. Inviting the system actors to think and act as a whole is called by many designers for a policy as the next level of design intervention in public affairs, as Kieboom (2023) proposed in her compilation of theory and practice among the public system for the Canadian government²¹.

Thus, designing for and with public service through a system thinking perspective proposing a decolonial approach means considering that the current reductionist model has its paradoxes and affects the construction and application of a balanced intervention in society. Considering that the interrelations among the participants in this system are siloed and linear, the design proposes a reflection and practice calling for awareness, consciousness and responsibility.

The term public systemic design, introduced by Kieboom (2023), "highlights collaborations between and within governments, organisations and communities, over applying systemic design merely in or for individual organisations or businesses"²².

Additionally, its contribution may trespass the governmental walls to work collaboratively with communities with a regenerative focus, making it possible to reflect and act in an intuitive and iterative environment (OECD, 2017).

According to practitioners and researchers, public servants and the government lack a perception and acceptance of complexity (European Environment Agency, 2024). Moreover, building collective action with public service also means deconstructing some prevalent assumptions and power dynamics once a natural "holistic" perception doesn't emerge from nowhere. As mentioned, dominant systems can oppress different approaches, requiring consistent, long-term action towards the current extractivist, rational, linear, and reductionist reality.

Thus, what does a system perspective mean in public service? It means enhancing complexity perspectives and helping public servants and other actors visualise complexity, embrace it, and act. Besides, it means decolonising designers' practices from dualistic, oppressive, reductive, and dominant behaviour. The system perspective on public service also recognises the dichotomy faced by those powers that prevent change. On the one hand, we have mechanisms trying to move

²¹ Kieboom, M. (Jan. 5 2023). Unbounded Affairs: Systemic Design (with)in Government. Retrieved March 24th from <https://medium.com/publicsystemicdesign/blog-1-introducing-the-blog-series-unbounded-affairs-systemic-design-with-in-government-7c0d4a16f1ee>

²² Kieboom, M. (Jan. 18 2023). Unbounded Affairs: Systemic Design (with)in Government. Retrieved March 25th from <https://medium.com/publicsystemicdesign/blog-3-systemic-viewpoints-introducing-and-questioning-systemic-design-with-in-a-public-service-e7c8380cbe6c>

forward willing to construct different proposals based on experimentation methods. Conversely, rigid structures avoid transformation and risk and are moved by political inconsistency.

Finally, using system thinking perspectives in public service, one must ask the following question: How do ownership and accountability exist in the design of social systems involving multiple stakeholders and actors? On complex problems such as gender-based violence, people always expect that others answer the victim's calling. Thus, ownership and accountability must be shared across society and every institution as part of this complex system. This will be only possible if we add a critical perspective around our roles, values, and actions.

3.2 Participatory Dimension

In its participatory nature, Social Design explores sharing responsibility and stage with people considered experts in their domains and life experiences. Emphasises collaboration and inclusion, focusing on the active involvement of stakeholders and other relevant parties throughout the design process. This approach values diverse perspectives and seeks to empower those directly impacted by the outcomes. All participants share the richness of co-creation for the benefit of the community.

The critical nature of Social Design presupposes a participatory approach to researching and developing social interventions. Besides the introduction of participatory design around the 60s and 70s with the intention of helping technology solutions be closer to those that use it, this domain is widely applied as an emancipatory and critical tool (Freire et al., 2011). With resemblance to Social Design, participatory design must be seen not as a domain or discipline, which it is, but as a "diverse collection of Participatory Design principles and practices has been developed, driven by ongoing efforts to deepen our understanding of how collaborative design processes can enable the participation of those who will, in the future, be affected by their results" (Simonsen & Robertson, 2012, p. 2).

Directly involving people in co-design can enable multiple voices to be heard and ways to cooperate and develop shared learning through the iterative process with designers and non-designers, expanding perceptions and action on the system's needs. Whether the roles of participants, users, and facilitators were categorised at the beginning of participatory design or nowadays, participatory approaches require a critical and decolonial mindset (Gazulla, 2021; Klumbyte et al., 2022; Mannell et al., 2021).

This democratised way of designing engages participants actively with the process and path for change, emerging as a new way for people's agency. As design has become a critical vehicle for creating solutions, interventions and social participation, its approach has also been questioned. The social dynamics in design through its collaborative methodologies can be a form of power dynamic

when proposing to 'use' participants' experience to develop solutions without contributing to their needs. As van Amstel (2022) exposed, many human-computer interaction theories evidence explicit and implicit oppressions when undermining users, in what the author calls 'userism', an act of dehumanisation which can be subverted by liberating these interactions from oppression. Furthermore, unveiled researchers expose violent structures in digital design for Intimate Partner Violence (IPV), reflecting design actors' vulnerabilities to face collaborative practices in sensitive fields (Fiadeiro et al., 2023).

Proposing an overweight design role may seem like an overload and even exaggerated. However, as Buckley (2020) reflects, the way design shapes reality evidences its relevance in developing significant changes. On the other hand, limiting our actions towards oppressive structures can perpetuate inequalities, which, according to Drydyk (2021), puts the collective and individual agencies on opposite sides in the path to change oppression, confronting beliefs, behaviours, and actions in the benefit of self and the whole.

Hence, situating the oppressor role of design is relevant to reframe design's contribution as a self-reflection and positive action for liberation. Ahmed is crystal clear when evidence of the personal is political in ways that every individual must act in favour of social changes that benefit all (Buckley, 2020). Thus, the importance of developing agency as a natural form of existence can also be practised.

The presence of an oppressive design is vast and intersects many levels and areas of people's lives. From Souza's (2020) perspective about design as a racist mechanism, the Western and European narrative shapes consumers' minds through visual elements like symbols as racist motifs to create bias against African Americans and other minorities. In his work, it is possible to see how communication perpetuates segregation and the imagery of black people in American society. According to Santos (Santos, 2018), binarism is a prevalent aspect of our material culture, exposing a hegemonic culture in everything around us. In the same focal point, Perez (Perez, 2020) shed light on the enormous number of products and services with a male-centric solution as a human default.

Moreover, the political component of design is gaining currency with debates around decolonisation (Fry, 2010; Schultz et al., 2018). It evokes changes in design related to multiple levels, from teaching to practice and research, where the decolonial perspective can diminish the colonial prevalence in how design is made and effectively use participatory approaches to enable people to design with (Amstel et al., 2022; Schultz et al., 2018). As Schultz (2018) states, rather than counter attacking the colonial design's creation, it creates new ways of being that go against the productivist colonial logic. This critical approach in design gives people a place to act in shaping the world, and designers are responsible for conducting such approaches with ethics.

It is not more functionality than participatory, which is about participation, which involves an ongoing process of relationality and embraces friction during the process. Building trust and room for genuine participation requires care, empathy, and self-awareness about the barriers one must cross or not. Interacting with multiple players or stakeholders can flourish confluences and divergences that must be embraced as part of the process. The participation process's richness is developing spaces to propel the best part of themselves. The positive application of participatory is seen in social innovation and policy (Freire et al., 2011; Lindberg et al., 2019a), for health (Bowen et al., 2013; Boyd et al., 2012), and through a critical future thinking perspective in education (Gazulla, 2021) are just a few examples of its applicability.

However, more acknowledge that genuine participation allows an in-depth context understanding of 'users', consumers, or participants. It is a critical and emancipatory tool that makes knowledge accessible and shareable. This reflection through action enables designers and practitioners to create multiple worlds with a reflexive source and accountable people involved (Schön, 1992).

Through practice we produce the world, both the world of objects and our knowledge about this world. Practice is both action and reflection. But practice is also a social activity; it is produced in cooperation with others. However, this production of the world and our understanding of it takes place in an already existing world. The world is also a product of former practice. Hence, as part of practice, knowledge has to be understood socially – as producing or reproducing social processes and structures as well as being the product of them" (Ehn 1993, p. 63 apud Simonsen & Robertson, 2012, p. 7).

The participatory approach is a process where communities can thrive in complex subjects. In the path of community resilience, Manzini and Thorpe (2018) assert that values, narratives, ideas, and projects arise when creating an environment that fosters exchanges and mutual learning. This learning opportunity occurs when all participants are actively involved and where design serves as a facilitator for these encounters. To Manzini & Thorpe (2018), "These are radical social innovations. They appear as creative communities and, when successful, evolve into collaborative organisations: groups of people who choose to collaborate with the aim of achieving specific results and creating social and environmental benefits"(p. 3). They explore how these practices of collectiveness can create place-related communities, weaving people and places to act towards their problems.

A primary objective is establishing a user-centred collaborative approach, enabling participants to engage actively and positioning stakeholders as co-creators rather than passive observers. This approach ensures that contributions and outcomes align with real-world needs and contexts. However, some scholars contend that participatory research may inadvertently reinforce

oppressive dynamics, wherein individuals and communities are not genuinely recognised as project owners or key decision-makers. Gonzatto and Amstel (2022) argue that, within the field of Human-Computer Interaction (HCI), user research often perpetuates oppressive relationships by limiting the meaningful participation of the general public in the development of solutions.

Supporting this perception in participatory fields, Udoewa (2022) presents the Radical Participatory Design (RPD) approach. It emphasises deeply inclusive and equitable methods of design that prioritise the voices, experiences, and agency of the communities and individuals most affected by a design outcome. Udoewa's framework moves beyond traditional participatory design by embedding principles of equity, justice, and power redistribution into every stage of the design process. This proposal is centred on community ownership and leadership. Unlike traditional participatory design, where users are often consulted or engaged, RPD seeks to transfer ownership and leadership of the design process to the community. The role of professional designers is secondary, as facilitators or supporters rather than decision-makers.

The proposal aims to include marginalised groups in the project and facilitate a healing process. This is a decolonial approach to addressing systemic oppression, which includes addressing systemic barriers to participation and creating safe, accessible spaces for engagement. A core aspect of RPD is dismantling traditional power dynamics in design. It ensures that decision-making authority is equitably distributed among all stakeholders, especially those who are most impacted by the outcomes (Udoewa, 2023).

RPD is particularly significant in addressing complex social challenges where traditional top-down or tokenistic participatory approaches often fail to achieve meaningful, sustainable impact. It ensures that solutions are more relevant and practical while empowering the communities involved, which fosters resilience and self-determination.

Another relevant condition or outcome for the participatory approach in design is the dialogue as an open tool for communicating goals, constraints, and progress to build trust among all parties and create a shared understanding. Participatory design aligns the needs and objectives of all stakeholders to develop solutions that balance functionality, usability, and desirability.

Participatory methodologies are particularly prominent in addressing gender inequalities, as observed in subchapter 1.2, which discusses the contributions of design to combat gender-based violence. This approach provides relevant contributions to the more practical construction of tools and services and a deep understanding of barriers, especially regarding the needs of victims or aspects related to preventing the phenomenon.

It is important to notice that this is a sensitive subject to approach by design, requiring more critical development over the methods and processes used. A central question could be how design

can help navigate sensitive topics and prevent oppression and re-victimisation over collaborative processes. Better preparing participants and developing ownership over the process can be some of the answers, but probably not the only ones. Therefore, there is an opportunity to explore a safe space for developing these transitions, especially regarding design's role in participation.

3.3 Critical and Justice Design Dimension

Some authors propose a political role for design because it empowers individuals, amplifies their voices, and fosters participant acknowledgement (Fry, 2010). Meanwhile, it is vital to make some distinctions between politics and politicians.

By 'political' I refer to the dimension of antagonism that is inherent in human relations, antagonism that can make forms and emerge in different types of social relations. 'Politics', on the other side, indicates the ensemble of practices, discourses, and institutions which seek to establish a certain order and organize human coexistence in conditions that are always potentially conflictual because they are affected by the dimension of the political" (Mouffe, 1999, p. 754).

Design for politics will support governmental and institutions in their structures and mechanisms in the act of democratic meanings. In contrast, political Design creates ways for argument and contest the status quo, generating spaces and opportunities for debate and changing structures through its critical approach (Serpa, 2022). This proposal is evidenced in works such as Design Justice by Constanza-Chock (2018), which is collectively defined as "a field of theory and practice that is concerned with how the design of objects and systems influences the distribution of risks, harms, and benefits among various groups of people (p5)". Design justice reframes the design path as a tool for collective liberation based on the principles of intersectionality (Collins, 2015). It recognises the human capability to design as a shared and inherent condition.

In feminist speculative Design, Martins (2014) proposes a feminist concept of critical Design to correlate oppression, technology, and gender to unveil gender oppression in Design. It also works on the design of oppression, which is evidence of the role of design in maintaining and changing oppressive systems (van Amstel et al., 2022; Liedauer, 2021). Decolonial movements that reach design can also be understood as political design in intervening and questioning the status quo. Decolonial Design proposes deconstructing linear thinking and reductionist perspectives of life and human beings (Gonzatto & Van Amstel, 2022; Schultz et al., 2018).

In this domain, self-reflection is important in design roles and their effects, as well as interactive proposals and interventions (Schultz et al., 2018). New paradigms are present to confront the consolidated ego-centric design culture. When Freire (2011) affirms that creativity is organised

to coordinate people to novel solutions under the umbrella of an approach where people are experts or participants, this knowledge and the shared experience of collaboration, neither the solutions will be transformed into a value contribution for those people and their community (Freire & Oliveira, 2017; Jost et al., 2021). Thus, one critical Social Design indicator is its impact and the level of autonomy such design intervention causes. In other words, how such interference shakes or changes the current reality for the better.

Besides, although Escobar (2016) doesn't define design as a critical tool for liberation, the author believes that design can play a constructive role in transforming ingrained ways of being and towards philosophies of good living. He suggests that design can strengthen autonomy and contribute to realising communal forms of independence.

Noel (2023) urges us to move towards equity and our senses as designers to a more just approach, recognising that every human being has personal obstacles, regardless of whether in history, culture, politics or economics. Those differences lead us to multiple questions and solutions that can be achieved if one embodies justice by understanding people's journeys, barriers, and what makes them alive. This path transforms a concept of justice into a more subjective, sense-making definition, requiring empathy, mutual understanding and a convergence of social justice, racial justice and climate justice to face the systemic complexity of current times.

However, other models to face inequalities and justice have been developed by other fields that have recently been incorporated by design (van Amstel et al., 2022). Brazilian playwright Augusto Boal (1931-2009) created the Theater of the Oppressed based on his experiences as director of the Arena Theater in São Paulo, with the Popular Culture Movement (MCPs) and with groups from the Peasant Leagues in the northeast region of Brazil during the 1970s. When interrupted by the dictatorship and exiled from Brazil, he continued his experiences in other countries in Latin America, Europe, Africa and Asia, expanding the understanding of the possible dimensions of oppression according to the political and cultural context of the subjects involved.

The Theater of the Oppressed democratises theatrical practice by considering that all people are actors and actresses because they act, while they are also spectators because they are observing (Boal, 1996). Based on this premise, an arsenal of games, exercises, and body techniques was systematised to stimulate the development of people's expressive capacity. The Theater of the Oppressed emerged from the need to build relationships that break with androcentric and sexist practices and representations about the dominance of patriarchal culture, present even in so-called liberating spaces, as in the case of the Theater of the Oppressed itself. "If the Theater of the Oppressed teaches us to work with a theatre of questions, we need to question ourselves about

what and who is invisible around what we do, the structures we create and the directions we take" (Santos, 2019, p.42).

Based on statements like these, experienced through corporeality within the scope of the Madalena World Laboratory, a Theater of the Oppressed network specifically focused on working with women, Bárbara Santos, former artistic director of the Center for the Theater of the Oppressed (CTO) in Rio de Janeiro and current partner, systematised some experiences in her book *Teatro das Oprimidas, estéticas feminist-as para poéticas politics* (Santos, 2019).

Upon completing this work, Santos demarcated the Theater of the Oppressed as a feminist epistemology, bringing new ways of narrating and knowing the world, advancing the work inaugurated by the playwright Augusto Boal based on feminist praxis. These practices have been applied by design in services and product development with the aim of questioning and provoking political interventions of design (Costanza-Chock, 2018).

3.4 Dialogical Dimension

The emergence of new paradigms requires the creation of more active approaches with various actors in society (Irwin, 2015) to promote more outstanding contributions to social interactions and relationships that strengthen human capacities at collective levels, which are increasingly essential for maintaining the future (Manzini, 2017). In this path, human interactions and dynamics are central to reinforcing or changing structures with whom they interrelate.

Dialogical theories can be found across various fields, including philosophy, anthropology, and economics (Friedman, 1954). It emphasises the relationships and well-functioning of individual and structured relationships. According to Buber (1923), the concept of "I-Thou" relationships emphasises genuine dialogue, where individuals engage with each other as subjects instead of objects (Friedman, 1954). He proposes that dialogical interaction is the foundation for ethical and creative design processes. Complementing Buber, Beer (1975) defends that dialogical processes in organisational structures occur through a Viable System Model that enables autonomous operations that coordinate integrations among every cluster inside an organisation (Espinosa et al., 2008). The relational aspects were responsible for harmonising, maximising synergies, and providing the capability to adapt and align solutions.

Additionally, according to Paulo Freire (2012), dialogue is a means of empowerment and liberation, particularly in educational and social contexts. The author argued for participatory approaches in which individuals co-create knowledge rather than passively receive it, which influences dialogical design in contexts that aim to empower marginalised voices.

To design means emphasising interaction, relationships, and the social context of design rather than focusing solely on objects or outcomes. To design implies creating processes or artefacts that encourage dialogue and conversation. The dialogue is supported by the idea that design can be a medium for exchange, reflection, and mutual understanding between people or between people and their environment. It involves the relational aspects of interactions where connections and relationships that a design creates or sustains are central to its thinking and making.

Dialogical Design helps structure multiple ideas coherently using dialogues to capture and map causal systems (Bausch & Flanagan, 2013). Moreover, the intentional presence of this approach in Social Design stresses the importance of dialogue on cultural understanding and intervention; as defined by Banathy (2013), dialogues are connector elements to understand what surrounds us with deep lenses capable of reflecting upon our way of thinking, our beliefs that construct the actions and the mentality that structures patterns in life. Resides in dialogues the capacity to access and change worlds.

As a social and diverse species, humans have developed unique communication methods that enhance their ability to create new realities. One of the primary goals of dialogical and relational design is to promote the expression of human potential and foster thriving communities (Cipolla & Manzini, 2009). Collective creativity is encouraged through tools, dynamics, and models to evidence every simple uniqueness in human capabilities (Kimbell & Julier, 2012).

This ability to create dialogues between actors and these actors with their surroundings is natural to human beings. However, it only becomes reliable for Design when these interactions are genuinely participatory and participants are in a condition of equality and inclusion (Christakis, 1998; Jenlink & Banathy, 2008). These needs for participatory and emancipatory models have been the focus of constant debates from a decolonial perspective, which proposes change through centrist thinking or a single narrative (Kidd et al., 2018; Klumbyte et al., 2022).

As Banathy and Jenlink (2005) state, trespassing our social system's destructive constitution to a more conscious level is necessary. The author raises awareness about the sharing responsibility in creating nonviolent and oppressive ways of being and stimulating humankind. Thus, dialogue is a central element in Social Design that articulates consciousness, human approach and interactions, participants' relations, power dynamics and emancipation (Giubilini & Levy, 2018; Rescher, 1998).

Rughani (2020) and Cipolla and Bartholo (2014) highlight the importance of design dialogues. The first provides a thoughtful illustration of the importance of cultivating empathy in a polarised world. Second, they emphasised the importance of empathy and inclusion as central elements in the relationship with 'I and thou' to prevent exclusion and segregation. Both are evidenced by the capacity to design articulation and create bridges for conversations and exchanges.

Hence, places for dialogue can change. As stated by Friedman (1954), "Through the presentness and concreteness of the meeting with the "other" in dialogue, it is possible to see things, people, and places "in their uniqueness and for themselves, and not as already filtered through our mental categories for purposes of knowledge or use" (p. 199).

Another relevant aspect of dialogical design that should be emphasised is the profound current influence of indigenous perspectives on dialogical and relational design. These perspectives offer a wealth of insights rooted in longstanding traditions of community, storytelling, and ecological interconnectedness.

With the premise of constructing a proposal for a fairer design that dismantles colonial structures, some authors evidence the contribution of narratives as powerful tools for teaching, preserving heritage, and fostering empathy. Indigenous cultures often prioritise storytelling as a primary mode of knowledge-sharing and community bonding (Goodchild, 2021). Furthermore, Indigenous practices typically involve reflection, learning, and adaptation cycles—dialogical design benefits from this iterative process, highlighting co-evolution and responsiveness (Romm, 2024).

Thus, the relational tools focus on fostering relationships over isolated transactions and can deeply resonate with these principles by creating systems and solutions that prioritise connections and mutual respect. It is also a practice and a way of thinking that encourages collective well-being, incorporating rituals and practices that are valuable to design (St John, 2024). Finally, if conducted with ethical considerations, this approach can provide design for social change, not only innovative solutions but also deeply ethical, inclusive, and rooted in respect for the web of life.

3.5 Transitions Design Dimension

Humans are good with technical problems and issues but not with the social challenges we face (Heller, 2018). The challenges we face prompt a transition in design, highlighting the relevance of social change. Working at a system level, Social Design bridges cross-disciplinary teams to participate, and the outcome is making it easier to learn, where the practical guidance with its tools gives autonomy (van der Bijl-Brouwer, 2017). Significant changes happen with people involved in the process because it enables people to develop the capacity to approach context and act upon problems in a new way. This capacity relies on people, and they can apply to other things, and it changes cultures (Christakis, 1998).

Design transition roles are pushed in a more holistic direction by forces that transform the system's reality generating possible exploratory futures (Du Plessis, 2012; Irwin, 2018). The domains of transition design provide tools to approach system problems so their practitioners can visualise and intervene sharply in the field with a long-term vision (Boehnert, 2019; Irwin, 2018).

There is widespread agreement that Transition Design (TD) necessitates a shift in design toward a new ethics of practice, one that acknowledges the interconnectedness of social, economic, and ecological systems and strives for contextual, systemic, long-term, and plural outcomes (Di Bella, 2023). Indeed, the urgent call for change is not new; transformations that began in the 1970s also echoed this need, and other areas of design significantly contribute to ethics.

However, TD literature consistently emphasises the importance of "cosmopolitan localism", which advocates for place-based and regional lifestyles that maintain global awareness (Irwin, 2015). The proposal also emphasises the need for multi-level perspectives, particularly when addressing wicked problems. Its format is considered valuable in a relational and transdisciplinary context, enhancing the ability to develop decentralised approaches to problem-solving. When TD proposes a long-term vision to face a problem, it also elevates the potential engagement and conscious decision-making.

Acknowledging that design for social change is a community-based intervention in most parts of its process is important. However, some authors have divergent views on the role of designers in this path. For some authors, designers need to be just like the environment and the community they are contributing to, an integral part of it, rejecting any level of domination. For others, the function should facilitate a collaborative vision in which community members are empowered to participate in decision-making (Di Bella, 2023).

According to Tonkinwise, different from his perception of Social Design being too problem-solver and not addressing root causes, TD aims for structural changes by transforming everyday practices and facilitating the transition to more sustainable economies (Tonkinwise, 2015). From his perspective, TD must embrace design's responsibility for shaping the future while acknowledging its social complexities and emphasising long-term thinking.

Irwin (2022) proposes a practice in the School of Design at Carnegie Mellon University that encourages collaborative visioning exercises, like "Snapshots from 2050", to help stakeholders transcend present-day differences and co-create desired futures. This shared vision, informed by collective insights, can guide actions toward a more sustainable and desirable future. TD emphasises amplifying existing grassroots initiatives within communities to help construct a shared understanding about what is important to leverage the collective wisdom embedded in community practices. TD can help scale solutions on this proposal by connecting to broader networks and amplifying impact through collective responsibility.

With a long-term thinking and systemic perspective, TD encourages a shift away from short-term, isolated solutions and promotes a long-term perspective grounded in understanding complex systems. By framing problems within significant spatio-temporal contexts and considering the

interconnectedness of social, economic, political, and environmental systems, TD helps stakeholders understand the root causes of troubles and the potential long-term consequences of interventions.

Moreover, when the stakeholders embrace the process using TD approaches, they are confronted with the power relation. It avoids the unequal distributions of power among stakeholders when collective decisions are made from problem framing to future shared visions. Including varied perspectives and knowledge, systems are vital for collective wisdom, as they guarantee that a broad spectrum of insights and experiences shapes solutions. TD recognises that traditional design approaches often operate within limited disciplinary boundaries and advocates for a more inclusive and collaborative approach that leverages the collective intelligence of diverse stakeholders (Irwin, 2018).

3.6 Pluriversal and Regenerative Design Dimension

Pluriversal Design is embedded with many worlds. It allows a collective construction based on multiple voices, from humans and non-humans. The principles enhance the design process on various levels, ranging from individual self-awareness to collective management. Originating from the global south, pluriversal design are inspired and directly influenced by ancestral wisdom from First People from Latin America. In regenerative design, wholeness and nature propel the creation of solutions from a non-human perspective. When the design is inspired by nature, it absolves its dynamics and interacts with design culture with a whole perspective, promoting a transformative aspect from aesthetics to mind models for positive emergences (Wahl, 2016b).

Escobar (2018) studies try to find a place for balance in human transition for a regenerative society. The author contests the One-World-World by John Law (2011) and the standards of globalisation and singular perspective about the world, proposing an open space for creating new narratives for ecological and social transition. Through education, Noel (Noel, 2020) provides a new approach to thinking apart from Euro-American centrality in design.

Besides being a decolonial form of political Design against Western dominant mentality, pluriversal design is relevant to Social Design because it nurtures new models of existence (Leitão, 2023). This proposal of a world where many worlds fit (Escobar, 2018) discusses acceptance, inclusion, and evolving from centrality to margins (Light, 2019). It moves from standard world views to the rediscovery of wisdom and stimulates individual knowledge and contributions to world collective ideas (Giubilini & Levy, 2018; Kania & Kramer, 2013). In some way, this regenerative approach to thinking and generating answers from original people contributes to a rise in the sense of responsibility and interbeing (Wahl, 2016a).

These approaches enrich the design capability to answer social and environmental problems by accepting multiple voices, narratives, and truths. As Schultz (2018) said, "All Perspectives (Truths) are valid and reasonable. This is not relativism because there is still judgment emanating out of a locality in a reciprocal relation with land, place, ethics, balance, and autonomy" (Schultz et al., 2018, p. 86). In regenerative culture theory, networks, fundamental interbeing, mutual support, learning, exchange, and nurturing relationships are central elements for intervention. Additionally, it is relevant to understand that nested systems evolve by integrating the whole and the small sub-systems (Gunderson & Holling, 2002).

Margolin and Margolin (Margolin & Margolin, 2002) mention the ecological perspective on Social Design in their work "A Social Model of Design". Here, the social worker perspective is used to deepen the role of design in translating social necessities among the people and their relationship with the environment and their spheres. The intersections of ecology, social science, and indigenous wisdom are becoming more common to transform linear thought and add a real participatory presence of underrepresented people (Kelly, 2019; Klumbyte et al., 2022).

What do we mean by designing for a regenerative purpose? Renewing or converting power dynamics based on self-responsibility and cohesion can also benefit nature and positively impact human life. Besides, in social system design, it is possible to construct a "collective model of inquiry for engaging stakeholders in the many activities of designing" (Jones, 2014, p. 7). Additionally, it is from Social Design the capacity to rethink and redesign the collective and collaborative work with multiple stakeholders through participatory methodologies and to recognise the interconnectedness of social issues and aims to address root causes rather than merely treat symptoms.

As mentioned in the article Social Design and regenerative theories, a possible intersection to address gender-based violence to use regenerative perspectives in gender-based violence can flourish new approaches to counter a centralised and siloed approach. Starting from dissolving the dualistic form of seen and act towards gender-based violence, moving away from the State as the sole responsibility for answering these issues and generating debates around the narratives of power between the stakeholders and actors (Lima et al., 2023). In this model, regenerative Social Design "facilitates relationships between diverse agents in the system and enables conditions for the restoration and regeneration of healthy ecosystem function" (Wahl, 2016a, p. 120).

Although it may seem utopian to envision an entire system working toward a common goal, eco-literacy empowers individuals and communities to drive transformations. These changes can be observed in small communities, neighbourhoods, or even across a country like Colombia (Capra, 2007). Moreover, a policy governance paradigm increases the need for new dynamics and 'networked models' (Dunleavy et al., 2006), opening possibilities for experimentation and the

participation of designers as facilitators sharing their tools and approaches. As Gustavsen said, innovation demands social responsibility, which is closely related to effective governance and the policy offered (Gustavsen, 2005).

There is potential for regenerative theories to address societal challenges related to gender inequalities, particularly in combating gender-based violence. These theories can enhance social participation and create strong collaborative synergies. As with every complex problem, it will need multiple efforts and aligned solutions to evolve its application. However, orchestrating system dynamic improvements requires further investigation into the challenges and elements that construct this context. Therefore, this theoretical exploration intends to inspire new approaches in system thinking for social change while constructing solid bases for the learning process that will lead us to further advances in this investigation.

4. A Preliminary Theoretical Model for Design Social Change

To propel collective responsibility and action among the socio-technical systems, the theories presented construct a collection of dimensions that represent the potential to transform individual participation into social cohesion as explored in the article Sustainable Development Goals: A Social Design Approach on Gender-Based Violence (Lima & Guedes, 2024), the theoretical approach that unites multiple design domains to address gender-based violence social challenge has the objective of introducing Social Design as a multilayer design area that congregates an action-based proposal to improve participation in social challenges.

Based on those emergent design disciplines and the need for social change that goes from individual consciousness to collective participation to social cohesion, we elaborate a model to approach social change empirically discussed in the further study case chapters on social design application in gender-based violence context.

The model improved during the research process to better identify topics that address central needs for social change from individualistic to a collective synergy between multiple actors at the forefront of social transformation. The multitude of design areas will enhance change capacity in complex social problems, which is considered systemic discipline, critical practice, conscious practice, emancipatory tool, relational tool, and support for transitions.

Otl Aicher, in "El mundo como proyecto" (Aicher, 2005), helps us construct the idea of a model as a space for knowledge construction, a place where projects and human creation can be sketched. As affirm Aicher "the project is born where the meeting takes place" of theory and praxis:

We know both what is and what should be through models of concepts and definitions.

Access to reality, to the world, is offered through a model, a construction based on statements, concepts, and conceptual operations. And the leap into the future, to a new possible world, also requires speculation, working with the model. Knowledge is conformity with the model, and the future development of the model. Projecting is building models. (Aicher, p.179, 2005).

This proposal constructs a collectively responsible model, as Cipolla and Bartholo define "a socially responsible designer also means acting "where you are" to transform your situation by establishing dialogical relations with those who live in the same context" (Cipolla & Bartholo, 2014, p. 87). The figure shows that to activate such capacities in collective groups, we stress six design areas as social design domains that potentially act in three levels: an approach that calls for a

conscious use to achieve some specific outcome, a tool that facilitates its application, and a desirable outcome.

Figure 11 illustrates the six domains and their central contributions. This perspective benefits individuals, social actors, activists, designers, and anyone interested in social change. It encourages a conscious acknowledgement of one's role within the system and highlights the importance of relationships with others in social change.

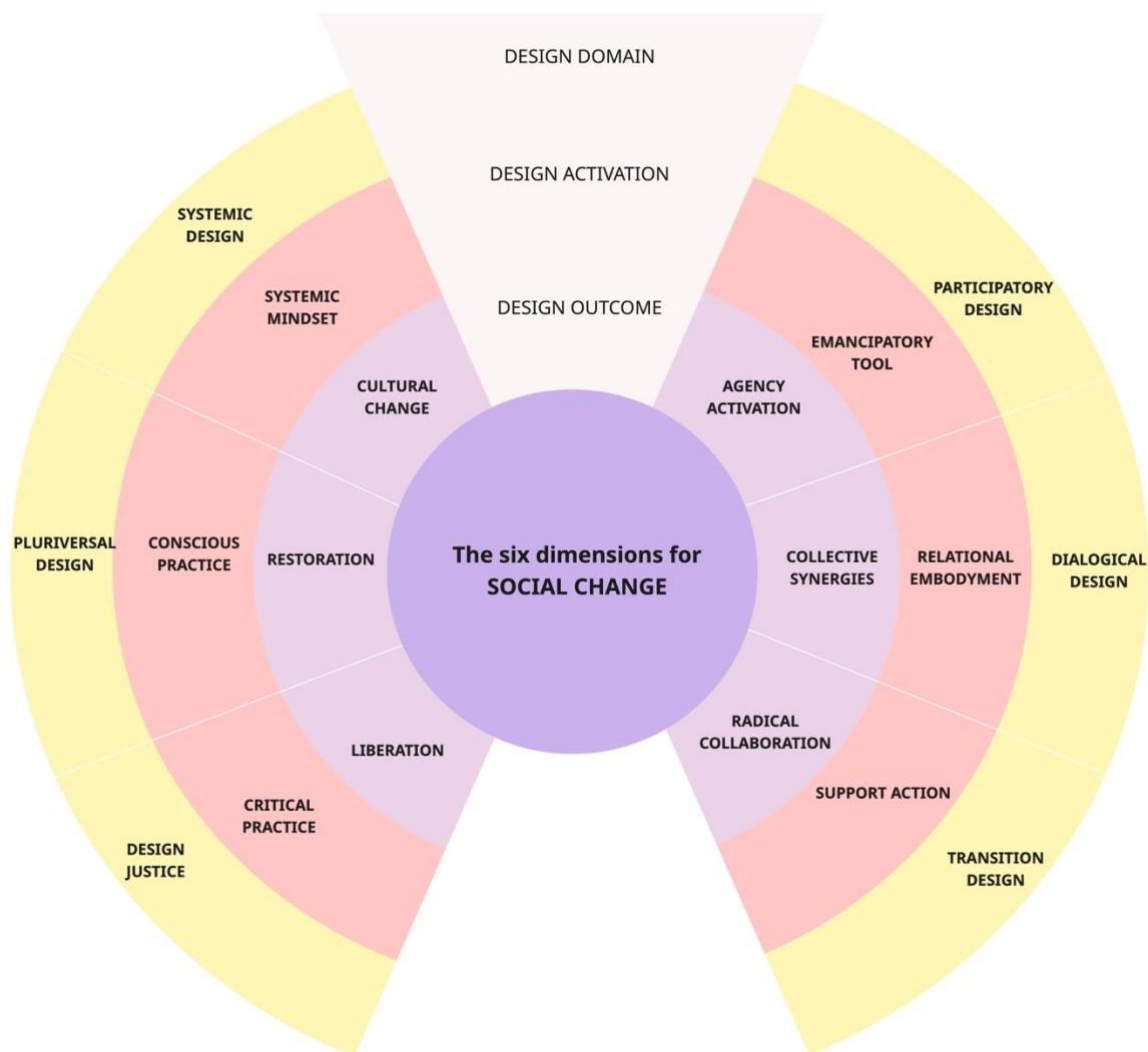


Figure 11 The six design dimensions for social change. Source: Author.

Embracing systemic design, participants are invited to deconstruct linear thinking and siloed mindsets to start thinking of dynamics and reflect on power and multi-structured problems. As an outcome, they have the opportunity to change the culture of approaching problems differently from the Cartesian way, change the culture to embrace multiple possibilities of intervention, challenge the culture of addressing one focal problem or fast solutions rather than thinking of long-lasting benefits and answers.

Through participatory critical design, participants are involved during the process, gaining knowledge and tools to act autonomously. The approach evidence gives voice to all elements in the context, allowing them to actively contribute to change. The most visible outcome becomes agency activation. Giving people the right tools to act and the benefit of collaborating makes them more secure and stimulated to act. Thus, participation becomes an everyday process in their lives.

By dialogical design, we refer to the process of enabling individuals to actively listen, engage, and embody the journey toward building strong partnerships and relationships that drive change. The ability to create connections between diverse perspectives and align common goals while incorporating multiple voices has the power to transform social realities. These relational tools can enhance a sense of belonging and elevate collective efforts to achieve lasting solutions to social challenges.

Transitioning design approach enables participants to develop new visions for the future and the answers to transitioning from current complex realities. This radical form of collaboration elevates the capacity to explore transformation critically. It invites the multidisciplinary vision to a self-critical perception and action among the problems.

Design justice is a central element in this proposal because it enhances the critical aspect of design for social change. It reminds us to cultivate a critical vision of individual and collective work in order to have things done with less bias and privilege. The main outcome is to guarantee that design acts as a liberatory tool, conducting things in a way people feel comfortable and empowered to change their realities.

The pluriversal design is a regenerative proposal to address social and environmental challenges. It broadens our perspective to include other worldviews, inviting us to explore reality through non-centralized and non-hegemonic approaches. Enhance how we see the world from ancestral visions and cosmovision, helping deconstruct oppressive research methods and inviting us to enhance our perception of collectiveness. Hence, those frictions became fuel to move from common sense and shape reality from other perspectives, giving us a conscious tool and a restorative possible outcome that contributes to the enhancement and resilience of ecosystems, humans and a sense of wholeness that can include also non-humans in this equation.

The six design dimensions for social change, as proposed by Lima and Guedes (2024), illustrate the significance of these domains in the social transition paradigm concerning individuality and collectiveness. However, the application of those suggested moments of cultural change and individual change is not sound; that is what we show in chapter 13, which exposes the empirical practice realized in this research.

As an initial proposal, we arrive at a model that comprises three areas or moments to activate collective synergy, enhancing responsibility and agency in social changes. Embodying comprehends the whole-body assessment related to self-awareness and recognition of individual roles and the big system in question. In this phase, the actors construct a critical perception of their participation in the system and relative dynamics.

Moreover, it looks to establish relationships, structures, values and beliefs that compose the wholeness, giving space for multiple voices and situating the problem. Sensing is related to understanding the whole, and this shared vision could be a strength through tools and processes that allow a full sense-vision of the current reality to project the future collectively. Besides, activation is present from the starting point of a social change project, acting as a verb means to provide tools to intervene and reflect on transformations, transitions and decision-making collectively.

Multiple Social Design domains are expected to provide structure, experience, critical reflection, and tools in each phase of the empirical process to help this study navigate the aims for social change in complexity related to gender inequalities.

In the current model, each element is an independent part of the system, and the dynamic is based on solidarity and integration. Each institution implements the action guideline independently, with only a general standard provided by the government. The system is economically dependent on funds and partnerships based on charity mode, where institutions and partners share services and goods. It is a hierarchical structure managed by a centralized structure.

Thus, an activation model for social change that enables multi-stakeholders to participate must also have a systemic perspective and a critical vision of its application. This approach cannot be institutionalized as a governmental model, or its purpose can become a form of control over the system. Rather, it must be a shared proposal to embrace multiple elements from our society, including civil servants, citizens, non-governmental institutions, activists, academia, governmental organizations, and enterprises interested in constructing positive and long-term impacts.

PART II

Design Research Approaches, Methods, Tools and Techniques

5. Methodological Approaches

The requirement of this research exceeds the traditional approach because it aims to explore a systemic perspective that intersects Social Design and gender-based systems. Further, real-world contexts demand more diverse and reflective methods to address their unpredictable nature. Researchers already established that standard research strategies and techniques are insufficient in sustainable paths (Fitzpatrick et al., 2024). Thus, we must choose a bold proposal that embraces holism, pluralism, and emergence as a practice that conducts knowledge. On the other hand, it is prudent to be aware that there are also limitations in every approach. "We are constantly navigating real-world systems that exceed our capacity to understand them fully" (Midgley & Lindhult, 2021, p. 647).

Moreover, as defended by Fitzpatrick (2024), developing a flexible and reflexive practice on approaching systems is favourable for avoiding reductionist interventions and perpetuating oppressive practices. Plural approaches are well-known in investigations that deal with multiple stakeholders or systems in interrelated practice (Goodchild, 2021; Irwin, 2015; Sevaldson, 2013). However, even a systemic approach requires methods and practices outside of design to enhance its set of learnings (Fitzpatrick et al., 2024).

Understanding the fragile repertory in Social Design and gender-based violence and the standardised use of methodologies, we found in this project an opportunity to explore a combination of methodologies and methods that could deploy our understanding of the Social Design capabilities under this phenomenon. Hence, through this practice, it was possible to arrive at an enlargement of knowledge in a field insufficiently worked until now: the intersection of Social Design, system thinking, and gender-based violence, as exposed in Part I, subchapter 1.2.1.

Complex systems thinking is essential when addressing contemporary problems. This approach highlights the significant differences between traditional techniques and the assumptions of complex systems (Naimi, 2016). It underscores the importance of employing multiple strategies to tackle social change challenges. Key aspects such as nonlinearity, heterogeneity, dynamics, holistic views, and the interactions among various actors, as outlined in Table 3, are crucial considerations for this investigation.

Table 3 Comparison of Traditional and Complex System Analytic Assumptions

Domain	Traditional Analytic Techniques Assumption	Complex Systems Assumptions
Functional form	Linearity	Nonlinearity
Common distributions	Normality	Non-normality
Characteristics of actors	Homogeneity	Heterogeneity
Level of analysis	Single level	Multiple levels
Temporality	Static or discretely longitudinal	Dynamic, with feedback
Fundamental relationships	Among variables	Interaction of action
Perspective	Reductionist	Holistic

Source: Luke and Stamatakis, 2012, p. 360

To understand from a realistic perspective that allows creativity and speculative ideas to flourish, the methodological approach is articulated to propose a scientific accuracy while exploring empirical design approaches. The inductive approach gives us a broad perspective to understand the subject while generating knowledge. Thus, reflection and reason play a significant role in understanding phenomena. Hempel (1965) says that observation confirms a given hypothesis, and all other hypotheses are logically equivalent (Reiter, 2017). However, observations must be generalised to establish legitimacy in knowledge production, especially with complex problems.

Hence, the research involves collecting data through various methods to understand the phenomenon and Social Design practices comprehensively. This approach included complex thinking (Morin, 2006), case studies (Yin, 2014) and tenets of ethnographic research (Ingold, 2017). Given the complexity and richness of the dataset collected and the study's objectives, this project provided a valuable opportunity to explore how applying more synergic approaches to complex societal issues could enhance the quality of research results in design studies.

To establish a comprehensive state-of-the-art, a literature review is conducted to explore prominent areas of design for social change and to provide a deep learning phenomena in the real world, which offers elements for documented practice as well as a set for refining theory and practice (Baumeister & Leary, 1997). Instead of assessing Social Design based on its various interpretations by different authors, this research aims to establish a comprehensive body of

knowledge that can activate a model for social change. To achieve this, the study selected relevant academic contributions to provide a multi-dimensional overview that entangles social design, regenerative theories, and domestic violence, thus offering a fresh perspective on complex social problems (Snyder, 2023; Webster, & Watson, 2002). With these aims, the selection of literature followed high standards and search for significant voices that appear in the last ten to seven years, but also other precursors of these surrounding subjects of interest (Cooper, 1988).

The literature on tackling is evidenced in the article published in 2024, presented in Table 4. It explores the emerging disciplines that intersect design for social change from multiple angles. Within these topics, it is possible to find elements that could be explored in further investigations and practices, particularly in collective and systemic approaches, which were further explored in the empirical proposal (Lima and Guedes, 2024).

Additionally, a systematic literature review was conducted between November and December 2024 to assess the academic contributions of Design research on domestic violence (DV), intimate partner violence (IPV), and gender-based violence (GBV). The review, previously presented in subchapter 1.2.1, further revealed a strong methodological inclination towards qualitative approaches, particularly participatory and co-creation methods, with 11 studies employing co-creation due to its applicability in digital interventions to enhance victims' capacity to navigate and understand GBV. While Design research predominantly employed problem-solving frameworks that targeted specific aspects of GBV, a systemic approach to framing the issue remained largely absent.

The field demonstrated a prevailing victim-centred focus, with 19 studies dedicated to informing, preventing, supporting, or equipping victims. In contrast, only three explored how designers engage with GBV-related issues, and just one addressed the perpetrator. Notably, four studies adopted a systemic, multi-actor perspective, underscoring a critical gap in the field's engagement with broader structural and systemic dimensions of GBV. These findings emphasise the necessity for a more critical and exploratory application of systems thinking and other related methodologies that help enhance the Design research role to address the complexities of GBV.

From literature research emerged a theoretical approach, where the iterative process of the theoretical model was revised and used on the empirical case study to connect with practice. Moreover, there is a need to address the evolved area of design for social change, evidencing the vast contribution of design in transforming social realities.

More than providing the basis for research, this broad understanding of the practice and contributions of design in the social sphere helps form a starting point for other studies and researchers who may be interested in this approach to complex problems through design.

Table 4 Emergent design disciplines in the field of social design. Source: Lima and Guedes, 2024

Design discipline	Explanation	Authors
Design for social innovation	Social innovation became essential to move forward the conceptual idealisation to an authentic product of design for social change. Its outcomes are meaningful and based on new social and economic models. Additionally, the diffusion of design thinking as a model of approach was evidenced by social innovation and its entrepreneurial spheres and collective network proposal.	V. Margolin and S. Margolin, 2002; G. Mulgan, et. al 2008; J. Phills, K. Deiglmeier, and D. Miller, 2008; M. Mortati and B. Villari, 2014; E. Manzini, 2015; A. Deserti, F. Rizzo, and O. Cobanli, 2018; E. Manzini, 2018; A. Caetano, 2019.
Dialogical design	Dialogical design helps structure multiple ideas coherently using dialogues to capture and map causal systems. This ability to create dialogues between actors and these actors with their surroundings is natural to human beings. Thus, dialogue is a central element in social design that articulates consciousness, human approach and interactions, participants' relations, power dynamics and emancipation.	N. Rescher, 1998; L. Kimbell and J. Julier, 2012; B. H. Banathy, 2013; C. Cipolla and R. Bartholo, 2014; T. Irwin, 2015; G. Klumbyte, et. al, 2022;
Transitions Design	The domains of transition design contribute to its practices, providing tools to approach system problems so their practitioners can visualise and intervene sharply in the field.	A. N. Christakis, 1998; C. Du Plessis, 2012; D. C. Wahl, 2016; M. van der Bijl-Brouwer, 2017; C. Heller, 2018; T. Irwin, 2018.
Political Design or Design Justice	Political design creates ways for argument and contest the status quo, generating spaces and opportunities for debate and changing structures through its critical approach. Thus, one critical social design indicator is its impact and the level of autonomy such design intervention causes. In other words, how such interference shakes or changes the current reality for the better.	T. Fry, 2010; K. Freire, et al, 2011; R. Vazquez, 2017; 2018; S. Costanza-Chock, 2018; B. Serpa, et. al, 2020; P. H. Collins, 2015; F. M. C. Van Amstel, et. al, 2022; T. Schultz et al,
Systemic Design	In many fields, social innovation evolved to embrace the systems perspective, moving from a product and service provider to a complex service system view, including public participation and private and citizen representatives. Thus, system thinking not only enriches social design practices but also propels the creation of more assertive and impactful proposals. Rather than a problem-solving perspective, the systemic design approach enables practitioners to navigate an exploratory journey for leverage points and emergencies that impact the whole.	von L. Bertalanffy, 1968; A. N. Christakis , 1998; D. H. Meadows, 2008; B. H. Banathy, 2013; G. S. Metcalf, 2014; M. van der Bijl-Brouwer and B. Malcolm, 2020.
Pluriversal and Regenerative Design	Pluriversal Design is embedded with many worlds. It allows a collective construction based on multiple voices, from humans and non-humans. Its principles enrich the design approach on multiple levels, from self-consciousness to collective management. While in regenerative design, the wholeness and human nature propel the creation of solutions from a non-human perspective, and with a whole perspective interacts with design culture, promoting a transformative aspect from aesthetics to mind models for positive emergences. These approaches enrich the design capability to answer social and environmental problems by accepting multiple voices, narratives, and truths.	J. Kania and M. Kramer , 2013; A. Escobar, 2015; D. C. Wahl, 2016; A. Escobar, 2018; L.-A. Noel, 2020; G. Klumbyte et al, 2022.

5.1 Complex Thinking

To produce knowledge, one must be supported by fundamental assumptions that guarantee a self-critical and self-reflective vision of the analysis. As Morin (2006) pointed out, an ongoing

investigation and interrogation about how knowledge is produced are required. Opposing the assumptions made by Descartes (1954) about the paradigm of simplification, Morin presents us with a more open and creative conception of understanding human beings, avoiding creating inviolate realities or questions, where complexity represents a vital role in scientific evolution (Montuori, 2007, p. 5). As world societies become increasingly complex and more elaborate, the research methodologies must also be rigorous to understand social phenomena ontological and epistemological to deliver effective and efficient solutions.

According to Lakatos (1970-1978), the relevance of a Scientific Investigation Program transposes the pertinence in generating a hypothesis. This assumption consists of creating proposals where methodological choices help to decide what to follow in the investigation. That opposes Popper's rational and permanently evolved ideas of science (Lakatos, 1978). It is possible to understand a Scientific Investigation Program as a progressive empirical and theoretical development where "science proceeds by bold speculations. The proposition is never proved or made probable. However, some are later eliminated by hard, conclusive refutations and replaced by still bolder, new and, at least at the start, unrefuted speculations" (Lakatos, 1978, p. 14).

Thinking based on mathematisation and calculation rigour, called blind thinking by Morin (2005), is incapable of looking after the entire unit of a question. However, according to the author, complex thinking does not eliminate simplicity or express completeness. The ambition is to develop a thinking process capable of dealing with the real and with the dialogue and negotiation (Morin, 2006). This assumption is reinforced by Piaget and his epistemological approach to reality-based knowledge, a never-ending process (Bernard, 1940). Additionally, a complex system approach requires the articulation of knowledge and action.

In his understanding, the reductionist form of seeing and embracing life is the fruit of a Western culture where the logic over the imagination and creation are compartmented or siloed for the benefit of control. Since Aristotle (384-322 B.C.E), observation and reasoning in the natural world as a scientific approach have gained relevance. Empiricism states that knowledge and learning must be organised through discovery, order and the displaying of facts. It is essential to understand the phenomenon in its totality. In other words, moving closer to a thinking format where ontology and epistemology can construct a fertile field to flourish new perspectives.

The necessity of understanding the world through a critical panorama is rooted in theoretical elements such as the Social Construction of Reality, where Collins postulates the accepted reality that transforms habits into routines. In this perspective, acts of violence structured through dynamics of power and dominance are reproducing and socially constructed (Collins & Stockton, 2018). Therefore, to develop thinking about complex systems within their subjectivity,

Schutz's (1970) phenomenological perspective makes it possible to understand reality through the meanings people give to it. Therefore, complex thinking allows us to practice a critical focus on the context and dynamics through narrative analysis and the various layers that may emerge during the investigation.

It is an approach that has become widely used in addressing sustainable issues (Espinosa et al., 2008) and has recently been implemented in design practices from different fields (DeTombe, 2017; Norman & Stappers, 2015). Complex thinking became the basis for science disciplines and design, from ecosystems to social science. It benefits from its capacity to articulate confluences of thinking and knowing in a nonlinear dynamic.

However, there are some limitations in complex thinking. Schwartz (2004), in *The Paradox of Choice*, discusses how decision-making can be affected by an overwhelming amount of information and possibilities to approach a problem. Alternatively, the limited rationality can restrict action over decision-making (Simon, 1972). All these limitations can be effectively complemented by additional approaches that provide reliable and confident data, along with empirical choices that enhance decision-making and strengthen individual and collective capacities. Additionally, it relies on the design role as a translator of the context and facilitator as a builder's world visions.

5.2 Ethnographic Approach

Moreover, the ethnographic approach focused on holistic and contextual fieldwork will be used to deeply understand the culture and generate a rich and detailed social phenomenon account. The chosen method avoids overgeneralisation and premature closure. This approach provides a reality-based overview of the community. In the early 1990s, ethnography met design to help manufacturers better understand and meet consumers' needs. Some authors consider this connection inseparable from the designers' role (Ventura & Bichard, 2016).

To avoid centralisation, this investigation embraces anthropological concepts and approaches to ensure dialogue with people and the community, providing a broader ethnographic viewpoint. According to Ingold (2017), anthropology does not seek solutions but embraces critical inquiry and the capacity to build worlds collaboratively. Therefore, documentation and critical dialogue during investigations can enhance the quality of data collection.

This research establishes assumptions and constantly revises its propositions in response to unexpected discoveries that can happen instead of proposing a hypothesis, analysing data and testing based on deductive methodologies. The subjective nature of this project necessitates a critical foundation, as Foucault discusses in "Subject and Power." This foundation should delve into the conceptualisation and understanding of the subject to prevent objectification, which could

create a power imbalance in the investigative process (Foucault, 1982). Hence, the inductive methodology will be used in this project to better understand the phenomena of social participation in gender-based violence systems and their context of collaborative articulation (Lakatos, 1978). Moreover, the proposal will be led by respecting the topic demands and creating a cross-disciplinary perspective.

The aim is to construct an in-depth understanding of Social Design contributions to complex social systems, here represented through gender inequality, using a systemic perspective and an anthropological approach. Thus, the production and reproduction of content, information and communication represent a cultural framework of current aspects, bringing into qualitative analysis the thermometer of our time (Foucault, 1982).

Language plays an important role in understanding social dynamics. Language is a product of collective consciousness (Sassure, 1916); it influences the relation of things and their contexts in interpreting narrative data. Hence, a semiological analysis will be part of the exploration to perceive each message operating in different contexts. Thus, semiotics and semiology are also present in constructing and analysing human agency models to understand and identify narratives in social-symbolic contexts (De Luca Picione et al., 2019).

5.3 Qualitative Method

To encompass the presented method, a qualitative approach will contribute to generating scientific knowledge about how social reality is constructed and what cultural meanings, interactive processes and values are created and supported. The qualitative method allows us to see a person as a group representation, where emotions, feelings and beliefs can reveal patterns and relevant narratives. In other words, "Human behaviour, unlike physical objects, cannot be understood without references to the meanings and purpose attached by human actors to their activities" (Guba & Lincoln, 1994, p. 106). Through this perspective, the study seeks new insights and perceptions to assess the phenomena in a new light. Hence, collecting, analysing and interpreting data will represent an ongoing journey of reflection.

Qualitative methodology is applied to construct an in-depth contextual reference that will enrich the design approach subsequently. Contextual inquiry is considered an efficient practice that creates a clear framework for the investigation, particularly when related to social dynamics (Attride-Stirling, 2001).

The study focuses on gathering bold information about the context from multiple perspectives in the system. Thus, interviews are the primary tool for data collection to gain a deeper understanding of the phenomenon. They allow in-depth analysis from a relatively small sample size,

focusing on participants' views. Additionally, they enrich the perspectives from specific understanding, values, beliefs, and decision-making processes, providing a rationale and subjective perception.

Interviews provide an effective way to gather a substantial amount of data while allowing for the exploration of individual perceptions and local realities. Qualitative interview research combines factual information with deeper insights into the phenomenon, highlighting the stories behind historical facts or structures described within a theoretical framework. Besides being a popular method, interviews are criticised for their lack and concerns (Young et al., 2018). Hence, auxiliary methods and a curated focus on content analysis can enhance the knowledge capture.

According to Bardin (1977), content analysis is "a set of communication analysis techniques aimed at obtaining, through systematic procedures and objective description of the content of messages, indicators (quantitative or not) that allow the inference of knowledge regarding the conditions of production/reception (inferred variables) of these messages" (Bardin, 1977, p. 42). In this analysis, the researcher focuses on comprehending characteristics, structures and models behind fragmented messages. The analysis requires double effort: understanding the communication sense as a receptor and trying to find meaning in another possible message hidden in the discourse (Câmara, 2013).

The chosen analysis is conducted in three steps: Pre-analysis, Exploration, and Treatment of Results (which includes interpretation and inference). This process is detailed in Chapter 6 of the Design Research. Additionally, selecting the sample is crucial in qualitative research to ensure a deep understanding of the studied phenomena. In this type of research, the voices and perceptions of specialists provide a representative contribution through multiple perspectives. However, the focus is not on gathering information from a large number of participants but rather on specialists working in the field of gender-based violence.

5.4 Case Study

Case studies select the relevant focus of interest in the field, developing a coherent amount of knowledge. Commonly used in social science, its methodology involves deep study, which can positively avoid generalisations while also exposing potential replications in other contexts or cases (Stake, 2005).

Particularly in complexity, a case study is a technique that helps researchers approach complex problems to "balance the open-ended, nonlinear sensitivities of complex thinking with the reduction in complexity" (Hetherington, 2013, p. 71). It is an appropriate choice for a complex gender-based violence system because it emphasises the local and contextual nature of the

problem, and the research objectives centred on developing Social Design capabilities in the complex phenomenon within a collective net of social agents (Cilliers, 1998).

The study portrayed a local and national context of gender-based violence, focusing on domestic violence due to its effects and disposable data. Case studies utilise structured (e.g. surveys) and unstructured (e.g. open-ended interview questions and observations) data collection methods. Carefully selected case studies are beneficial for establishing external validity and ensuring that results are generalisable. This case is exploratory, embracing real-life context and exploring intervention situations (Yin, 1993), and instrumental due to its objective of understanding more of what can be observed (Stake, 1995).

5.4.1 Case Selection and relevance

The objective of selecting a case study is to identify small-scale capabilities that frame design interventions relevant to the local context while contrasting these with the broad spectrum of issues within the chosen theme. Although Portugal is a small country, it has seen a rise in domestic violence since the COVID-19 pandemic, leading to the introduction of multiple new resolutions aimed at addressing this phenomenon (Statista, 2024). Additionally, studying gender inequalities in Portugal since 2017 deepened the researcher's awareness of the issue. It enabled engagement with a community comprising civil servants, governmental representatives, institutions, and social activists.

Unlike the UK, which has its support, education and prevention system for violence against women and girls centred on their police, countries like Spain²³ and Brazil²⁴ have specialised structures and interconnected systems that support networks inter-dynamising collaborations and partnerships in a solidarity-based approach, where most people in situations of violence rely on the effectiveness of such synergy to have their rights guaranteed. In these mutual aid networks, public and social authorities coordinate responses together, relying on social institutions, non-governmental organisations and associations to provide support, education and assistance to the population. This format depends on social participation and articulating a mentality of collaboration and shared responsibilities, as pointed out in the comparative study between Spain and Italy during COVID-19, which exposes that the reaction towards this phenomenon is directly influenced by how society lives in cultural and structural aspects (Donato, 2020).

²³ Following a decentralised proposal and a participatory approach, the Spain Government share responsibilities with other specialised institutions in a coordinated context whose organigram can be seen in the link <https://violenciagenero.igualdad.gob.es/wp-content/uploads/InfografiaUnidadesVG.pdf>.

²⁴ Brazil have a specialized net that articulate institutions from government, non-government and communities providing tools for combat GBV and domestic violence <https://www2.camara.leg.br/a-camara/estruturaadm/secretarias/secretaria-da-mulher/procuradoria-da-mulher-1/como-buscar-ajuda-em-caso-de-violencia/conheca-a-rede-que-atua-no-enfrentamento-e-na-prevencao-a-violencia>.

A field study of one Portuguese's network for domestic violence and gender equity is presented here to explore Social Design contributions in complex social systems through an active approach. SIGO (Service for Promotion of Gender Equality) network at Póvoa de Lanhoso, north Portugal was chosen for analysis because it is the first group of multiple stakeholders to self-organise collectively, providing local support to women in vulnerable situations. This local socio-technical system generates answers for gender-based violence in interconnected models following international structures and contexts provided by global agreements that serve as guidelines aligned with Human Rights and Sustainable Development Goals. The local network development strengthens the root presence of a national proposal program articulating responses for local needs and propelling synergies and central management made by its municipality.

Finally, by exploring a local case, this research aims to evidence the relevant contribution of Social Design to complex societal issues. This study does not confront current studies from other fields, such as sociology, anthropology, and psychology. Instead, it takes advantage of the components presented, the previous knowledge of studies already carried out on the themes in Portugal, and the lack of initiatives that explore it through a systemic approach. In the academic field or the field of design practice, a systemic approach dedicated to gender-based violence is a new field of research and practice that requires further investigation and exploration, which allowed us to find a field for carrying out this study.

5.4.2 *Brief Portuguese Context of Domestic Violence*

The violence committed against women is itself a paternalistic construction if we consider the evolution analysis of the victim. In the early 70s in Portugal, violence against women started to be known as a social problem. Before that, cases of violence were treated as Syndrome of the Beaten Woman (S.M.B.), "a set of psychological symptoms, usually transitory, that are frequently observed, in a recognisable and specific pattern, in women who claim to have been physically, sexually and/or psychologically mistreated in a serious way by their male partners (and, sometimes, female)"(Dias, 2008).

In the 80s, the narrative around women as victims of domestic violence began to shift. Women were increasingly seen not just as victims but as survivors. While the impact of acts of violence was evident, the underlying causes of this phenomenon remained largely overlooked. In some ways, the feminist movements contributed to direct attention to the men's roles and the socio-cultural and political spheres of perpetuating the violence against women (Russo & Pirlott, 2006). In other words, a systemic perspective was added to the individual one, making clear that

men dominated the capitalist society, the public and private spheres of life, and the social roles were the baselines that supported women's condition in Western society until now.

In the 90s, Portugal settled its first studies about domestic violence, which the Commission first made for Equality and Women's Rights, which became the Commission for Citizenship and Gender Equality (CIG). Those investigations contributed to creating specific legislation to address domestic violence, aside from a series of actions to reinforce awareness, protection, prevention, reintegration of victims, and professional qualification in these areas:

Whoever, repeatedly or not, inflicts physical or psychological abuse, including corporal punishment, deprivation of liberty and sexual offenses: a) Spouse or ex-spouse); The person of another or of the same sex with whom the agent maintains or has maintained a relationship analogous to that of spouses, even without cohabitation". This amendment criminalizes acts that occur in conjugal situations even if they do not imply cohabitation and provides, for the first time, the criminalization of domestic violence between same-sex couples. The crime of domestic violence is also attributable to «the parent of a common descendant in the 1st degree (...) or a particularly defenseless person, due to age, disability, illness, pregnancy or economic dependence, who cohabits with him». The concern for children in contexts of domestic violence is also foreseen when it reads that "the applicable prison sentence is aggravated if the aforementioned acts are committed against a minor, in the presence of a minor, in the common domicile or in the victim's domicile" (Article 152, Portuguese Penal Code).

The government created a National Plan Against Domestic Violence²⁵ to support new legislation. This plan is restructured and analysed every four years to guarantee protection and adjust interventions associated with this phenomenon. The National Plan Against Domestic Violence is a strategic plan that unites many stakeholders and actors to generate answers that protect victims and their social integration, in addition to preventing and monitoring the theme.

In 2013, another perspective of domestic violence gained attention from public affairs: violence in young relationships. According to the Office of Women's Health, dating violence "is physical, sexual, emotional, or verbal abuse from a romantic or sexual partner. It happens to women of all races, ethnicities, incomes, and education levels. It also happens across all age groups and in heterosexual and same-sex relationships." Just in 2013, the crime of Domestic Violence²⁶ in Portugal

²⁵ III Plano Nacional Contra a Violência Doméstica. Resolução do Conselho de Ministros n.º 83/2007. Diário da República, 1.ª série, n.º 119, 22 de Junho de 2007.

²⁶ CIG (Comissão para a Cidadania e Igualdade de Género). Violência no Namoro. Accessed on February 12th from <https://www.cig.gov.pt/area-portal-da-violencia/violencia-no-namoro/enquadramento/>

started to contain Dating Violence, which means that all elements characterised as violence were included in this new review of the law.

Today, the system that generates answers for gender-based violence, specifically domestic violence, is constituted by the Public Ministry, Police, National Guard Security, Hospitals, municipalities, NGOs, and social civic institutions. It is the responsibility of the Public Ministry to manage the cases and ensure the application of the law. To the Police and National Guard Security, collecting victims' complaints and all the relevant data is the objective. Hospitals also apply their victims' enquiries when necessary. The data is a significant part of the process for administrative and juridical roles. However, research shows us a lack of this data, and as in many countries, the reports of violence against women are underrepresented (Lisboa & Pasinato, 2018). According to the authors, available official statistics provide relatively little information, and the main concern is related to the system synergy of its participants to ensure long-lasting strategies.

Under the supervision of the Portuguese Council of Ministers, is designed a guideline for Gender-based Under the supervision of the Portuguese Council of Ministers. Those structures guarantee the proposal's maintenance and support to extend its application to local communities. As we can see in Figure 5, the responses in this area encompass three levels of action. Short-term prevention covers victims at risk and victims in general, offering immediate protection and support to victims to avoid increased risks. Also, it generates answers for acting at the level of safety and empowerment through physical and psychological health support, employment, skill development and sociability, as presented in the following Figure 12.



Figure 12 Prevention areas to fight against gender-based violence in Lisbon. Source: Comissão para Cidadania e Igualdade de Género – CIG, 2025.

At the Medium-Term Prevention level, the approach prevents and educates non-victim adults, young people and children. At this level, efforts exist to combat insecurity and to train and

educate professionals. Additionally, the program raises awareness and invests in school education for equality through local cultural and technical associations. The Long-Term Prevention level is dedicated to future generations, namely children and young people, and focuses on education and constructing less unequal cities. Through the incubation of good practices, such as pilot projects in education areas of gender equality, schools and educational programs have access to books and more information to help deconstruct stereotypes and biases (II 2nd Municipal Plan for the Prevention and Combat of Violence Against Women, Domestic and Gender-Based Violence 2019-2021, 2021).

The Citizenship and Gender Equality Commission (Comissão para Cidadania e Igualdade de Género – CIG) was created to orchestrate all initiatives and promote practical actions to fight violence as a social phenomenon. The Commission is comprised of an administrative and presidential area followed by units that support and guarantee every strategy's action, validation, and application, allocating money as presented in Figure 13.

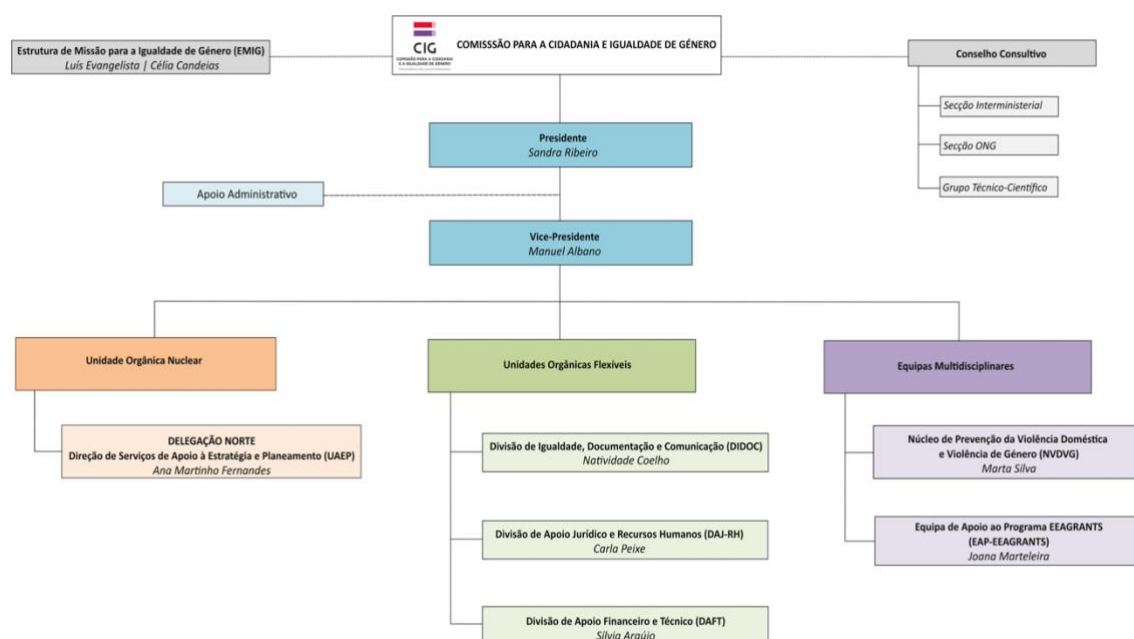


Figure 13 Organisational chart of the Citizenship and Gender Equality Commission. Source: Comissão para Cidadania e Igualdade de Género – CIG, 2025.

Furthermore, good practices highlight victim protection strategies. The Portuguese mechanisms of cooperation allow other institutions to share information and resources between governmental institutions and non-governmental institutions to support victims in shelters, giving them all the resources to pass through the process. The investigation and protective measures follow strict regiments to ensure rapid feedback to protect victims. The country also invests in education, starting from an early age, and professionalization of its structures.

Despite the significant efforts from all spheres related to this issue, the latest preliminary report from November 2022 shows that from January 1 to November 15, twenty-eight victims of femicide – the intended murder related to gender issues – twenty-two of them occurred in intimate relationships, twelve were aggressors with antecedents of harmful behaviour. In these twelve cases, it was possible to identify that a third person knew about the previous aggressions, and in seven of them, there was an anterior complaint²⁷. This means that significant work must be done on issues involving organisms, entities, individuals, and society in general.

5.5 Observation

Rather than place participant observation as a mere method of data collection, the investigation embraces Ingold's (2017) reference to participant observation attributes to the anthropology nature of the commitment of an attentive observation during the inquiry. However, it is considered a second and complementary source of data that has its values to construct relevant moments of reflection.

The anthropological nature of design aligns with Ingold's (2017) view that observation serves as an educational and transformative tool for many. Our capacity to observe, think, and act critically towards reality can shape our future.

We do so in order that we may grow in wisdom and maturity, in our powers of observation, reason, and critical thinking, in the hope and expectation that we can bring these powers to bear on whatever problems we may tackle in the future. That's why participant observation should be understood, in the first place, not as ethnographic but as educational. It is a way of learning, and that learning—as we well know—can be transformative (p. 23).

According to Joagensen (2020), the use of participant observation is appropriate under six conditions, presented in Table 5, that enable better results and its application.

Table 5 Six conditions to participants observations

1. The interest of the research especially is concerned with human meanings and interactions viewed from the perspective of the native members of those situations and settings.

2. The phenomenon to be investigated is observable in some natural, everyday life situation or setting.

3. The research can acquire reasonable access to people and their activities in an appropriate setting.

²⁷ OMA. Observatory of Murdered Women. Infographic. Preliminary data on Women Murdered in Portugal. Retrieved on December 22, 2022, from http://www.umarfeminismos.org/images/stories/oma/Infografia_Dados_preliminares_2022.pdf

4. The phenomenon of study is sufficiently limited in scope, size, and location to be examined by way of a case study design.	5. The questions or problems to be addressed are appropriate for the case study.	6. Direct observation, participant observation, interviews, documents and materials, and other means sources available in some field settings can collect suitable information.
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Source: (Jorgensen, 2020)

Through participant observation, it is possible to see how reality presents itself. One must embrace how things behave and acknowledge the intrinsic dynamics to understand complexity. Participant observation is an excellent source for collecting data about people and matters (Jorgensen, 2020). Observing how civil servants, government structures, grassroots institutions, and activist groups address the subject of analysis is crucial for understanding their relationship to the problem. It reveals how they engage in this area and the needs and barriers they encounter during collaboration.

To do so, the mode of participation was passive, with the researcher in the role of observer, not interacting with the people or their activities. Besides an active role that could stimulate data gathering from other perspectives, the passive mode here was adequate for the selected moments of observation. These were two forums organised by local municipalities, the first in Cascais and the second in Lisboa. Both encounters aimed to unite all institutions related to gender-based violence issues and allow them to share learnings and practices from the field. The data was collected through note-taking, photography, and a meeting report shared online. This source provided additional information for a broader understanding of the current situation.

Overall, participant observation enhances the qualitative approach by offering detailed descriptions of a typical situation selected for this investigation. It will also help examine human interactions and provide insights that either do not exist in reports and literature reviews or confirm the findings documented there.

However, it is also worth adding the use of participant observation in the work applied to design, where the observer assumes an active role. Being a participant while observing allows for the collection of information with high levels of subjectivity, which is of great importance for this study.

5.6 Focus Group

The research understands collective consciousness as a relevant perspective on which to focus. Thus, focus group discussions were used as an additional technique to provide rich experiential data. Particular topics guided the discussions and propelled the sharing of experiences and perspectives.

Widely used in research focused on understanding the victims of gender-based violence (Murray et al., 2015), focus groups represent an opportunity in this investigation to identify the main collective barriers and perceptions of participants in this field of research.

Approaching central themes makes it possible to cover the main concerns and embrace future directions to achieve the proposed objectives in improving social participation. Three focus groups were organised with six up to eight participants, each representing a) governmental entities, b) non-governmental institutions, and c) independent associations, social actors and designers, selected according to their relevant work or participation in gender-based violence issues and system thinking or system-oriented design (Morgan, 1996). The sessions use notes and boards to collect information, and an extensive interpretation and rethinking of the collected data and selected literature review will be held to construct a new approach to form a final proposal.

Rather than a form of group interview, in this proposal of learning by doing and Social Design action, participants are exposed to conceptual inquiry. This method of observing participants while performing tasks and interacting with them about what they are doing is prompt and efficient for the design process (Ventura & Bichard, 2017). By conducting these moments of collective interaction, it is possible to understand the overall context and the problem that arises within that and use it as a form of validation. In addition, this technique is adequate and relatively easy to implement.

6 Research Through Design

Following the complex thinking approach, this investigation cast two referential design methods: the system-oriented design approach and participatory design. Both approaches permit various tools and techniques to contribute to knowledge development within a social system design context. In this realm, Ulrich (1987) proposes a practical heuristic to deal with system implication, its problems, definitions, and evaluations. Additionally, this choice elevates the possibility of having the whole picture of a problem and acting toward it so that the various areas can benefit from the established relationship.

To create a comprehensive inquiry that integrates various disciplines, the system-oriented design approach and participatory design can foster new knowledge through this interdisciplinary method.

6.1 System Thinking and Design

System thinking helps designers develop a holistic perception and nourish multiple world views about paradigms that can or cannot be solved through design. It complements the reductionist mindset to approach problems by building a critical overview through elucidative visualisations that invite action. The capacity to propel understanding of causal parts of a system provides awareness and sensemaking. All its capacities have shown numerous applications, from sustainable development goals to community transformation (Andreotti et al., 2012; Costa, 2020a).

According to Seelos (2020), understanding soft/critical system perspectives centred on discovering motivations and options for progress from individuals and small organisations. In his article about Changing Systems, the author argues, "Hard perspectives tend to ignore social complexity and underestimate the potential of local wisdom, resources, commitment, and ownership" (Seelos, 2020, p. 44). Such a statement encourages a reflection on the relevance of elaborate proposals capable of understanding social systems in subjective dimensions. Additionally,

the author reminds us that systems are not objective in the real world, making capturing a realistic point of view about system interactions and perceptions even more relevant.

Rather than solving a problem, in system-oriented approaches, design looks for leverage points that can propel positive transformation in some way and affect multiple areas in the system, occasioning a ripple effect (Meadows, 2008). Intervening in a system can lead to unpredictable outcomes but also creates a more significant opportunity for exploration and learning. Therefore, maintaining an open mindset and curiosity is crucial for this research. Systems thinking as a mental model offers a framework for analysing the current paradigm and provides tools for potential actions within the system.

Moreover, when related to societal problems, they are mainly addressed by policymakers and social workers. It is a recent participation in design to face such a complex world with enormous volatility: social problems and their stakeholders. However, there is no specific area to address exclusively complexity in society, which is or should be an open invitation for designers to collaborate and contribute.

The systemic approach in this investigation looks to find patterns of behaviours in the complex societal problem of domestic violence, to look to those patterns, and, as system thinking proposes, explore what and where multiple shifts in the relations of each part of the problems can leverage system change. In this path, systems design, through its transdisciplinary essence, emerges as a holistic approach to enabling collaborative reimagining of the intricate dance between theory and practice, investigation and application. To transcend traditional academic silos, it propels diverse knowledge streams and methodologies. This approach explores the co-creative potential hidden within the in-between and transitional spaces, those ambiguous boundaries where human creations and the natural world merge and intertwine.

System Thinking Tools

System Thinking presents tools that help researchers understand the complexity better, frame it considering boundaries, and act towards multiple aspects of the issue. Enabling people to collaborate on complex issues requires the development of abilities for systemic thinking. Therefore, visualisation is a crucial aspect of system-oriented design, which is fostered through collective reflection and narratives. This approach allows participants within the system to engage with the larger picture actively. Stroh (2015) talks about developing a collective momentum for change by engaging participants in the process. Sadabadi and Aramipour (2022) developed it in a collective interview to construct the whole picture and act towards social innovation.

The capacity to build a great visualisation can directly impact conscious decision-making. Thus, tools such as iceberg canvas effectively build structural elements and root causes of social problems. However, to deal with soft system problems, system thinkers must adopt a subjectivist point of view and reflect upon multiple problem aspects (Costa Junior et al., 2020b). While engineering is a commonly used modelling tool, from a Social Design perspective for this context, other models have equally great results, such as dynamics and interactive maps produced on platforms such as Kumu. An example of this use by the Catalan Government proposed in RIS3CAT 2023 to tackle societal and economic challenges of the 21st century, which system map²⁸ allows the visualisation of adaptive problems in complex environments and the objective of achieving a long-lasting social life of great wealth.

Although building maps is a participatory process, there are also moments when specialists must stay with the problem and find ways to construct that visualisation better. This requires reflexive approaches and forward and backwards information movements for validation and shared understanding.

Maps effectively reduce the tendency to focus solely on one aspect of a problem. They help prevent a narrow and biased perspective and minimise tensions that may arise from differing agendas among various system stakeholders (Stroh, 2015). Thus, maps' central objective is to create a concrete world that enables people to perceive, embrace, and act (Sevaldson, 2013).

However, the approach used in this investigation was adapted from Stroh's Four Stages of Leading Systemic Change, presented in Figure 14 and is deeper explored in the subchapter 6.1.1 (Stroh, 2015, p. 75).

²⁸ <https://reimagined-futures.kumu.io/mapa-sobre-com-el-sistema-de-generacio-de-coneixement-de-catalunya-pot-contribuir-a-accelerar-la-transicio-cap-a-un-model-socioeconomic-verd-resilient-i-just>

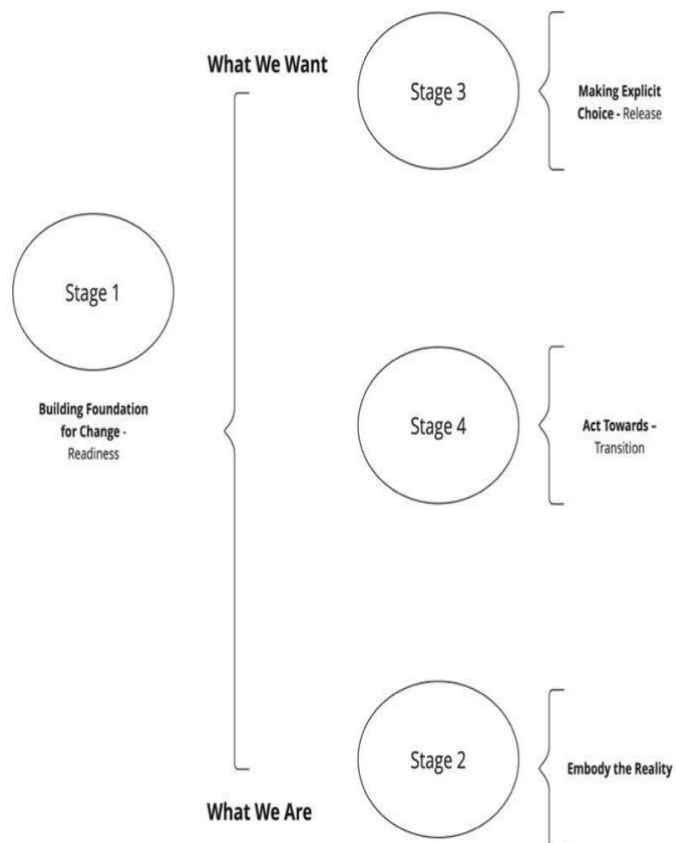


Figure 14 Four Stages of Leading Systemic Change. Source: adapted from Stroh, p.75, 2015.

In this proposal, Stage 1 of building Foundation for Change consists of mapping the stakeholders and building a common ground by making the system visible through a causal system map designed at Kumu and later redesigned to simplify a co-creative session. These two maps are detailed and presented in the results of Part III. Stage 2 was adapted to Embody the Reality because it constitutes a form to activate critical thinking and confront personal perceptions from stakeholders in valuation sessions and co-creative sessions. Stage 3 Making Explicit Choice – Release, constituted a moment of reflection and decision-making for short-term and long-term transformations. It exercises the commitment but also the imagination through the collective path.

The results are presented in Part III, and the participants are evaluated for coping with different interests and perspectives according to their work area or role in the system. Finally, Stage 4 rather than focus on bridge the gap is identified as Act Towards – Transition. After releasing some barriers, old beliefs, and reductionist perceptions of the problem, the transition moment allows to leverage points for change and tackle it as an ongoing process of collective responsibility.

Irwin's approach to the system's transition was an essential component of this investigative process. Her method incorporates various strategies to foster a favourable outcome and helps envision the future as a commitment to ongoing effort and long-term work. Rather than speculate, transition design proposes a reflection in action that places designers in a position to enhance systemic perspectives in complexity. It invites participants to explore narratives, knowledge and skills to face current realities, acknowledge past statements that increase and perpetuate inequalities, and propel curious minds to face new levels of development (Irwin, 2015).

Irwin (2018) argues that design transition represents an evolution of service design and design for social innovation. This approach also complements fostering social change, mainly when one views it as identifying problems and creating solutions. This perspective embraces innovative design strategies and utilises the Theory of Change as a framework, as illustrated in her framework presented in Figure 15.

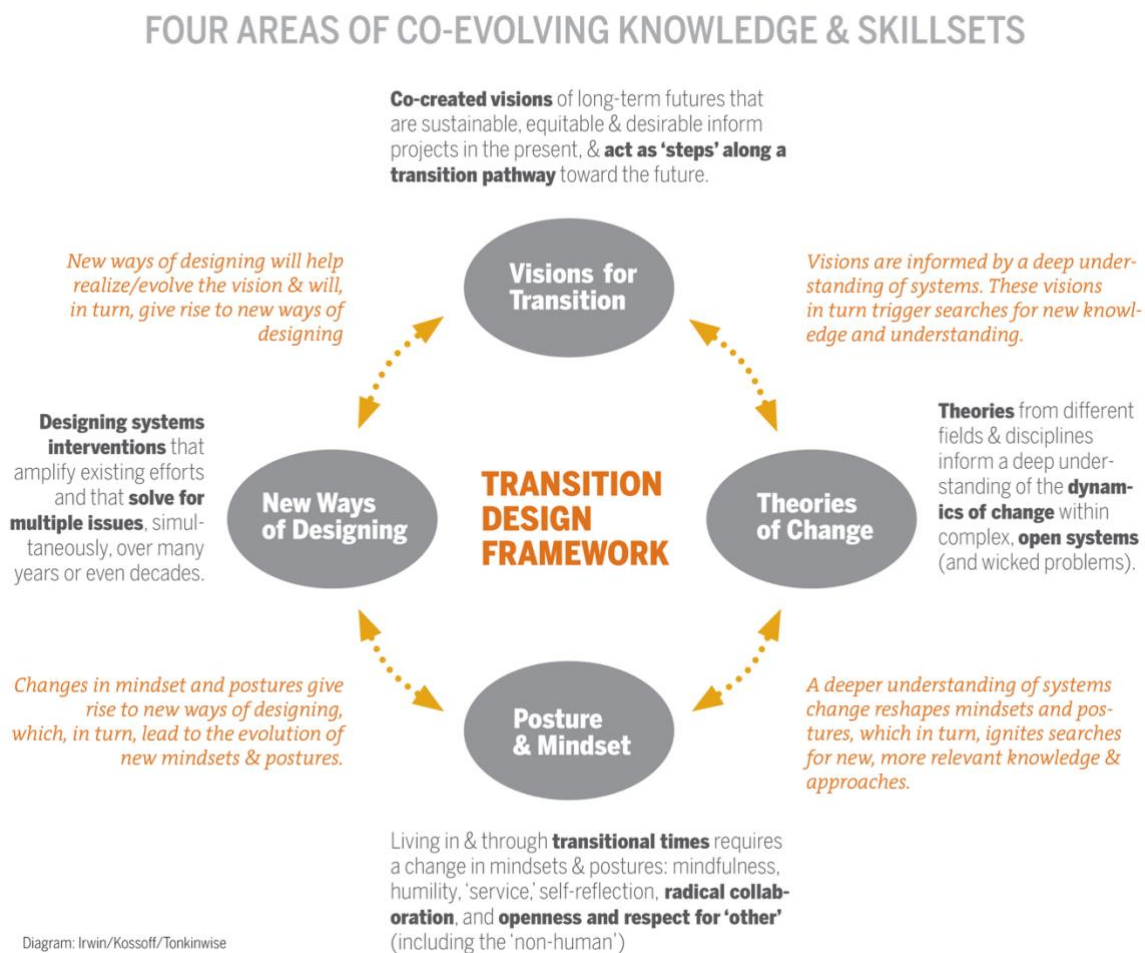


Figure 15 The Transition Design Framework brings together a body of practices in four key areas useful in designing for systems-level change. Source: Irwin, 2018, p. 97.

A crucial aspect of this approach is the framework that allows participants to critically engage with the holistic dimensions of a complex social issue. After conducting a system map analysis, participants develop a deeper understanding of the interconnected problems involved. When participants were presented with backcasting scenarios, they could address long-term visions for transitions, not as forecasts but as tangible steps moving from the current reality toward new pathways (Irwin, 2018). Additionally, the Transition Design process can help diminish what Udoewa (2023) calls 'System Trap' because it evokes a sense of embodiment and consciousness about how participants are entangled by past structures perpetuated until now. The process is represented in Figure 16 and exemplifies the related framework that was chosen to adapt for this investigation.

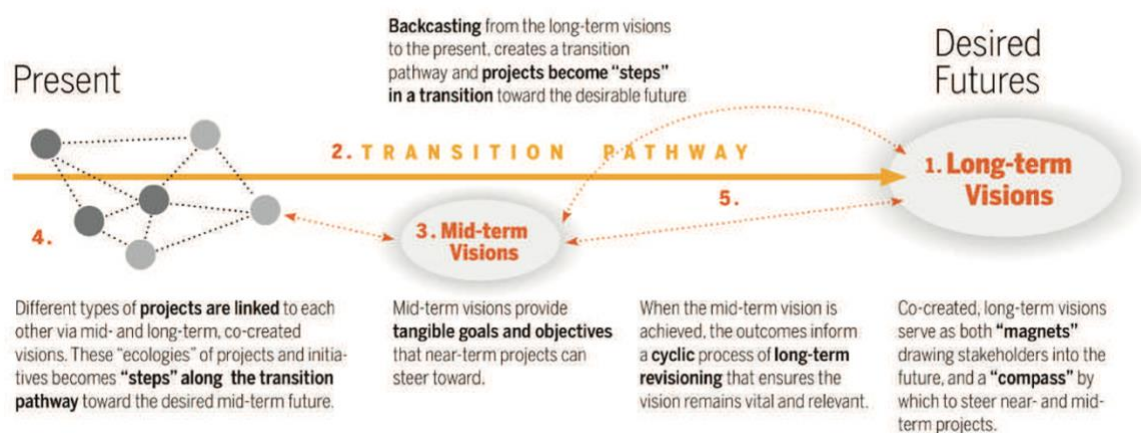


Figure 16 Backcasting from a co-created future vision creates a “transition pathway” along which new and existing projects can be connected and situated as “steps” in a long transition toward the desired future. Source: Irwin, 2018, p.979.

Lastly, the system thinking approach is widely known in multiple areas, as shown in Chapters 3 and 3.1. However, for too many researchers, it is a concern to apply system-oriented design due to the need to manage multiple stakeholders in decision-making. To address this challenge, the process was modified to accommodate the limitations associated with the difficulty of having all system stakeholders in the exact location to develop the process collaboratively. Some parts of the process were generated by analysis and synthesis processes and evaluated by participants or other specialists invited. The processes are clarified in Chapter 7 in the design process phase.

6.2 Participatory Design as a Method

Participatory practice in design is a well-established approach that engages participants in addressing specific issues. This investigative process allows individuals to have a voice, gain understanding, reflect, and develop knowledge, ultimately transforming their realities through a collective "reflection-in-action." In this proposal, rather than having specialist designers act as

facilitators who conduct the process for participants, we emphasise allowing participants to influence both the process and its outcomes (Andreotti et al., 2012; Costa Junior, 2020b).

Spinuzzi (2005) elaborates coherently on why participatory design must be seen and treated as a methodology due to its form of understanding knowledge by doing. The methods used in participatory design emphasise its iterative nature and the various interpretations made by the designer-researcher and the participants. Participation confirms the process and elevates the investigation capacity to transform current realities, reshaping layers from mental models to cultural beliefs and tools established.

In this collective process of inquiry, Sanders (2002) describes the expert mentality as one that searches for results and commonly subjectifies and objectifies the person involved in the investigation, making them just informants, in an extractive way of doing research. The participatory seeks to develop solutions with the participants in a reciprocal form because they are the experts. In this proposal, design has a relational role and a goalkeeper to guarantee collective participation in the same objectives. Hence, while the research moves through the investigation process, changing the context, it also changes its participants by adding new layers of knowledge and self-awareness.

The participatory methodology is founded on rationality and constructivism, which provide a framework for understanding people, artefacts, communities, and practices. However, as Spinuzzi (2005) notes, much of this knowledge cannot be wholly systematised. Instead, it can be approached as a "perspective" that emerges through reflection. In this contraction lies the design's ability to transcend concrete walls and venture into realms of subjectivity. On the one hand, it opens doors for an exploratory educational mindset, the emancipatory tool at the individual and collective levels, and the building of collective capacity to thrive. On the other hand, the relational role of design, the ethics and non-exploitive approach, and the massive involvement are at the table. This methodology requires self-awareness and constant reframing of dominant roles in social dynamics not to reproduce what this investigation wants to work against.

In Sanders's (2008) proposal, designers approach research with two mindsets: the expert and the participatory. The first design researchers view themselves as the experts, possessing the knowledge and skills to understand user needs and create solutions. Individuals are seen as "subjects," "users," or "consumers" – passive recipients of design interventions. In participatory mindset design, researchers see people as partners and co-creators. The participants are actively involved throughout the design process, contributing their ideas, perspectives, and experiences. It is more collaborative and iterative, with individuals playing a central role in shaping the design outcomes. According to the author, in Figure 17, moving from expert to participatory allows projects to become more inclusive, fair and human-centred.

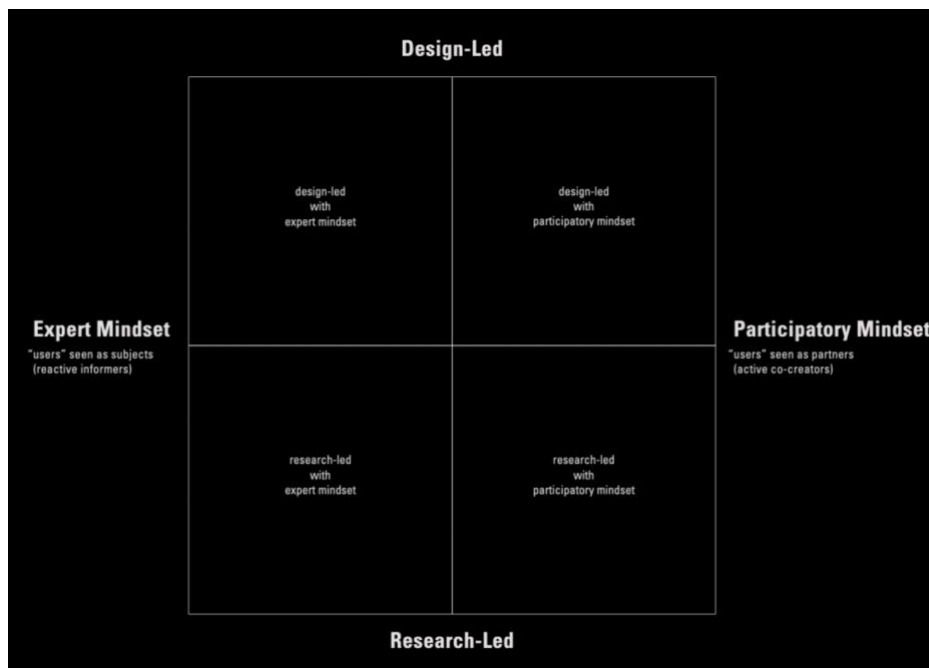


Figure 17 Map of design research-underlying dimensions. Source: Sanders, 2018, p.2.

Therefore, participatory methodology is not a mere part of a Social Design approach but a conscious choice methodology that will contribute to decisive reflection during the process. It will set the boundaries and straight capacities to go further in the challenge of sharing responsibility in this path and subject of research. Just by using this form, one can comprehend and stride.

To Sanders (2008), shifting from an expert to a participatory mindset requires a significant change in the power dynamics between designers and users. Designers often find it difficult to let go of control and accept the uncertainty and complexity of authentic collaboration. This can result in tokenistic participation, where users are consulted, but their feedback is neither valued nor incorporated into the design process. Design practitioners and participants must acknowledge new ways to collaborate and embrace challenges in challenging transition times.

7 Design Research

The present research project relies on data collected through theoretical inquiry and qualitative methods aimed at exploring Social Design applications to address the complex societal issue of gender-based violence. The research utilises collaborative systems thinking and a participatory approach. This section outlines the steps taken to gather data, where each step builds upon the previous one and encourages reflection in an iterative process. Figure 18 illustrates the scheme that locates each step, demonstrating how the work was developed progressively over time.

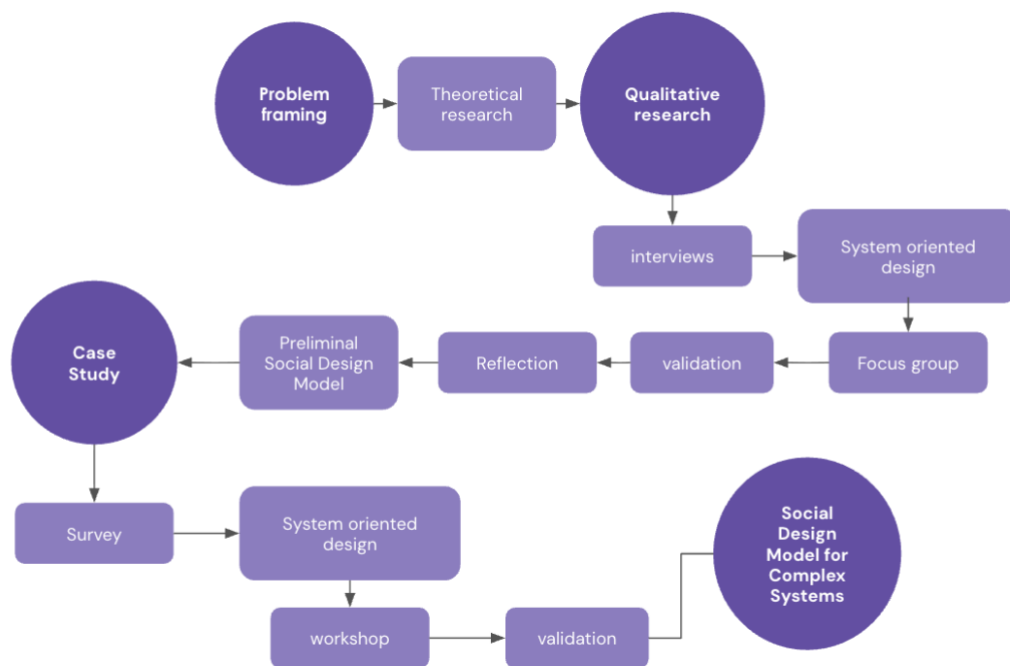


Figure 18 Methodological approach. Source: Author.

The proposed program is divided into four phases. The first phase comprises theoretical deepening and proposal structure construction, where the problem is defined and boundaries are established. The second phase involves qualitative research and consists of two parts. The first part focuses on structuring the research framework, while the second entails data collection through one-to-one interviews with specialists. This approach helps identify strategic areas and provides a deeper context.

The third phase of the investigation focuses on consolidating the knowledge from the first two phases and establishing the case study approach, building bonds and relationships with the net

occupied in creating solutions for domestic violence in Portugal. Moreover, it is dedicated to selecting and structuring the Social Design in action approach with system thinker specialists who could interact with the process developed to deal with gender-based violence through Social Design lenses. Finally, the fourth is the final construction of the model and is dedicated to proposal implementation, followed by writing and the conclusion of the final chapter.

7.1 First Phase Theoretical Investigation

This investigation examines the theoretical framework surrounding Social Design, System Thinking and regenerative and gender theories to reach a deeper understanding of the gender-based violence phenomenon and its complexity. It addresses the structures and mechanisms involved in this social issue. It explores the collective actions in place to address domestic violence to develop a Social Design framework that can implement the changes social groups' presence finds essential. Besides the substantial work made in the first year of investigation, gathering literature is an ongoing process due to the nature of this investigation.

Understanding that Social Design is a relatively new discipline, theoretical research was conducted to collect information that structures Social Design in reality, opening spaces for future perspectives. Thus, the research found elements to construct theoretical bases of Social Design and its current contributions to complex social problems, framing gender-based violence. Moreover, to establish a relationship with a local net that works in the phenomenon, the first phase also centred on acknowledging the elements of the system in this related problem. A list and map of institutions and specialists in Portugal's socio-technical system were created, and reports and documents were analysed to prepare the following step of interviews and context understanding.

7.2 Second Phase Qualitative Research

As an effective way to gather relevant information with a profound amount of data, interviews require a focus on preparing and conducting. A semi-structured interview protocol with fourteen questions was designed and presented in Appendix I. The average interview lasted about sixty minutes. The interviews used semi-structured form with thirteen individuals representing a fraction of civil society organisations previously mapped for this proposal. It was settled one by one, recorded and transcribed later.

The sampling selection focused on four main areas: sociology, anthropology, psychology, and law due to its direct intervention in gender-based violence. In qualitative research, sampling is relevant to illuminate important aspects that constitute or contribute to the theoretical perspective

(Djamba & Neuman, 2002). Thus, the selected specialists in this research represent a sampling of a few people representative in their relevant roles in sociology, anthropology, law and psychology in Portugal. As the objective is not to create a representative sample, the strategy adopted was to use a reputational sample where the selected interviewees represent a net linked by the same or similar subjects of work and area of research, which is related to violence against women and girls.

A survey was applied in the same way to the different participants of the interviews to ensure homogeneity in the research. The focus of the interviews was collecting multiple views about three pillars identified as central to changing the social dynamics surrounding the phenomenon of gender violence, which ensured relevance under the collected content. In this context, the interviewed narratives aggregate knowledge related to this complex system's perceptions, practices, and responses.

This non-probability sampling has impacts on a variety of attributes beyond representativeness. It makes finding perspectives possible when randomising the population target is impossible. The deliberate choice of participants considers their relevance to the field of social action in Portugal. The finding informants were selected based on their active work on the subject. Some of them relate to well-known civic society organisations and governmental institutions. The research also does not exclude snowball sampling as a technique for finding new participants with relevant roles in gender-based violence (Farrugia, 2019).

For the protection of the identities of the interviewees, a coding system was developed that assigns each individual a letter and a number based on their area of expertise and their position in the interview. Table 6 presents the thirteen specialists who contributed to this research out of the thirty invited, highlighting their relevance to the subject of analysis.

Table 6 Specialists Interviewed in the Portuguese Gender-based Violence Context

Area	Relation	Code
Psychology	Contribution to fieldwork for gender equality and violence. Is the author of several scientific publications and coordinator of several research projects, of which the most important is "Íris – Life Trajectories of LGBTI People Victims of Domestic Violence".	E1P
Psychology	Worked for over a decade with the Roma population and victims of Human Trafficking. Has been a consultant on Gender Equality and a trainer in this area since 2000. One of the founders of the Plano i Association. Part of the list of experts recognised by the CIG in the areas of Equality between women and men, Violence Against Women and Domestic Violence, Human Trafficking and Sexual Orientation, Gender Identity and Expression and Sexual Characteristics.	E2P
Psychology	Responsible for the initiative to prepare the court and legal environment to assist and welcome victims – a more humane and welcoming judge – spaces designed	E3P

	not for aggressors, but for victims. Bringing the judicial office closer to supporting victims.	
Legal	Researcher at the Centre for Research in Social Sciences at the University of Minho, and a member of the Centre for Studies on Migration and Intercultural Relations at the Universidade Aberta. Obtained her PhD from the University of Minho, with a thesis on rape crimes. Holds a master's degree in Women's Studies (Universidade Aberta) and a degree in Journalism from the University of Coimbra.	E1L
Legal	Founder of Casa do Brasil - has done important work in guaranteeing rights and advocating for Brazilian women in Portugal. Has an active voice on issues of violence.	E2L
Legal	Superintendent of the Public Security Police and Assistant Professor. Recently prepared a document reporting a broad overview of the Public Prosecutor's Office's actions on the issue of violence against women.	E3L
Sociology	Full professor in the disciplinary area of Sociology at the Department of Sociology, Institute of Social Sciences, University of Minho. Has numerous publications on the issues of inequalities between men and women in Portugal.	E1S
Sociology	PhD in Family Sociology, Master in Sociology, Postgraduate in Criminal Sciences and Degree in Social Policy. The main areas of interest are Social Policy, Criminology and Victimology, Gender, Domestic Violence Promotion, and Protection of Human Rights.	E2S
Sociology	Was Secretary of State for Citizenship and Equality. With a degree in Sociology, has a long career in gender equality issues, recognised by the European Institute for Gender Equality (EIGE).	E3S
Sociology	Holds a PhD in Sociology and is a university professor. Has worked in social intervention in the areas of violence against women for over twenty years. She is the author of literary fiction, self-help books and academic works. She regularly collaborates with television, print media and radio as a sociologist.	E4S
Sociology	Researcher at the Center for Social Studies, which is part of the Democracy, Justice and Human Rights thematic line. Co-coordinates the Working Groups that intersect religion, sexuality and gender in addition to projects in the areas of sexual violence and masculinities.	E5S
Social Service	Represents one of the municipalities in Portugal that manage an integrated net of institutions against gender-based violence.	E1SS
Anthropology	Anthropologist with a Master's degree in Urban Sociology, is an independent researcher with over 20 years of experience coordinating and participating in national and European projects. The main areas of interest are poverty and social exclusion, policy analysis for social inclusion and protection, housing exclusion and homelessness, and gender-based violence.	E1A

The interviews lead to the development of an in-depth understanding of the phenomenon and provide a source to create a Causal System Map to build the capacity to relate, embrace and intervene in the problem from a non-linear and multilevel perspective, which is further discussed and presented in Appendix II. The data collected from 2022 to 2023 presented valuable information where cause and effect could exist in the same element in the map.

The map was evaluated by specialists from system thinking and gender-based violence, then applied in a collaborative session to re-evaluate and explore ways to approach and intervene in the problem from a Social Design perspective through a systems-oriented approach. The findings are presented in Part III, Social design applied to gender-based violence: a case study. To understand the process behind the GBV Causal Map, follow Chapter 9, which provides the design processes and methodological approach to each phase, configuring empathise, define, ideate and prototype. Additionally, two field observations occurred in 2023 during the III National Forums Against Domestic Violence and the Cascais Forum Against Domestic Violence, further explored in subchapter 8.2.

7.2.1 *Designing the Interviews*

The survey, divided into three macro-relevant themes, is based on the bibliographic investigation intersecting different areas of knowledge. The themes encompass cultural and social inheritance, social roles, and mechanisms of action. The selection of these domains follows a critical bibliographic review, a relevant achievement in this project because it propels areas of our societal structure that help us understand gender-based violence and its response mechanisms.

Through a critical analysis of the bibliography, this research identified the main topics related to gender-based violence and social action. It found that aspects like cultural heritage, poor social dynamic incentives, and system structure are central elements that compound gender-based violence in our societies. Such areas of interest comprehend an interdisciplinary perspective, allowing us to understand the social construction, dynamics, motivations, and interactions related to the gender-based violence phenomenon.

The interview structure focuses on creating a multidimensional perspective on the macro themes designed through a single guide, where we can perceive differences and similarities in the perception and experience of the interviewed experts.

Therefore, this research has no intention to raise or deepen spheres already widely and richly studied in fields like sociology, anthropology, economics, or politics. It is up to this study, through the perspective of Social Design, to bridge new debates, foster innovation, generate changes in social dynamics and create a more cohesive society that can stand against gender-based violence.

As the object of study is complex, where problems accumulate and are of multiple origins, it requires contribution from all areas. Since the groups of agents on the issue and the dynamics between them occur at different levels and on multiple fronts, it is essential to provide tools to flourish and improve its interactions and interrelations. From this perspective, this proposal focuses

on finding mechanisms to change social dynamics to create a sustainable, inclusive society that facilitates the well-being of communities.

7.2.2 *Interview Themes*

Understanding what is behind the chosen themes is relevant because it starts to construct the context in which Social Design will be embraced. The overview presented of each theme that originates the inquiry with specialists represents a starting point in the literature that elucidates social and cultural dynamics in gender-based violence nowadays.

Cultural and Social Heritages

Social and cultural heritage shapes human perspectives in many areas, which is not different in the social construction of agents and institutions that act against gender-based violence. After all, from victims to agents fighting these issues, we are all social beings composed of cultural references. Moreover, the individual and collective dynamics are impacted by cultural influences shaping societal behaviours that can perpetuate dynamics and defaulting social responsibility (Bauman & Donskis, 2016; Morin, 2006; Gofman, 2014). It is also known that individual and societal attitudes about gender contribute to the increase and perpetuation of violence against women (Heise et al., 2002; Htun & Weldon, 2012), as well as cultural and social norms.

From a sociological perspective, violence against women is thus a pattern of behaviour that occurs in a physical, emotional, psychological, sexual and economic form and that is developed to perpetuate the aggressor's intimidation, power and control over women (Htun & Weldon, 2012).

On the other hand, the feminist current, which confronts the structures of analysis of violence against women, is centred on the concepts of gender, power and patriarchy (Sitaker, 2008). The historical development of our society reveals that the power dynamics against women's freedom and access to social life are a construction that propels violence in symbolic and physical ways, affecting some countries more than others and reflecting on the acceptance of mechanisms against gender-based violence (Breines et al., 2000; Inglehart et al., 2017).

These intrinsic aspects of each society make this topic relevant to establishing local social construction and dynamics, especially considering the recent impacts of pandemics and emerging changes and challenges. Hence, society and its values play a leading role in what could be essential to define the success of a more active action against gender-based violence.

Social Roles

Social roles can determine active participation that goes along with social changes. However, positive dynamics can be stimulated or suppressed according to individual and collective involvement in societal issues. In 2012, Htun and Weldon pointed out the importance of autonomous movements in producing a relevant impact on violence against women. The research collected several acts of feminist mobilisation in civil society from 1975 to 2005 to perceive its effects on policy change. Further, they found that policy creation is related to the active participation of women in the feminist movement. According to the authors, "the autonomous mobilisation of feminists in domestic and transnational contexts—not leftist parties, women in government, or national wealth—is the critical factor accounting for policy change" (Htun & Weldon, 2012, p. 548).

The well-known mechanism in participatory action research has shown the importance and impact of civic participation. Recently, Melsa Ararat described in her book the challenges in Turkey and the relevance of the private sector intervention in gender-based violence to balance the gender gap and strengthen the impact of the United Nations Sustainable Development Goals (SDG) (Ararat, 2020). Thus, the articulation between different sectors of our society is a multi-dynamic and non-linear system that enriches the possibilities to answer this issue. Developing and fostering social roles in multiple layers of social action and interaction can increase new solidarity patterns that generate real impact in these social-cultural structures of violence.

Action Mechanisms

In general, mechanisms of action for gender violence issues were created and adjusted according to existing social needs and resources. Thus, the government institutionalises most of the current social action mechanisms in this area to determine public policies and allocate funds for governmental and non-governmental institutions to implement actions in the field (Heise, 2011; Russo & Pirlott, 2006).

Research emphasises the need to create solidarity networks based on bottom-up models well-structured through social participation (Htun & Weldon, 2012). In many cases, it is possible that governmental responsiveness mechanisms do not include citizen participation and the development of a network with citizens. Moreover, the authors mention that policies depend on implementation, their discriminatory proposal, and their lack of use. From this perspective, bringing other operative possibilities to the centre of discussion represents an opportunity to generate a more natural interbeing, sustainability, and synergy in the system of Violence Against Women. Social action plays a relevant role in moving and forcing the application of policies.

7.2.3 *Data Collection and Analysis*

Data was collected using video recording and transcripts. Its analysis was made by categorising narratives according to the previous themes. Each theme evoked aspects related to the other. Analysing the patterns was possible to create an overview with the main topics to explore their interrelations.

The researcher could code and closely examine the data in thematic analysis, identifying broad themes and patterns. The central objective of this approach is to understand social structures and interactions that act against gender-based violence as a sociotechnical structure. Hence, this approach will capture individual perspectives to understand which actions, values and attitudes could be considered impulses or are blocking solidarity action - such as power dynamics, social roles, commitment, and empathy. Moreover, it also seeks to understand the solidarity dynamics, narratives and beliefs that support the current and the future of collective social change.

Besides the lack of transparency in thematic analysis (Attride-Stirling, 2001), this approach can provide a rich and insightful understanding of complex phenomena (Braun & Clarke, 2006). To do that so, we adapted the framework from Ritchie and Lewis (2003), presented in Table 7 that provides an approach through the content collected to be familiar with the data in a process of translating and re-reading, followed by the identification of initial macro themes, then to assign the coding index and the final themes. After that analysis, it was possible to synthesise the information, select relevant quotes and let the big picture flourish. Accessing this whole context of the studied social dynamics and gender-based violence in Portugal, the patterns started to appear to translate into a system that is presented in the results.

In this phase, the collected data was used to create a causal system map exploring the visualisation and sharing of information in an interactive way using the Kumu platform (Appendix II). This process took two months and was validated by specialists. It was used in a pilot workshop with participants from sociology, social workers, shelter specialists, designers, and journalists to validate and observe how those people interact with the map.

Table 7 Overview of the framework approach

Stages		
Data Management	Descriptive Accounts	Explanatory Accounts
Becoming familiar with the data (reading, transcribing and re-reading)	Summarizing and synthesising the relevant data into categories	Developing associations with data and themes
Identifying initial themes	Identify associations and relations	Reflect upon original data from theoretical perspective
Developing coding index	Developing abstract concepts	Reviewing data and guaranteeing misinterpretation
Assigning themes and representative information to the coding	Exploring possible interrelations	Interpreting and constructing the whole picture

Source: Ritchie and Lewis, 2003, p. 24-34.

7.2.4 Community Engagement with Domestic Violence

The investigative project was named DISTURB - Practising System Change in Gender-based Violence to build a relational proposal with the local community. This identity made presenting the differential research approach to design practitioners, social workers, and the community involved in this issue easier. The proposal was presented to municipalities, colleagues and specialists to build a relational network to follow and support this work with shared information, commitment and interest as required in a Social Design project. The communication material is presented in Appendix III.

Thus, DISTURB was presented as a project that uses participatory methodologies, a system-oriented approach and co-creation to drive collaboration and synergy in complex social systems. It is a way to collectively visualise and intervene in already-known structural patterns to create possible alternatives to leverage collective capacity. Moreover, it was the way we found to engage key stakeholders and propel the subject under analysis.

The project DISTURB was the empirical manifestation that congregates theoretical research from design and qualitative research. It was applied in the evaluation phase, which constitutes Phase II in the design research process, and in the case study with the Municipality of Póvoa de Lanhoso. DISTURB was also applied as a social media platform to connect with people interested in subjects related to gender inequalities, Social Design, and system thinking.

This approach is inspired by relational studies to build trust, communality and collective wisdom (Cipolla, 2009; Freire and Oliveira, 2017). By getting involved with the local community, it is

expected that design assumes a position as part of the system allowing other actors to feel the same when using design tools and approaches.

7.2.5 *Causal System Map Creation and Validation*

After data collection, the research centred on preparing the causal system map that could represent the context of domestic violence in Portugal. The creation process was adapted from Stroh's (2015) proposal, which collects information and takes critical self-reflexive action towards analysing material and the elements collected in interviews.

Its construction uses the iceberg canvas as a starting point; however, the construction of any system map reflects the perspectives of its participants.

System maps are valuable tools for establishing a common language and understanding complex problems. They highlight the differences among participants, creating opportunities for collective wisdom and accommodating various perspectives, even in the face of conflicts and friction. Moreover, they help address the limitations of scarce resources by bringing together multiple viewpoints in a single space for reflection, action, and visioning.

In an ideal world, creating a social system map brings together stakeholders from various sectors related to the issue in co-creative sessions. Together, they can collaboratively explore the current reality and work towards changing it with a shared intention. To achieve this, the involvement of government and other relevant institutions is essential. However, since this project is an independent exploratory investigation and is not funded, some adaptations were necessary to pursue the desired outcomes. This topic will be discussed further in the limitations section of the next chapter.

To effectively address and approach the challenges within Social Design practice, examples from other projects and studies were utilised to demonstrate how to implement systemic interventions for societal issues (Irwin & Kossoff, 2022; Sadabadi & Aramipour, 2022; Stroh, 2015).

From Stroh, we adapted the "Four-Stage Change Process" to build a foundation for change, face current reality, make an explicit choice, and bridge the gap, as explained in Table 8. The process was adjusted due to the nature of independent research and the incapacity to work with a particular group during the whole research process. This adaptation enables the research to proceed with independent strength and accuracy to explore Social Design capacities in this scenario, as shown in Table 8. All these phases construct the causal system map creation and analysis.

Table 8 Four-Stage Change Process Adaptation and Explanation.

Stages	Stroh	Adaptation
Building Foundation for Change	Develop collective readiness for change by engaging stakeholders, creating an initial picture of what people want and where they are now, and build people's capacity to collaborate.	Building Foundation for Change - Readiness Map stakeholders and engage them. Building trust and acceptance in sharing information and responsibility in the system. The basilar getter qualitative information that builds the holistic understanding of the problem. Designer facilitates the relational process, decodify information and synthesizing.
Facing Current Reality	Help people to face the reality, share understanding, surface mental models, stimulate awareness, acceptance and alternatives	Embody the Reality Invite people to face the reality and see themselves in the system. Stimulate awareness, acceptance and create a preliminary moment of system analysis. Starting to introduce non-linear thinking, deconstruct siloed mindset and the potentials of interventions.
Making an Explicit Choice	Evidence what they really want, identify costs for change, benefits of change, expose how they undermined their avowed purpose to end the problem	Making Explicit Choice It is the moment of embracing reality with intentions. Identifying points of change and potentialities for social change.
Bridging the Gap	Identify leverage points, establish processes for continuous learning, and expand engagement.	Act Towards in Transition. Is the design of transition to desired future visions. Through a speculative proposal settled in possible points of evolution.

Source: Stroh, 2015, p. 75 adapted.

7.3 Third Phase Case Study

The theoretical perspective and qualitative approach contribute to designing a more precise context of Portugal's reality in gender-based violence. This approach allows us to move to the third phase related to the case study selection that will permit the empirical process. This phase took extra time due to its complexity involving multiple institutions and their representatives. Arrangements were made to achieve the desired outcomes. As exposed in subchapter 1.3, the institutions at the grassroots are coordinated by local instruments from the government, usually municipalities, that articulate partnerships with other governmental and non-governmental institutions. The challenge

was to build a relationship to develop a protocol for the case study. After more than six months of talking with two municipalities, only one could proceed with this exploratory investigation.

In partnership with Póvoa de Lanhoso municipality, we conducted an explorative qualitative approach and research through design that took four months. The researcher established a collaborative approach with SIGO network, a web with a cross-institutional approach of collaboration created to provide answers to domestic violence. The process of investigation was divided into three moments, two of them collecting qualitative data from the inquiry. The first started in May 2024 and approached the phenomenon, collecting data from enquiry and finding similarities and differences from the initial data collection with specialists, as a zoom out about the problem. A questionnaire was sent through email by Municipality representatives to all 16 entities involved with the SIGO network. The second, which started in June 2024 and used open and closed questions sent by email, provides an internal perspective and perception of the Rede SIGO network and its participants as a zoom-in visualisation. Both inquiries are presented in Appendix IV.

In this moment of investigation, qualitative data collection was adapted from the first inquiry interviews to design a collection of questions to confront general reality with a local viewpoint. It was necessary to understand what was found in the general context that reflects on local reality in the case study, to see if there were relevant differences between Lisbon and Porto's specialists interviewed and the local community on Póvoa de Lanhoso. Two data collection phases were conducted. The first aimed to understand how local contexts shape the end result while keeping a broader perspective in mind. The second phase focused on examining how the SIGO network is organised and how it operates. The source of data collection and its results is presented in Appendix V and Appendix VI consecutively, corresponding to the Actors dynamics map from SIGO network and the complete report presented to Póvoa de Lanhoso Municipality.

To reach the third moment, specialists from system thinking, design, and social innovation were invited to participate in and contribute to a social system transition workshop. The workshop's intention was to develop new knowledge and build collective responsibility towards the domestic violence system following the transitioning design tools presented by Irwin (2015).

Seven specialists in system thinking, design and social innovation attended the 3-hour workshop, held online at the Miro platform and recorded. Specialists were selected based on their relationship with the design tools and their connection with Portugal. Some of them live abroad, and others are foreign people who have lived in Portugal for at least seven years. Further information about specialists' relevance and contribution are presented in Table 15.

The workshop proposal comprises three moments. The first is where we give context to participants through a brief presentation of gender-based violence's main aspects and the current

reality through a simplified causal system map that presents the main aspects of social issues, mental models, economic issues, legal issues, politics and governance, and infrastructure, technology, and human resources related to gender-based violence in Portugal. The map also identifies the dynamics related to each topic and its interrelations, which are presented in Part III.

As a participatory proposal, the investigation using the case study was conducted with multiple participants, institutions, and domains. Contact and relationality were a central point during the investigation to guarantee they were continuously informed and had relevant contributions. Both participants from the SIGO network, responsible for providing solutions for domestic abuse and the specialists who participated in the workshop, received a final report with relevant data consolidated and presented in person at Póvoa de Lanhoso Municipality. Further findings are exposed in Session III, dedicated to presenting the outcomes and learning.

7.4 Limitations of Method

Understanding that every method has limitations, few works have been done that intersect Social Design and system thinking. This exploratory research focused on Social Design applied to gender-based violence and used multiple approaches to fill some possible gaps that could be revealed during the investigation. Even when the qualitative approach is effective in collecting primary information, there is always the possibility for gaps and biased perceptions to occur. Design methodologies work in real-based situations, and because of that, they lead to more profound observations and supplement those gaps in information.

Limitations in the participatory approach regard what is desirable and what can be done in investigation, mainly when it is not supported by funding or by decision-makers interests, focus or concerns. Besides considering that one primordial aspect of participatory approaches is the constant presence and active participation of actors related to the problem investigated, this research found limitations due to its complex structure. Involving multiple stakeholders throughout the process proved to be challenging. As a result, we had to adapt our investigation by continuously collecting and sharing findings with the primary decision-makers. This approach reduces the oppressive effects that make a participatory investigation feel extractive. Additionally, we carefully structured the processes so that participants could co-interpret, co-analyze, and co-design responses. This approach counters Forsythe's critique of the knowledge extracted through traditional research methods (Spinuzzi, 2005, p. 168).

System-oriented design involves setting system boundaries to analyze problems effectively. However, determining these boundaries can be subjective and challenging, as some elements may

fall on the edge of relevance. Authors like Checkland (1999) in *Systems Thinking, Systems Practice* discuss the difficulty of boundary setting and argue that boundaries may limit the system's representation and overlook relevant factors that are not clearly within the system's defined scope.

Emphasized that systems should be studied as whole, not as isolated parts. This perspective encourages recognizing interdependencies and emergent properties in complex systems, which means policies and strategies should account for effects across different system levels and avoid reductionist approaches focusing on isolated elements (Von Bertalanffy, 1968). This means crafting policies considering broader social, economic, and environmental impacts on governance and encouraging interdisciplinary collaboration to address complex issues.

These challenges influence how design conducts the process, how knowledge construction and sharing are managed, and how system-oriented approaches are implemented by government and trans-sectoral entities. There is evidence of the challenges faced by institutions such as the European Environment Agency and Generalitat de Catalunya, which chose to use a system-oriented approach to their innovative and sustainable projects. Those projects evidence the importance and barriers in enabling complex governance and embracing innovation and social-economic transition with strategies inviting collective participation (Acebillo-Baqué et al., 2025; European Environment Agency, 2024).

7.4.1 Practical Limitations

Participatory design research faces methodological and methodical critiques and practical challenges. It requires significant time, resources, and a strong commitment from institutions to be effective. This level of commitment can be challenging to secure. From the perspective of a profit-oriented business, participatory design appears to lack structure and clear deadlines, making it less appealing. Researchers find that they have to cede considerable control to workers, who must be committed to the process and cannot be coerced (Spinuzzi, 2005, p. 169).

The main limitations of methodological construction are related to relationality building and time. To follow the proposal of working with people, one must be aware that a relationship requires time, commitment, and timing.

The fieldwork was quite extensive because it required extra effort in developing relationships to effectively engage with the network working on gender-based violence. The researcher's presence was not perceived as typical since she was a designer, and her focus transcended the usual approach to social or psychological perspectives. The researcher spent nearly a year trying to establish a relationship with the Cascais municipality, but ultimately, they were not interested in participating in the exploratory research. On the second attempt, the contacts and

participation invitation were directed to the Póvoa de Lanhoso Municipality by the recommendation of a former chief of a governmental institution. In this second municipality, the social councillors considered the project important to the local population's well-being and manifested their interest in participating. The municipality experts and councillors responsible for the social area considered the approach to gender-based violence from a Social Design perspective innovative, and they engaged in collaboration to explore how design could address these issues.

Despite some constraints, the researcher participated as an observer in three annual working meetings: in Lisbon, Cascais, and Póvoa de Lanhoso (north Portugal). Through the relational effort it was possible to build trust and agency along the investigation.

7.4.2 Unanticipated obstacles

The selection of the case study was difficult and time-consuming. Building trust, establishing our presence, and forming partnerships required a conscious effort. Unfortunately, the first proposal did not proceed because the municipality was unwilling to commit to a project that required even a small amount of collaborative effort. This setback caused delays and required finding another municipality interested in cooperating with the project and aligning with the opportunities available to us.

We were also unable to anticipate the effects of COVID-19 on the entire process, especially in the early years of this research, which in 2021 still brought with it some demands related to the changes that had to be made to better prepare the response apparatus for the issue of domestic violence. It created some constraints in gaining access to people for interviews, as many of them were studying the phenomenon of COVID-19 in this area or were part of committees for reorganizing or evaluating existing and new public policies.

Finally, an unforeseen obstacle was understanding the design's capabilities beyond creating products or services and communication. During the research, there were many moments when explaining the concepts and goals of Social Design was required because the participants of the case study were not familiar with those concepts, nor did they understand the potential of this intervention.

7.4.3 Ethical considerations

Participatory research intrinsically relates to ethical concerns once it requires an iterative, reflective and proactive approach. Its nature calls for a conscious presence from practitioners and solid work to build trust and commitment. In such a sensitive subject, even not working directly with victims of

gender-based violence, it is appropriate to recognize that every person who deals with this kind of structural trauma in our society is affected by it, even if it is indirectly.

Participants' identities were preserved and referenced in their related areas or institutions to properly approach the complexity's sensitiveness. Moreover, using codes helped to evidence the area of contribution without exposing the person.

The choice of avoidance in participants who in some way experienced domestic violence was strategic, but not so. It was a choice to evidence other actors in this system of action and decentralize all possible revictimization that could occur if victims were invited to this research. Additionally, it would require extra knowledge and specialization or preparation to include these women and men in the situation of domestic violence with respect, humanity and kindness, as areas such as psychology are well prepared to do.

Part III

Social design applied to gender-based violence: a study case

8 Understanding Social Complexity: Digging the Context in Domestic Violence

One of design's main attributes is its capacity to translate existence and transform what is subjection into physicality. However, translating complexity requires a profound understanding of the context and a critical perception of design's role in the process and its outcomes as persistent inequalities and oppression are proffered by design solutions. The present chapter reports the findings in consolidating a socio-technical system into visible and pluriversal perspectives. The objective of this phase was to organise the information and deconstruct a siloed and dualistic mindset with these results. It was necessary to deepen the structural levels of domestic violence by collecting information from the ground to answer the central question that evokes the social design capacity to help in the societal transition from an individualistic to a collectively responsible model.

The project's initial phase focused on collecting data from various sources and areas related to domestic violence, defining some boundaries of what is considered representative in the field, and highlighting both structural and dynamic barriers. The topics approached were social and cultural heritage, social roles, and action mechanisms presented in the methodology session. Moreover, the interviewee's expertise domains are identified as S – sociology, L – Legal and Security, P – psychology, A – Anthropology, and S- Social Service with a number to represent their participation as presented in Table 9.

Table 9 Participants caption according to areas of specialisation

PARTICIPANTS CAPTION ACCORDING AREAS OF SPECIALISATION			
AREAS OF SPECIALISATION	S – Sociology		
	L - Legal and Security		
	P – Psychology		
	A – Anthropology		
PARTICIPANTS	S1S – Sociology	S1L – Legal and Security	S1P – Psychology
	S2S – Sociology	S2L – Legal and Security	S2P – Psychology
	S3S – Sociology	S3L – Legal and Security	S3P – Psychology
	S4S – Sociology		
	S5S – Sociology		
	S1A – Anthropology	S1SS – Social Service	

Each subject presented intersecting themes, and it was necessary to decode and redefine them by configuring patterns. Thus, this chapter presents the main findings of macro themes,

solidifying what we present as the general context of gender-based violence in Portugal through the perception of many specialists working and studying the subject closely.

Additionally, the result of the first part of qualitative research combines a decode, analysis and synthesis of interviews and the theoretical analysis. According to the inquiry, these themes refer to common points for every interview. It was possible to find similarities in social and cultural structures that constitute gender-based violence in Portugal, as presented in the following subchapter. It can be perceived in the following verbalisation from three different areas of specialisation mentioned before as approached topics. The gathered data form a whole picture that must be worked as a path to design a starting point for future interventions.

8.1 Findings and analysis of the context

The research with the selected experts confirms the data collected in theoretical research on the phenomenon in Portugal. All the different areas studied agree that gender-based violence is greatly influenced by a historical legacy based on church domination, state control and rigid standards of a binary vision, patriarchy and wage differences.

I believe that issues related to patriarchy, sexism, homophobia, and, therefore, all these axes of vulnerability that contribute to understanding these forms of violence are perhaps the factors that weigh the most in maintaining this oppressive system" (E1P).

According to Silva (2016), the inequalities among women are legitimised by a diverse range of arguments, from biology to the androcentric²⁹ catholic-Jewish society. Such social-cultural construction helps delimit gender roles, establishing levels of power and distinction between men and women (Silva, 2016). On the one hand, strict dogmas and rigid family structures reinforce stereotypes, role models, and power dynamics.

In my view, the Judeo-Christian matrix is very, very important. And it was used in a manipulative way in socio-political terms so that the Portuguese population would keep this social problem hidden in their homes and not make it public." (E2S)

It is essential to talk about this colonial body, this body that was constructed in this dynamic of colonialism, to be exploited and violated. Those women suffered various forms of violence during that period, and this imaginary was transposed over time, in various ways and currently, in this construction of the image and body of the Brazilian woman, which is closely related to sexuality" (E2L).

²⁹ Refers to Androcene. According to an ecofeminist proposal, the Anthropocene must be called Androcene due to its patriarchal effects on earth and people's lives (Vuillerod, 2021).

We know that gender violence is based on gender inequality, and this gender inequality is highly enhanced by all the social, cultural and religious factors that are dominant, concerning patriarchy, machismo, lack of freedom and democracy." (E2P)

Conversely, education is the right tool to propel transformations for many interviewees. They believe it is a long-term strategy, although its benefits can change life. Interviewees have reflected on the role of education in countering persistent gender inequalities. The school context is translated as the central aspect of social transformation in gender-based violence because it can work on root causes such as patriarchal structures, masculinities, gender roles, and other social behaviours. Additionally, education at the governmental level is proposed as essential to creating a wide consciousness of prevention and responses to prevailing revictimization, even for people who work in the field as prosecutors, judges, police, and social workers.

Education is critical because if you can prevent it and get children to see others as equals, regardless of gender, social class, or colour, then we can solve a good part of the problems. (E2L)

For me, school is a context of transformation by definition (...) And once again, I emphasize that school can promote this challenge to stereotypes and prejudices and, therefore, reduce discrimination and oppression. (E1P)

I believe in the power of education and citizenship training. The great mechanism should be citizenship training, but I do not think it is something very immediate. I do not think it is certain that it will work with adults because they are too formalized and have their beliefs and stereotypes; their values are very closed and very crystallized, and they have difficulty opening up and expanding their horizons. (E2P)

It is such a simple thing. It is planned, and some solutions articulate everything, but perhaps they require training. Additional training is needed for the people who deal with victims because things are prepared to work, but it takes effort and time for people to talk to each other. Perhaps the teams, even the criminal police departments and the courts should be equipped to have more people working because it is also impossible to do everything with few resources. Even if a person wants to talk, they need time to think about the case, and if they do not, they might end up not doing it. (E1P)

The Portuguese cultural bases are central to understanding the persistent disparities between men and women in multiple areas of life. According to Silva (2016), gender inequalities are the result of a combination of structural and historical power over women, in which dominance over bodies culminates in the perpetuation of abusive relationships. This oppression extends historically

over multiple areas, from private places such as homes to workplaces, impacting the presence of decision-maker positions and authority in their own lives.

It is not just a cultural relationship but a power relationship. We often talk about culture and a patriarchal culture. Still, it is, above all, a power relationship and unequal power relationships, whether in the family, in various instances, in the job market, in different political instances. In the national assembly itself, in the institutional bodies of power, women do not have the same position or power as men. (E1S)

We must also consider that Portugal is a country that, for more than 50 years, was subject to a dictatorship, and there was also a set of values that were conveyed, in fact, very curiously through powerful images. From a communication point of view, the Estado Novo has always conveyed powerful images about the role of women. This situation lasted until 1974; quite a few years have already passed, but society and culture had not changed significantly, and therefore, we still have the conservative people, many of them, in a society very marked by patriarchal norms and a whole set of very ingrained and very well-defined roles for men and women (...), there was also a symbolic language that was conveyed during all these years of dictatorship, this symbolic language that has a way of becoming very effective in people (E1A).

In this sense, they also report the perpetuation and prevalence of a culture that oppresses women and restricts their ability to act in more efficient ways that could contribute to promoting equality and reducing violence. The reproduction of myths and cultural dogmas that undermine women are still present, reflecting on reducing the capacity of women to thrive.

The myths that persist are that women do not leave because they are cowards or because they are complacent or perhaps, they are not victims, that they lie. These ideas are reproduced and verbalised even by professional associations with responsibilities, such as the associations of judges who reproduced it and said that many cases are lies when we know that the number of later not proven is a tiny percentage. However, this set of myths that only economically disadvantaged women are victims and that children are indifferent or neutral when it comes to the issue of gender violence. (E3S)

We are a society that blames victims, that hates victims because being a victim is failing, is being vulnerable. In Portugal, we cannot stand vulnerability and weakness; we cannot stand it, and we want to end the case immediately. The report of the Commission on sexual abuse in the church and I lost count of the number of times they said courage, that is, that the people who made the complaint had courage, but there is no harm in not having courage. (E1L)

Concerning the mechanisms of action related to the current socio-technical structure of fighting violence against women and girls, the agreements and disagreements are focused on the asymmetries found between the different entities and mechanisms generated by them. Some specialists can highlight more positive aspects of the intervention's mechanisms and the dynamics between the actors. However, for most, it is clear the inconsistency of objectives, values, and strategies, as can be observed through the following verbalisation:

I would say that the objectives are shared, but the strategies of the procedures are not necessarily shared. First of all, each sector has its specific intervention. What is expected of justice is not the same as what is expected of health. However, these tools could still be used to promote a common good. Moreover, I think that this is not the case. Moreover, sometimes, I feel that those on the ground can have an informed view of reality. The reality is that those who take on leadership positions and work in an office setting are not very sensitive to the reality that the officers encounter on the ground. (E1P)

She goes to the police and finds the representation of her aggressor there. For example, even in her work, when a woman goes to a service centre, we know that one works very well to receive a complaint, while another does not. There may even be a standard, an internal regulation, but these professionals do not share the same values, goals, or objectives because if they shared this discretion, it would at least be reduced. (E2L)

The police forces have contributed greatly to the effectiveness and coordination of the various systems. Health has a long way to go. The police forces have contributed immensely to the coordination between the various subsystems. The Public Prosecutor's Office has been very hesitant, with some magistrates and coordinators in some geographic areas working very effectively, but the opposite is also true (...) When the Public Prosecutor's Office's performance depends on the geographic area in question and whether I will find a responsible Public Prosecutor's Office, we are confronted with a severe problem because the issue of equality is at stake and cannot be left alone. (E2S)

Many of the interviewees highlighted the need for structural change, mainly because Portugal has a strong legal mechanism, which, however, has its weaknesses. Situations of gender violence find ambiguous answers in the system because it is also influenced by the factors mentioned above, and it is therefore susceptible to bias.

It is not enough for a government or a political group of people to say 'well, this is now our national priority' because if there is no resonance in the social fabric, it will not work. Moreover, the role of the community is fundamental, essentially in the issue of prevention, and here all formal or informal social control mechanisms must be invited to intervene (E2L).

The change will also have to be made within this structural logic. The challenge of beliefs, stereotypes, prejudices, and these completely biased representations of what it means to be a man, what it means to be a woman, and what territories we occupy based on our different affiliations, including non-binary affiliations (...) We need to find mechanisms to monitor and evaluate these policies and measures that have been outlined (E1P).

We need to bring the social problem to society. What I said at the beginning, stop understanding collective social representation because it is an individual problem – this perception is still very present”. (E2S)

We see that there are still very different interpretations of the same law and the same standards. That is, once again, it is linked here to who applies it; that is, those who apply it are people who have their training, obviously, but then they are also people and, therefore, their representations about the phenomena and, obviously, this influences the application of the law within limits” (E1A).

Unlike other parts of the world where social movements have supported and driven changes in women's rights, in Portugal what has ensured the evolution of resolutions and the confrontation of issues regarding violence against women has been the legal apparatus that has been built, as the sociologist interviewed explains:

The fundamental milestone for recognising this sociocultural change comes from the evolution of laws, from the political narrative on the subject more than from women's movements. In Portugal, it does not come from women's movements. Moreover, it still does not come much from women's movements. It has been through legislative changes and international pressure, namely within the framework of conventions and agreements to which we are bound, that changes have been made. (E3S)

However, reservations about Portuguese legislation have had positive aspects, contradicting the application of such legislation and the availability of instruments and articulations that are still scarce and require adjustments for an effective presence in the country.

One of the essential aspects is the conservatism of Portuguese society, which can sometimes seem quite progressive, especially due to its legislation. I don't think that Portuguese legislation on issues of violence is perfect, far from it, but I recognise that in some aspects we are doing well, others not so much in terms of violence. We are a country that recognises same-sex marriage, that recognises that it has a law on self-determination of gender identity, that allows adoption between people of the same sex, so basically, I would say that there is a set of legal frameworks that can sometimes make you think that in Portugal, on

the one hand, violence is reduced to a minimum, because Portugal is considered a very safe country, compared to others” (E1L).

In Portugal, we still have some difficulty in recognising certain forms of violence as gender-based violence. We only need to think about the violence against women that is committed within the context of the family. We do not have the term gender violence in our legislation; we have domestic violence. (...) We are talking about organisations that are very closed in on themselves, with a culture that is not very permeable to the inclusion of external people and citizens. Therefore, I think there has to be a paradigm shift here to promote this encounter. (...) However, I believe that if we also start working from the inside out, that is, if within these organisations there is space to reflect on the added value of the contributions of citizens, they will start to open up to the outside and be able to understand that in partnership, work can be more effective and more sustainable over time. (E1P)

It is important to highlight that women's institutions and social organisations often conduct effective outreach and action independently. In Portugal, data on violence against women is notably underreported³⁰. Estimates suggest that the actual number of incidents is much higher, primarily due to challenges in establishing parameters and societal reluctance to report such cases. Furthermore, Portugal faces an additional hurdle: systematic data collection only began in 2009, and there are ongoing difficulties in standardising the data, as reports come from various institutions (Felgueiras et al., 2021).

Interviews also revealed tensions among the institutions involved in addressing domestic violence. With increasingly limited funding and resources, these entities must leverage their capabilities to maintain relevance with both their audience and the government institutions that support them financially. This situation has led to visible competition among peers who could otherwise collaborate. Representatives from sociology, who deeply understand the dynamics at play among the various institutions in the domestic violence response system in Portugal, confirmed these observations.

There is also a certain amount of instrumentalization by some NGOs that create news and a fuss because of funding, and there are disputes over protagonism between institutions. I have also seen this happen. However, this issue of having data, having information, is very dubious because it is not just the information from *Correio da Manhã* (local journal) that is often wrong” (E3S).

³⁰ Council of Europe, January 21, 2019. Portugal and violence against women: significant progress but under-reporting and low rate of convictions. Accessed April 2023 at <https://www.coe.int/en/web/portal/-/portugal-and-violence-against-women-significant-progress-but-under-reporting-and-low-rate-of-convictions>.

But there are certain crimes for which I think that justice in Portugal is very lenient in terms of penalties, and this is one of them. The penalties, when they are applied, are very reduced. Because in most cases they do not reach 3 years, and since they do not reach 3 years, the sentences are suspended” (E4S).

There was a civil society organisation, an NGO which created and dominated the area, disqualifying its peers and other organisations that worked in the field. This organisation had privileged access to power and leadership structures because it was linked to personalities associated with the United Nations. It blocks networking and fieldwork in gender violence” (E3S).

Just like the reports on state interventions in cases of domestic violence, the interviews also point out some weaknesses in the system in question, mainly regarding how they are integrated or not and manage cases, but also regarding the lack of clarity even in the media and the lack of involvement of citizens. The vulnerability, lack of incentives, and ease of process for reporting are visible and the focus of interviewees' attention. Some respondents considered this a system failure as a process of involvement and bureaucracy, but also as a gap in providing clear information for people so that they feel safe to continue with the process, which can be long and even demand resources, as exemplified by the following comments:

The integration of the different institutions involved in the process. Often, everyone sits around the case, sees problems, and speaks different languages because they have different cultures and missions. Therefore, this can also be a barrier that we will have in supporting victims and intervening in the phenomenon of violence. We need to take this into account. (E3L)

As happened at the beginning of 2019 with that surge in cases of domestic violence, some of which were not domestic violence or gender violence. Other situations were reported as such. Moreover, that lack of proper definition later on created an idea of impunity for the aggressors. (E3S)

Sometimes victims think that contacting the institutions is almost like calling a call centre; there is no one there who is committed, and it is merely informative, not very personal. I think that when victims start to understand this, either through volunteers or through the media reporting a situation or case, victims realise that more than just calling the website and getting information, they are accompanied through all these stages to the court, the police, the forensic medicine office, and they feel supported. The victim almost always reports the situation and ends up doing so. This process corresponds to the empowerment that is being talked about today. (E3P)

All the reports from the retrospective analysis team on domestic violence crimes, which are crimes that occur mostly in intimate relationships, prove that if the process had been more agile and if a different risk assessment had been made, one death could have been avoided. It is harsh to say this, but we have a judicial system that, due to bureaucracy and often the undervaluing of this type of crime, also bears a certain responsibility for a few deaths that have occurred. The system itself is responsible for this, just as the system itself is responsible for the victim remaining a victim. (E4S)

However, mechanisms are not enough if there is no social resonance, a point often mentioned by many of the interviewees regarding social participation and citizen involvement in issues of violence against women. A society that is encouraged to take action can promote interventions and monitor situations.

It is not enough for a government or a political group of people to say 'well, this is now our national priority' because if there is no resonance in the social fabric, it will not work.

Therefore, the role of the community is fundamental, essentially in the issue of prevention, and here all formal or informal social control mechanisms must be invited to intervene. (E3L)

I think that much more is missing than just legislation or policy issues; society is not properly imbued with this knowledge about the complexity of the phenomenon and what it implies, what should and should not be done when we come across someone who is living a situation like this. (E1A)

Organisations that manage and articulate transformations on the ground also reported resistance to change in approach formats.

Our public institutions operate in small groups, and these small groups are the responsibility of professionals and technicians who have been in these organisations for a long time and who understand that confining the work they do to themselves, to their offices, is a way of protecting themselves in a public administration where, deep down, they want to have their space of power and professional preservation. This behaviour is a powerful obstacle to innovation. (E3S)

Another topic widely discussed in the interviews was the participation of society, which, for most of the interviewees, is of central importance since, in Portugal, domestic violence is a public crime. According to the UN, it is time for social action on violence against women and girls. However, this call and many more efforts to communicate the importance of social action in this phenomenon have not had an effect until now. Society's involvement during COVID-19 was notable, but awareness has faded (UN, 2020). There is a gap between what participation could be and what it is in reality. People often do not want to take responsibility and give their testimony or report the

aggressors. The specialists attribute the law's civic participation to the failures of law application, the fear of becoming a victim, and individualism, which focuses the responsibility on the victims, their aggressors, and the system.

People do not want to commit themselves because often the aggressor is part of the family or social circle, right? So people prefer not to get upset about it because it will break up the family, they will have to take a stand, and there may be a breakup (...). There are many cases where violence is ongoing and a part of cycles of violence. In the case of women and men, women can go back to the aggressor, and it is very common for this to happen. People, not understanding this dynamic, not realising how it happens, penalise women, penalise the victim in that situation of violence and tend to distance themselves. (E2L)

Sometimes victims think that institutions are almost like a call centre, that there is no one there who is committed, that it is merely informative, not very personal. I think that when victims start to understand this, either through volunteers or through the media reporting a situation or case, victims realise that more than just calling the website and getting information, they will be accompanied through all the steps: the court, the police, the forensic medicine office, and then they feel supported. The victim almost always reports the situation and ends up doing so. It is the empowerment that is being talked about today. (E3P)

In most situations that constitute a crime in Portugal, people resist being identified as witnesses. In questionnaire surveys, people declare that they are aware that the justice system is slow and that it is not rewarding, not even emotionally, to collaborate with the justice system. Because hearings are scheduled and then the date is not respected, they are changed successively. I am saying that the justice provided in the codes is not effective or useful. It is questionable if it is justice... (E2S)

We continue to have a very high number of people who have been victims of bullying of all shapes and sizes, and when asked if anyone had witnessed it, they continue to say that many peers witnessed it, adults knew about it, and very few did anything to change the situation. (...) Suppose we have these legal frameworks and are confronted with police inaction, which often happens. In that case, it is understandable that the rest of society feels it cannot act because it will create problems. If the police do not act, if the courts do not act, if I act, I will have problems. (...) I think that everything that the government does not cover and that civil society can support, I think that yes, it is social responsibility. It should not be the other way around; we should not reverse this, but since the government does not cover it, we will go around begging civil society. (E2P)

The asymmetries across the Portuguese territory were also a point of debate in the interviews, highlighting significant dichotomies in the different parts of the country and the responses provided that often do not reach everyone but also reflect an unequal country, where large urban centres stand out. Rural areas still suffer from a lack of access to responses. However, that is not all; the asymmetries are also present in the mechanisms of action of the laws, in the strategies and in the relationships between the institutions that respond to the phenomenon of gender violence and domestic violence.

We often want to create very complex processes and systems and then end up complicating things so much that the people who are required to intervene end up so overwhelmed with paperwork that they end up not doing things with quality. Because we force people to do many things (...) Despite people thinking that Portugal is a small country, we have some particular phenomena in which the cultural and social dimensions are closely linked. And this starts right from the beginning. Often, for there to be rules that regulate or disapprove of this type of conduct, there must be some moral consensus and a consensus shared in social terms. (E3L)

Liberals and neoliberals ignore and hide power relations and exploitation, and often refer to the legal-political issue, that is if the rights are enshrined in law, we are fine. But this is not enough. In addition to these mechanisms and institutions that demand these rights, other mechanisms and institutions that reinforce and support violence are based not only on the law but, above all, on mechanisms and institutions that reinforce and support them because old patriarchal relations can come from above under the guise of the law, despite the law. (E1S)

For example, even in our work, when a woman goes to a service centre, we know that one works very well to receive a complaint, while another doesn't, so much so that we know which one and recommend that she go to that one, because we know that one offers better treatment. (...) There may even be a standard, an internal regulation, but in practice, these professionals do not share the same values, goals, and objectives, because if they did, the violence would at least be reduced. (E2L)

The system permanently forces the victim to go through one of two situations: or it leaves the victim in a situation of great vulnerability, and she runs the risk of effectively being a victim again, being insulted again, being attacked again in the middle of the street, being killed; or when the system has to act by the law, it forces the victim to go through re-victimisation processes. (E4S)

When asked about the synergies between the entities, referred to here as actors in the system, and the weaknesses and insufficiencies of the current structures and responses, applied, possible and imaginable solutions for the phenomenon were also reported. During COVID-19, a significant commitment by the Portuguese government was to involve the media and society in joint surveillance, which resulted in an increase in reports and visible social participation in the issue through the distribution of posters in common areas of buildings, billboards and the media, which communicated the support lines, clarified the importance of looking after women and the relevance of mutual assistance. The result was also felt by the perpetrators of violence, who felt cornered into continuing to commit their violent acts.

Society only feels responsible when it knows. During the pandemic, I remember perfectly that the warning I issued at the very beginning was directed at society because we could not only direct it at women or the police. Because the only strategy was for us to create a strategy of permanent surveillance in society of what was happening in homes. And that happened. I even remember that we made some templates for people to print and put up in their buildings, with the warning that we are alert, in situations of violence, to contact us, etc.. These practices were meant to hold the neighbours accountable. (...) there were more reports from family members and third parties, there was a percentage increase in reports not only from victims, and also the report that many victims said that the aggressor was in a situation where he felt as if everyone was watching and was at home, it inhibited the situation of violence, and this could condition and embarrass the aggressor in some way.

(E3S)

Based on experts' speeches, this observation highlights four important aspects to promote system improvements: promoting self-responsible behaviour, greater information sharing, clarity in proposals and solutions, and, mainly, community building in the sense of belonging to the whole. The four areas are represented in Figure 19.



Figure 19 Desirable needs in the system according to specialists' interviews. Source: Author.

8.2 System Observation

During the field research, two observations occurred, one in 2021 at the I Forum Portugal Against Violence and the other in 2023 at the Cascais Forum Against Domestic Violence. The forums propelled advancements in the field but also explored some barriers and needs for more effective collaborative work. They evidence the struggles in building a synergic work between multiple stakeholders, as well as the benefits of multilevel initiatives that started to be tested, like GAV (Victim Support Office) structures for victim care, which include public prosecution entities, support victims' institutions and police investigation departments, presented in Tables 10 and 11.

Table 10 Observation research at I Forum Portugal Against Violence

Forum Portugal AGAINST VIOLENCE 17 – 18 novembro 2021	
Representatives from government and non-government organizations participate in these two-day collaborative sessions. This table represents the main topic shared.	
Relevant points in the meeting	
The release of GAV, the specialised integrated section for domestic violence (victim support office) in connection with the DIAP(Department of Investigation and Legal Prosecution) and PSP (national civil police force) for victim care. Psychologists provide technical and scientific support that supports legal opinions and give technical support in the processes, and assist in court. Objective: To provide direct or indirect care, psychological monitoring, welcome and inform, forward and develop scientific information. (forensic psychologists – assess and prepare reports on the risk of revictimization and psychological impacts, identify risk factors) Barrier: Shortage of full-time specialised professionals in all units.	
Safety Initiative to prepare the court and legal environment to assist and welcome victims – more humane and welcoming judges – spaces designed not for aggressors, but for victims Bringing the judicial office closer to supporting victims Function to issue technical opinions	Disclosure of the evaluation study of the first GAV pilot. It evaluated the pilot developed in 2019. The role of the court and all stakeholders. Contact with the court from the perspective of the victim, who often does not have access to information and literacy. Distress in the process and contact with the court. Complexity of the subject for the complaint. Lack of perception of the impact on them – legal language. Insufficient legal measures.
Pain Points: Need for a systemic view of cases, with analysis of victims and aggressors, and their stakeholders High recidivism and a need for urgent responses Implementation of new metrics and indicators: need for digitalisation, greater synergy, ongoing, teams need stability and more resources Problems with redundancies in interventions with the victim to avoid revictimization. The system is not yet adjusted in its internal dynamics.	Additional Information ● Positive and integrated experience, sharing good practices and procedures. ● Statements for future memory – a collection of additional statements that help in the processes and avoid revictimization or secondary victimisation ● Awareness of how to analyse evidence and collect elements in the crime scene ● Training in the field and judiciary ensures a description of evidence that helps determine the sentence.

Table 11 Summary of field observation at the I Forum Against Domestic Violence and Violence Against Women of the Cascais Social Network

Forum Against Domestic Violence and Violence Against Women of the Cascais Social Network 12.05.2023		
Representatives from more than 40 governmental and non-governmental institutions and entities, as well as private companies, as well as the local authority, which organises and runs the network's meetings, were present at the forum to present the municipal plan against violence.		
Relevant points in their strategy		
Obj 2 – Inclusion and social protection of the most vulnerable groups through the Social Network Development Initiative Plan	Obj 5 – Strengthen Strategic Coordination Cascais Social Charter, digital knowledge management system – mapping of services and responses, information on resources, statistics, visibility of resources and services. Participation routes – participatory practices and reflections, collaborative democracy, social network cohesion.	Obj 6 - Improve Knowledge and Capacity Building (local governance initiatives) Social support management platform Must-see Project – entrepreneurship and social innovation with a focus on social networking, international exchange
Local Initiatives		
Stop now – a project by CPCJ Cascais against sexual exploitation and abuse – with and for young people aged 14 and over. Done by students, from research to the creation of an information and advertising campaign, theatre. Information and training to form ambassadors who can act socially.	Shared Apartment Casa do Farol - Empowering homeless women, vulnerable and/or socially excluded (3 women and up to 4 children) – 12 months of support (council + social security)	Strengthening child psychological support policies for families in situations of domestic violence

Both realities, from Lisbon and Cascais, expose the need for a more synergetic, collaborative, and systemic approach to domestic violence. It is also evident that the benefits of cross-sector collaborative participation represent an intentional investment in their networks. Reports evidence the proximity and closer relationships as beneficiaries for institutions and victims. Moreover, the integration promotes sharing practices, knowledge, and responsibility to achieve a more aligned objective.

Another point of reflection is to become more humane and systemic in terms of actions and context understanding. The demand for more systemic responses comes with synergic collaborative works and dynamic adjustments. All these scenarios confirm the necessity for a systemic-design-oriented approach in social-technical problems where the structure must be seen, adjusted and led to transformative times.

There is also a willingness for autonomy regarding knowledge management, capacity for collective practices, collaborative democracy, and social cohesion. These central elements for collective transformation allow people and communities to thrive. Moreover, these elements can be learned by practice, which design knows well and can contribute actively to social change.

8.3 Discussion of the results

The intersection between theoretical research and qualitative interview approach consolidates data about the socio-technical system components that compose domestic violence. It presents all the elements one can consider when analysing a subject through a system-oriented approach using an iceberg canvas to position and differentiate all current structures of this sociocultural and structural problem, presented in Figure 20.

The events point directly to the evidencing cases of domestic violence during and after COVID-19; however, other levels of events, such as the dichotomies in the security and law system, continuous lack of trust in the justice system, the lack of financial and personal resources, the low qualification of social agents and other areas of intervention in domestic violence, and multiple institutions running for few fundings.

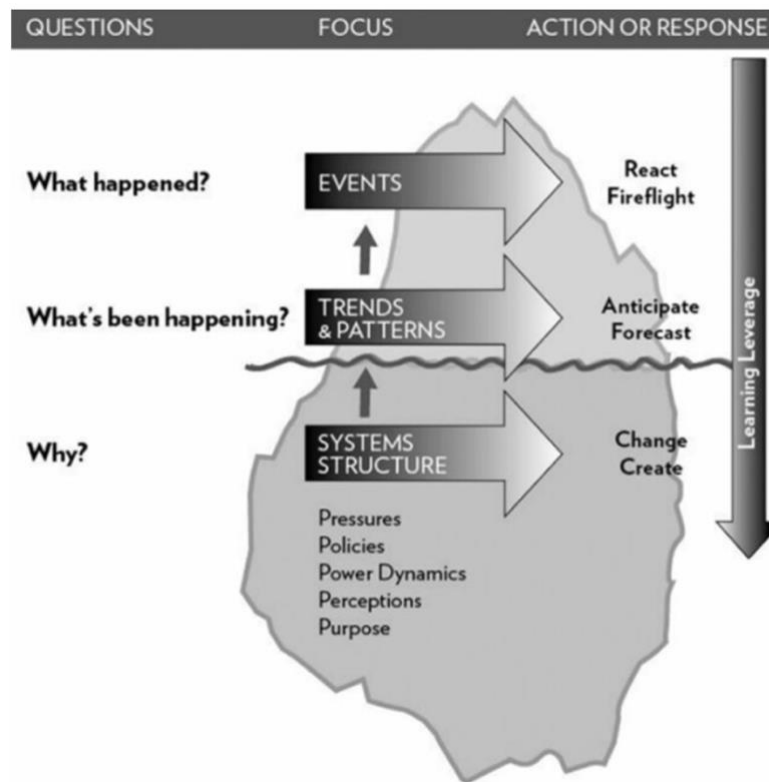


Figure 20 Violence Iceberg. Source: Stroh, 2015, p. 37

Patterns are related to societal behaviours but also to dynamics between actors in the system that have been prevailing during the ending of domestic violence like the economic dependency of the mechanisms of actions in non-governmental institutions, the behaviours of bystanders, the persistent role of communication in the violence culture and victimisation, the lack of cohesion and synergies between actors, the lack of social participation in domestic violence, the constant revictimization of women, the short-term mentality to develop solutions against violence, and the proximity with victims or perpetrators prevailing citizens to report.

Finally, the system structures are those prevalent and solidified dynamics that influence behaviours and are historically present in societies, such as patriarchy, capitalism, colonialism, the influence of church and family in gender roles, the persistence of gender inequalities, financial insecurity, gender inequalities at work, hegemonic masculinity, the power dynamics in the relationships between the actors in the system, the underestimation of violence against women, and the influence of communication in revictimization.

Moreover, the first part of problem contextualisation brought critical thoughts. A new model for greater social action and better dynamics between actors is an action model, but also a mental one and new values that can have a practical component. Additionally, some statements and the data collected from observation support the intentions of elevating design interventions in this field. Evidence from the initial questions drives this research, evoking collective action towards the

problem and working on a model that could propel collective responsibility and empower networks against domestic violence.

Besides not answering the central research question, this initial exploratory phase is the ideal starting point to explore the proposed Social Design domains in relational design and their critical function towards societal challenges. In particular, the relational component is responsible for constructing a relationship of trust and building a basis for further interventions between the researcher and the participants in the field. It enables us to have solid contact with institutions. However, it does not guarantee the full participation or the understanding of this project as an opportunity to try new approaches in the network. It was clear that a siloed mindset and a dependence on models that are already recognised perpetuates the current mechanism of action.

Hence, a Social Design approach based on system-oriented and participatory methods needs more exploratory tools to start the conversation with the system and its participants. It was necessary to construct means to permit actors in the system to become interested, exercise their critical minds, and act. It is possible to execute system mapping in multiple ways, from theatrical tools to more visual ones like Giga Maps. The dynamic system map allows people to explore independently and in parts while seeing the whole picture. Moreover, a visual structure permits critical thinking and action towards the systemic problem, allowing us to go further and use design capacities to decodify, synthesise, translate, and unify knowledge and information. The result of this work is translated into the Causal System Map presented in the next chapter.

9 Visualizing Social Complexity in Domestic Violence: The Reflexive Causal Map

Deep context understanding is crucial for designing social transformations, where the systems thinking approach constitutes the methodological part of this project, helping to create a causal map by transforming theoretical research and qualitative research into an interactive map. Meadows (2008) explains that our thinking shapes how we approach complex problems. Therefore, the system's perspective helps address wicked problems, not because it provides solutions but because it enables people to think in diverse and interconnected ways. Using system maps, we can regain our intuition about entire systems, improve our ability to understand individual parts, identify connections between them, ask "what if" questions about future behaviours, and be creative and bold in redesigning the system (Meadows, 2008, p. 7).

The system mapping process enables a collective understanding of societal problems as part of the combined system assessment. It can be a starting point for a co-design process for transformative action. System mapping uses a community's collective intelligence and credibility, emphasising the role of individual and collective agency. Additionally, friction and dichotomies are also expected in leadership and brokering relations that can potentially emerge to propel social change in complex systems.

In possession of all the information about the context of domestic violence in Portugal was needed to make it palatable to those people who relate to this problem. The first draft was a simple scheme with balls arranged so they could connect and represent the dynamics existing between them. However, the proposal could not embrace the valuable information in each system topic. Searching for new tools to present system structures, we arrived at Kumu, an iterative and interactive platform that helps the system community develop visualisation and interaction in system thinking.

The platform is well-conceived and easily understandable for placing information and arranging connections. The aim of developing this kind of visualisation was to provide a useful tool to understand the problem from multiple angles and propel transformations from this multilevel and non-linear perspective. Thus, Social Design could contribute to systemic intervention in gender-based violence (GBV) by making visible the system's dynamics so these parts can be actionable. Additionally, design can evidence the relevance of building dialogues that catapult innovation between multiple stakeholders.

Gender-based violence is a complex social issue that requires multiple interventions and, thus, a holistic and synergistic understanding of its context. In this research phase, we prioritise

building the context and dynamics of gender-based violence and focus on intimate partner violence in Portugal to create a visible understanding using a causal map system.

The process behind the map used theoretical research, qualitative research, and field observation. Data collection from 2022 and 2023 led to valuable information where cause and effect could exist in the same element in the map. First, we present the results from the causal system creation, followed by the evaluation with specialists and the collaborative session that evaluated and raised some insights for the case study.

The causal map was converted into an online presentation, providing open information to the global community at the link <https://wedisturb.kumu.io/domestic-violence-causal-map>. We intend to make it public and open access because of its possible contribution to the closeness between these issues in other parts of the planet. When we approached specialists from other countries, they related multiple aspects of the map to their own countries. Figures 21 and 22 show the website presentation created in the Kumu platform, detailing the process behind the map and how to interpret it, which can also be seen in Appendix II and discussed in the following subchapter.

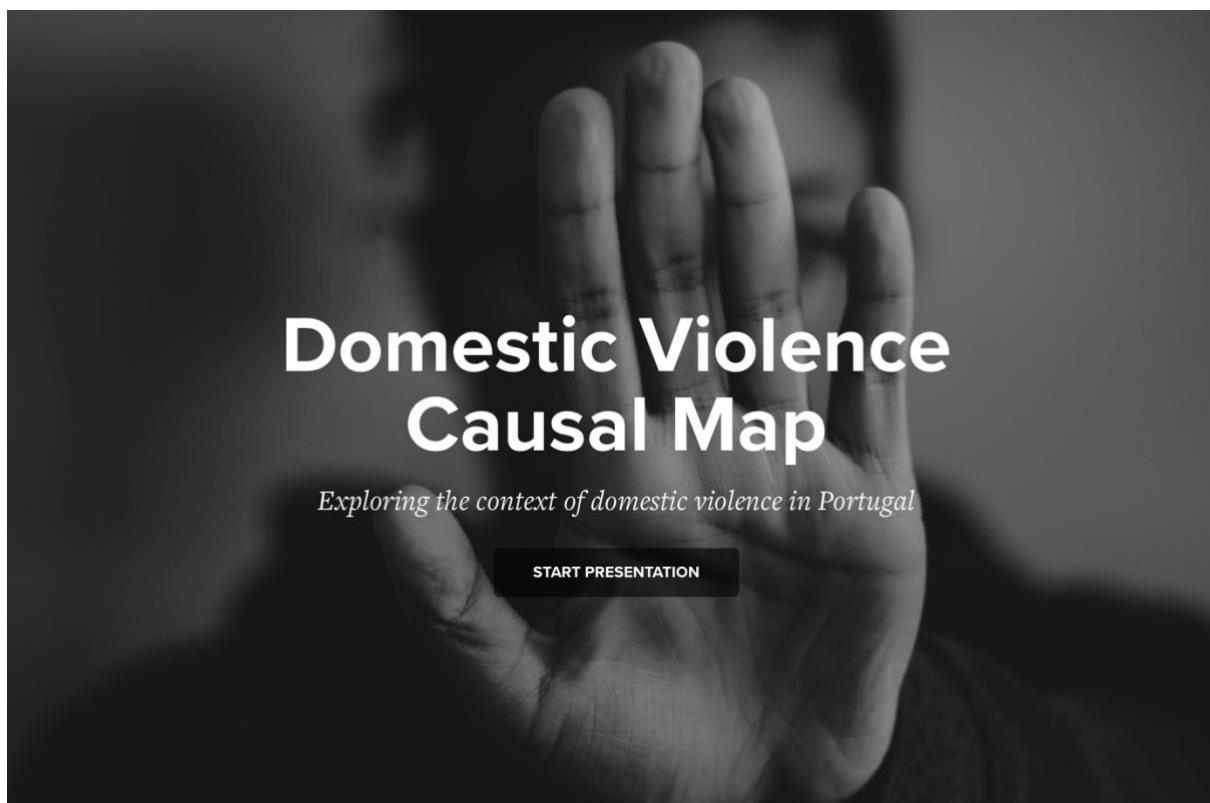


Figure 21 Front Page of Domestic Violence Causal System Map at Kumu. Source: Lima, 2024
<https://wedisturb.kumu.io/domestic-violence-causal-map>

Causal Map of Domestic Violence in Portugal

This map helps to visualize the existing dynamics in the phenomenon of violence against women, with emphasis on domestic violence and framed dimensions of the issue and its interrelations in Portugal.

Through it, you can explore how various issues intersect with violence against women and their responses to the issue of domestic violence. To compose this set of issues, the context is framed in five spheres: cultural structures (blue), security and justice structures (yellow), language and communication (green), social participation (orange) and support and action structures (red).

The objective is to give visibility to the phenomenon, provide a tool for accessing information and a holistic view, which can at the same time awaken self-criticism, help in decision-making and encourage the identification of leverage points for future transformations and interventions in this complex issue that requires multiple fronts.

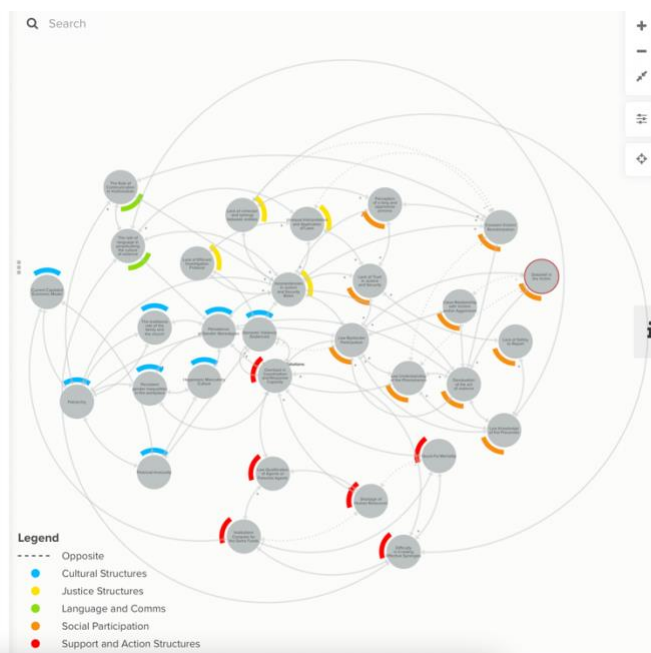


Figure 22 Inside View of Domestic Violence Causal Map. Source: Lima, 2024 <https://wedisturb.kumu.io/domestic-violence-causal-map>

9.1 Learning from system visualisation

When building system visualisation, it is essential to consider that those who create them are not exempt from perceptions and influences on the system itself. A system is a visualisation perspective with multiple points of view or worldviews. That is why positionality is so important at the beginning of the research, as it helps us understand who we are concerning the whole and everything that influences us (Noel, 2023). Positionality can also be applied in the development and analysis of the map, inviting interlocutors to visualise themselves in the system as part of it, not just as observers.

The map tries to answer the question: What factors/forces influence the system against gender violence in Portugal to provide more effective responses to the phenomenon? It helps to visualise the existing dynamics in the phenomenon of violence against women, with emphasis on domestic violence and framed dimensions of the issue and its interrelations in Portugal. Through it, it is possible to explore how various aspects intersect with violence against women and their responses to the issue of domestic violence. The context was framed in five spheres to compose this set of information: cultural structures (blue), security and justice structures (yellow), language and communication (green), social participation (orange) and support and action structures (red), as presented in Figure 23.

The objective is to give visibility to the phenomenon, provide a tool for accessing information and a holistic view, which can, at the same time, awaken self-criticism, help in decision-

making and encourage the identification of leverage points for future transformations and interventions in this complex issue that requires multiple fronts.

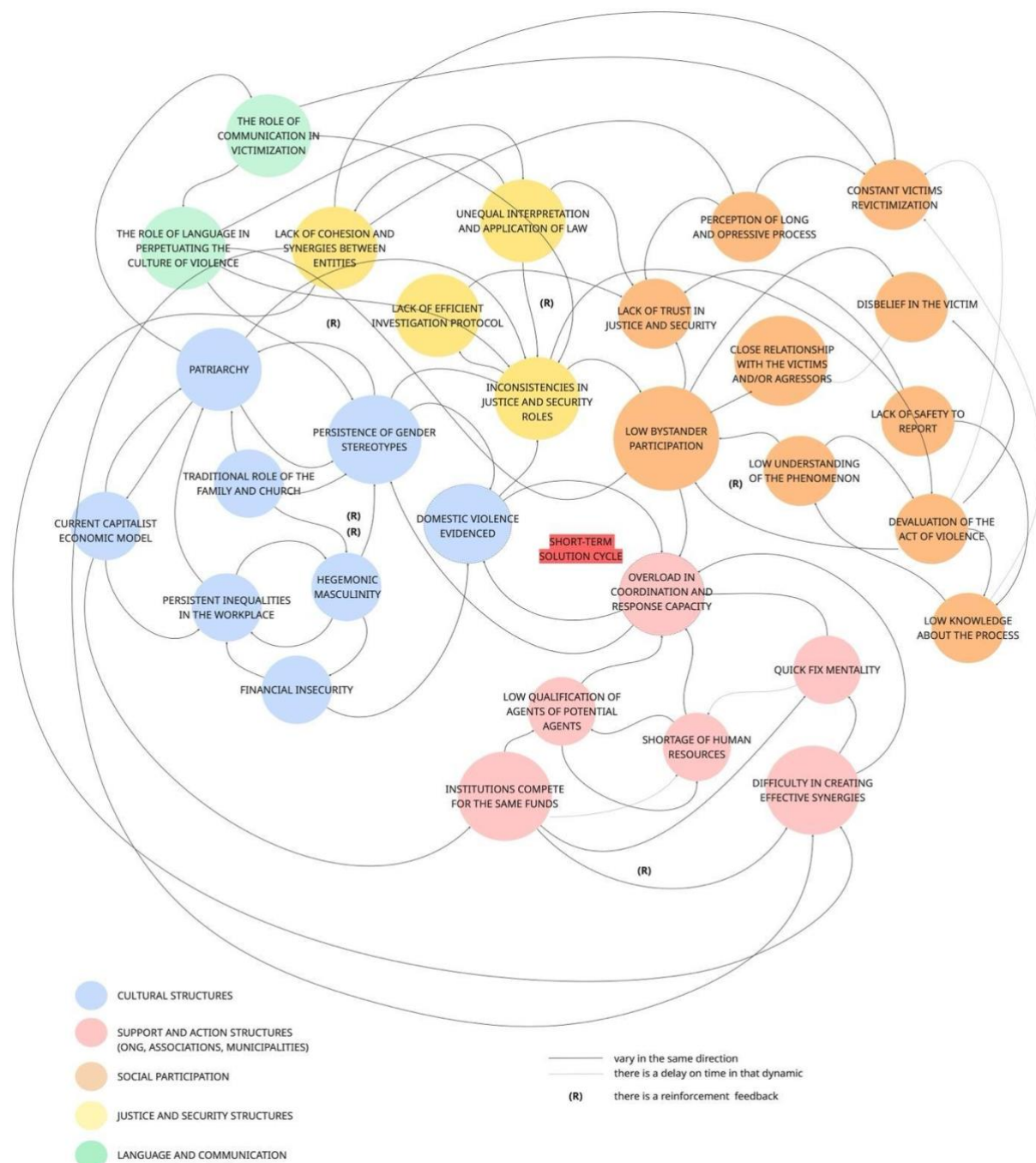


Figure 23 Causal System Map of Gender-based violence in Portugal. Source: Author

However, domestic violence is a complex issue that involves multiple actors and factors when we look at its social and cultural structures, but also at the response mechanisms, of which we highlight the diffuse role of Justice and the low participation of bystanders as structures that reinforce the perpetuation of violence.

Additionally, understanding that there is no complete system for complex societal problems but ways of seeing them, we present the first findings from a system-oriented design perspective. Theoretical references to systems thinking were necessary to present the main points in the system, which are the system dynamics, feedback loops, and possible leverage points.

The first great loop in this system is located in its centre and named the Short-Term Fix Cycle, which is reinforced by the evidence of domestic violence and the Overload in Coordination and Response Capacity. In 2020, COVID-19 highlighted the issue of violence against women when it saw the alarming number of reports drop and made it urgent to think about ways to address the issue and create solutions for that moment. On the one hand, the lack of reports hid the number of women, children and young people who, during the lockdown, were forced to live with their perpetrators. On the other hand, it reinforced short-term responses by demanding better synergy between actors and resources, generating what is represented on the map as a Cycle of short-term solutions.

It is also important to mention that in the third quarter of 2020, the number of complaints increased again, according to the report:

By the end of the third quarter of 2020, there were 19 homicides, corresponding to 15 women, one minor and three men. As of 11/19/2020, 20 homicides corresponded to 16 women. It is worth highlighting the significant increase in people integrated into Programs for Domestic Violence Aggressors in the community, which at the end of the third quarter of 2020 were 1898 people, 45.11% more than in the same period last year, corresponding to 590 more people" (Felgueiras et al., 2021).

To better explain the findings we chose to go by blocks separated by colours. Starting from blue, the cultural structures are those elements that historically build gender inequalities and perpetuate violence due to its solidified and pervasive forces, also known as root causes. The research found that structures like church and family play important roles in this system, reinforcing gender inequalities and influencing and being influenced by patriarchy. The system also presents the dynamics between patriarchy and other elements in different areas of the system, such as discrepancies in the justice system, the devaluation of acts of violence, and the citizen's action.

The yellow area of the map exposes the gaps in the justice and security system, highlighted by the feedback loop involved in the lack of efficient investigation protocol, Unequal Interpretation and Application of laws and Inconsistencies in Justice and Security roles. As one element becomes evident, the other will also be affected, making it challenging to apply laws, contributing to inefficiency and inequalities in how the system addresses the issue. The misinterpretations and the unequal applications of law exacerbate how those institutional mechanisms work. They are

reinforced by a lack of a more rigid investigation and protocol by multiple institution's role in collecting evidence. Moreover, the lack of cohesion and synergy between various entities made this vicious cycle of Justice revictimizing women over and over.

This map area evidences the reinforcing loop of incongruences and inconsistencies in Justice and security roles, which affect the lack of social participation trust. Specialists mention this point when referencing citizens' expectations in domestic violence cases, as presented in Figure 24.

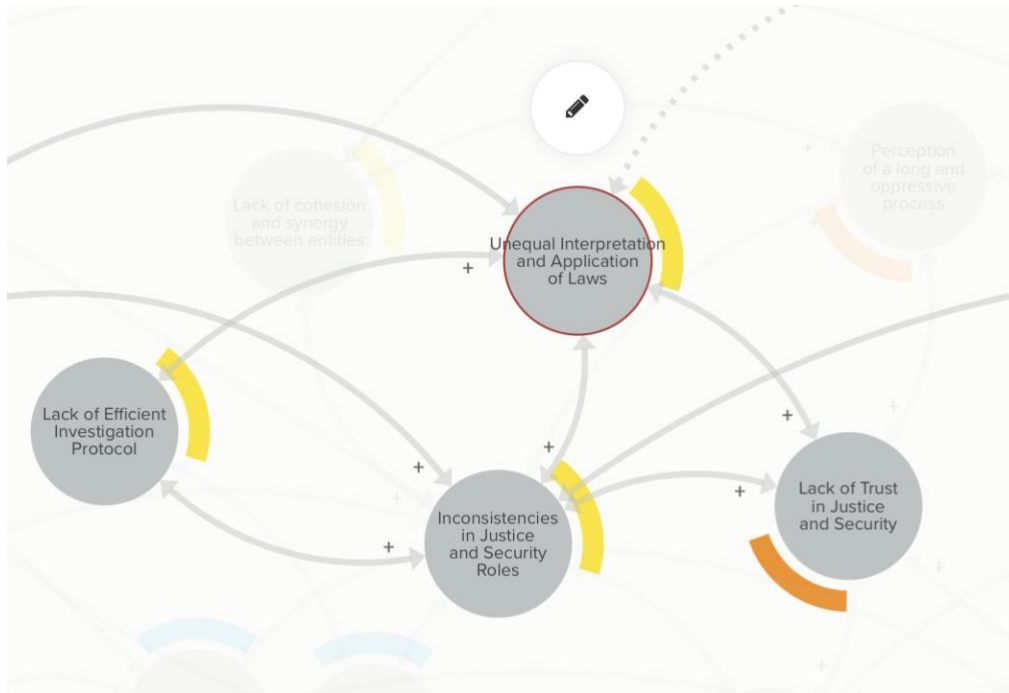


Figure 24 Loop in the justice and security systems. Source: personal.

In the Orange area, we can observe the reinforcements that lead citizens to act as bystanders. Low bystanders' participation is directly related to their connection with victims and perpetrators, the devaluation of acts of violence and the understanding of the phenomenon. With a delay in time, society becomes less active in this path, influenced by many circumstances, but mainly by a lack of trust in the justice and security system, knowledge, sociocultural influences, and understanding of the phenomenon. Thus, a little action of society will decrease the evidence of cases and the awareness of violence.

Additionally, it becomes clear how the lack of social participation in domestic violence is influenced by other areas, including deep-rooted cultural structures and the incongruences of the justice and security system, impacting the overload in coordination and response capacity. If society were more active in domestic violence, institutional answers could be less overwhelming because an active society acts with open eyes, and this vigilance could be a possible source of preventive action towards intimate partner violence.

The loop in social participation evidence the influence of cultural beliefs and the relationship with the victims in preventing social participation. However, the devaluation of violence against women and the relative normalisation of it are prevalent in the social narrative, as presented in Figure 25.

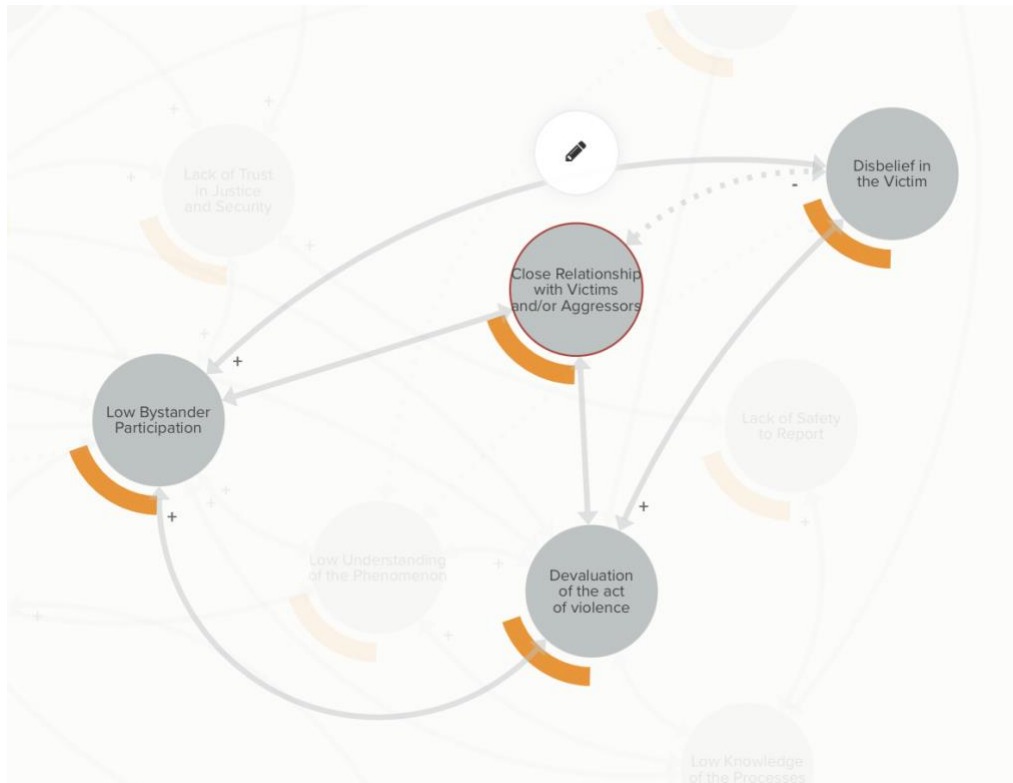


Figure 25 Loop in Social Participation. Source: personal.

The map permits us to dig deep into active social participation. Despite the growing public awareness of violence against women, the issue still lacks significant interventions to encourage the public to intervene, when necessary, in a situation of violence. Here, an important role lies for people who witness or have knowledge of offensive or violent behaviour, whether in the context of intimacy or harassment and could take action.

There is great fear on the part of whistleblowers, who are often anonymous, as there is a great fear associated with standing up to a person. I also think this is normal because the government and the justice system are neither prepared to defend these people" (Psychology Specialist).

In 2018, a report was published on the status of bystanders (observers) within the scope of the "Bystanders - Developing Bystanders' Project, which aimed to understand and intervene in the behaviour of young people in sexual harassment. At the time, the intervention proposal enabled greater awareness and empowerment of the ability to act on the issue, where participants built confidence and tools to act as active agents (Magalhães et al., 2018). As interviewed experts have pointed out, some issues that appear as obstacles are the lack of security and support from the

system, as well as the lack of knowledge of reporting processes and the structure of the cycles of violence in intimate relationships. However, it was during COVID-19 that some social articulation was noticed.

Society only feels responsible when it knows about this. During the pandemic, I clearly remember the warning given to society because we could not just address it to women or the police. The only possible strategy was for society to create permanent surveillance of what was happening in homes. And that happened. I even remember that we made some templates for people to print and put in their buildings, with the warning saying that we are alert in situations of violence, to contact us, etc. The goal was to hold the neighbours accountable" (Sociology Specialist).

In the red area in support action and structures, what captures attention is the economic dependency of many institutions responsible for intervening and acting in prevention, reception, shelters, and support of victims and their families. The institutions are overloaded with work and cannot meet the necessities in the system due to a lack of resources, but mostly because they are running for the same funds, and the synergies with other entities are not well organised. The support and action structures cluster shows a lack of resources, which makes institutions run for funding that is not sufficient for widespread participation and the qualification of more institutions and agents in the field that could act as supporters.

This suppression in investments also reinforces short-run solutions that do not solve the whole problem and even create some dependencies for women. Furthermore, it reinforces the low capacity to focus on prevention because there is always a fire to put out. This structure sheds light on important work that could be done to diversify economic functioning in victims' support, governance and coordination, which we can see as a possible leverage point. These loops can be observed in Figure 26.

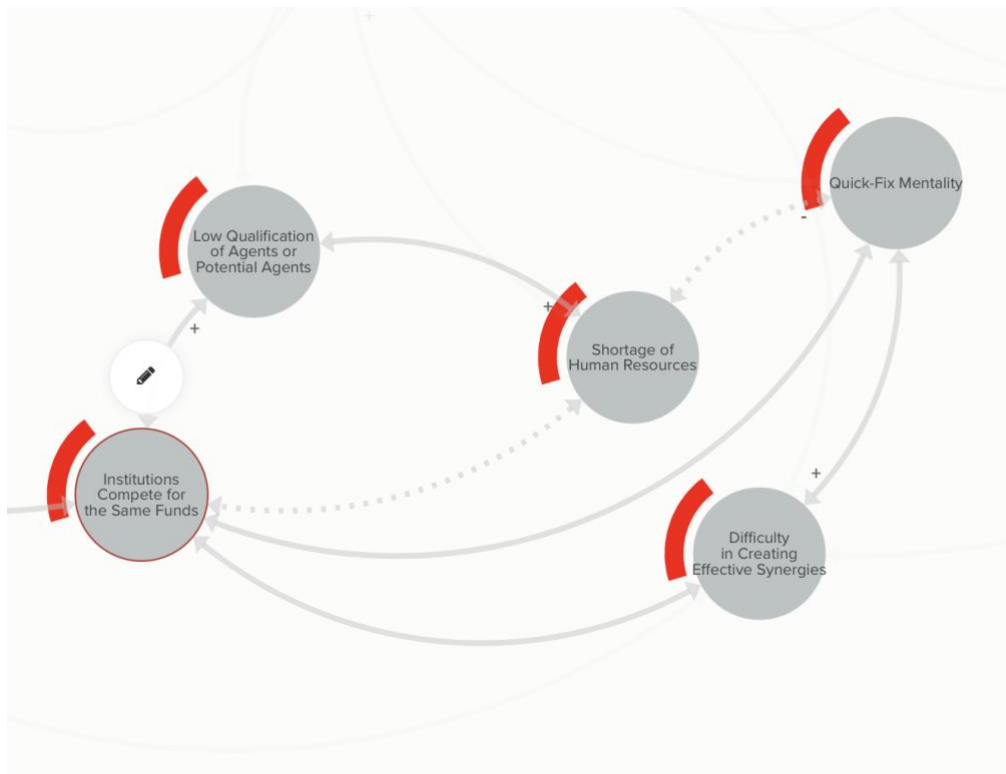


Figure 26 Loop in support and action structures. Source: personal

The root cause of domestic violence and gender-based violence is the mental models influenced by gender inequalities and hegemonic masculinity, both strongly affected by a patriarchal culture, in Figure 27. In Portugal, the influence of traditional family and church is also significant. Moreover, financial insecurity prevents women from leaving oppressive relationships, which contributes to the increase in the number of DV and GBV cases.

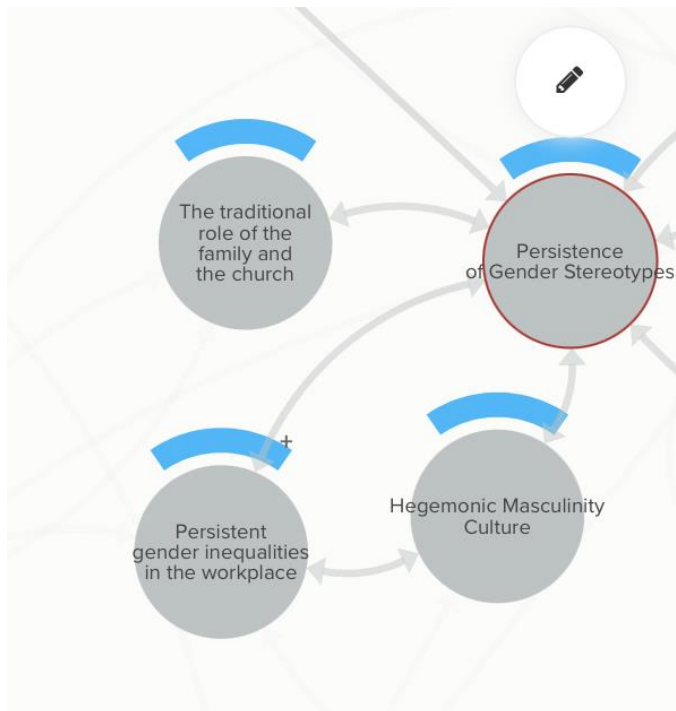


Figure 27 Social and cultural loop in domestic-violence map. Source: personal.

Maybe the most evident loop in this area is related to the persistence of gender stereotypes, hegemonic masculinity and inequalities in the workplace. Hegemonic masculinity, a term coined by R.W. Connell (2005), is a set of practices that authorise male dominance over women and invalidate other types of masculinities that subordinate other men who do not fit the dominant white, male, middle-class, and heterosexual standard (Connell and Messerschmidt, 2005). This dominant masculinity shapes norms, interpersonal relationships, gender occupation, access, aggression, and violence.

In the practice of masculinity, violence is sometimes accepted and even celebrated, legitimising and reproducing domination. Its nature means that masculinity needs to be reinforced in various ways and means, as explained by Peretz and Vidmar (2021):

Because male performance provides significant benefits but can be challenged at any time – that is because masculinity is valuable but fragile – it must be constantly defended and reproved in order to maintain not only dominance and access to the patriarchal dividend but also a measure of security against violence from other men (p.3).

For men, gender norms are somewhat more rigid, adding to this the lack of emotional encouragement, of not being able to express insecurities and being constantly pressured to be aggressive and measured to receive social approval. “Masculinity as a social construction highlights how men’s violence is always related to masculinity through masculine norms of resistance, dominance and the willingness to prove masculinity by any means” (Peretz & Vidmar, 2021, p. 3).

Masculinities are a predominant factor in this relationship of oppression against women. However, misogynistic societies also oppress male behaviours and create models and ways of acting that, when deviant, inflame the forces of those who experience them. As Beauvoir states: "For all those who suffer from an inferiority complex, there is a miraculous liniment in this: no one is more arrogant with women, more aggressive or disdainful than the man who doubts his virility" (Beauvoir, 1970, p. 19).

In the collective sphere, gender inequalities show how fragile a society can be if it does not provide conditions for the advancement of its women and girls. These gender asymmetries in global economies generate adverse effects that can be observed in care, unpaid work, and rising unemployment (ILO, 2020). In politics, a significant bottleneck in the presence of women reflects a less inclusive and equitable society (World Economic Forum, 2023). Reinforced by a psychology specialist interviewed, "The challenge of beliefs, stereotypes, prejudices, and these completely biased representations of what it means to be a man, what it means to be a woman, and what territories we occupy based on our different affiliations, including non-binary affiliations".

The maintenance of gender stereotypes occurs through socialisation and social control that ensures that conformity prevails among other social roles that are not accepted by a culture. This informal mechanism is also responsible for power relations, exclusion, radicalisation, and oppression. By challenging social norms, the individual is outside the norm and becomes more permissive to suffering some form of aggression, which can be bullying, deception, or even harassment (Lindsey, 2016). A interviewed sociology specialist presents the local evidence:

The very dichotomy exists in Portugal of the serious woman, the woman who commands self-respect, and the woman who dresses in a certain way and does not have many partners. And then there are the others, "who are then wrong to beat them", "who are wrong to use as objects", but deep down, they do not respect themselves. So this whole cultural melting pot in Portugal where it is easy to see how situations of gender violence, whether physical violence, sexual violence, psychological violence, have a cultural melting pot, so to speak, that allows for exoneration and understanding" (Sociology Specialist).

Another evident dynamic is regarding the communication and the language role in domestic violence. Figure 28 presents the interdependencies in multiple spheres that are responsible for reinforcing gender inequalities throughout the communication role and its effects on the justice and security system. This information is about how media communicate and reference domestic violence, but also about how the legal and security system reinforces gender inequalities through their form of communication, in legal cases, in the judges' resolutions, and in the way the security system acts towards victims.

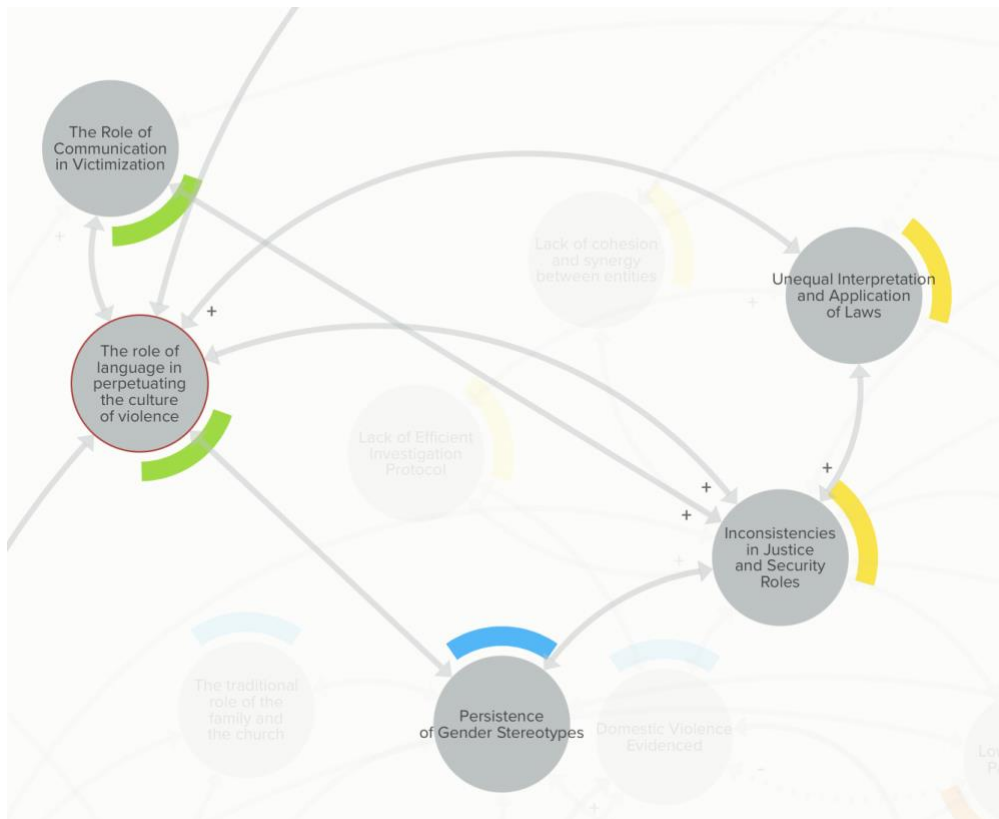


Figure 28 Loop in communication, law system and gender stereotypes. Source: personal.

Language is a theme that inhabits gender structures, access to information, and how everything is communicated, whether within the network that provides support and interrelates or in the communication used by lawyers or the media. Language as a cultural structure has its foundations, as the sociology expert explains, and will directly influence how society perceives women in situations of violence and contribute to the perpetuation of gender stereotypes:

From a communication standpoint, the Estado Novo has always conveyed images about the role of women. This was in the 70s, which means that many years have passed since then, but not that many, and so we still have the remnants, many remnants of a society very marked by patriarchal norms and a whole set of very ingrained and well-defined roles for men and women (...) There was also a strong symbolic language conveyed during all these years of dictatorship, a symbolic language that takes root in people in a very effective way" (Anthropology Specialist).

When we look at institutional spheres, language plays a role in unifying information for the various actors who, in different areas, are dealing with the same issue. In this sense, the reports point to a diffusion of information, a lack of unified data and clearer access to legal repertoire for victims.

Finally, the map receives constant improvements and interventions from the proposed dynamics in this research. It explores the main topics mentioned by interviewees and information gathered from theoretical data such as the role of bystanders, the culturally prevalent structures, the security and justice structures, the communication role and the support and action structures responsible for providing the first contact and support for victims and acting on prevention. In this kind of proposal, the design promotes a holistic comprehension of the phenomenon, inviting people to avoid a siloed mindset and contributing to a self-comprehension of personal and collective roles.

9.2 Causal System Map Specialists Validation

Three specialists, a practitioner of System Thinking (ST), a social innovation professional, and a specialist who has worked and researched in the gender-based violence field in Portugal for more than twenty years, validated the causal system map. The interviews for validation were held separately in 40 minutes and online. The causal system map was confirmed by three specialists who have expertise in System Thinking (ST), social innovation, and gender-based violence field research in Portugal. The specialists identified were A (a practitioner who uses system thinking tools to tackle violence against women), B (a researcher and practitioner in social innovation), and C (a researcher and practitioner in the field of gender-based violence with a background in sociology and policy making).

They validated the system storytelling presentation by first listening to the story behind the system, then answering a few questions about the missing aspects, the lack in the system, and what could be improved. They also enquired about what should be expected in the practice of ST with multiple players.

The relevant contributions are: the need for a clear representation of each node, which was not explained well enough; the addition of communication and language in the domestic violence system because of its significant impact on several aspects of the system, making it a leverage point to be addressed; the use of a digital tool to better visualise the entire system, which we chose Kumu.io for its interactive and storytelling capabilities; the recommendation of simplifying the map used for workshop attendees to interact with, reducing the theory, and shortening the time dedicated to each exercise. It was also suggested to avoid dividing the co-creation session into two parts, and to reframe some tags to make a clearer reference to the subjects.

In its totality, specialists pointed out positive aspects that a Causal Map can be a useful work tool to catch the attention of system dysfunctions about the capacity to generate answers to this phenomenon or specific areas like the justice system, and so on. To A and B, this is a relevant visualisation proposal and is possibly used to design social interventions to improve the system.

According to C, this can be helpful if people learn how to work with it. C agrees that the presented system map can be strategic to design answers where it is possible to see the ripple effects in the systems. Additionally, C mentions the interest in territories where work in articulation between multiple actors and collaborative practice is established, where this kind of visualisation tool could be relevant. This validation guided improvements in the map that enriched its visual capacity and refined the proposal of information contained in each node.

9.3 Prototyping interaction: system map co-creation session

A pilot session was proposed as a source for map validation and to assess or clearness of its application. The objective was to see how specialists from different fields, with gender-based violence as a central topic, interact with and perceive the causal map. Moreover, the objective was to use this map to gain awareness about the phenomenon and evaluate its capacity to generate possible interventions in the field.

Eight people participated in a two hour co-creation session on the topic of violence against women, including two representatives from a Portuguese city council, a specialist in interventions with aggressors, a representative from a shelter institution, two designers with experience in processes of co-creation and active in the themes of gender inequalities, a journalist with an interest in the topic of violence against women and a researcher on the topic of sexual violence. Source from the participation can be seen in Figure 29.



Figure 29 Participation at prototyping co-creation session. Source: personal.

The workshop process followed the Four-Stages for Change, presented in Table 12. During the exercises, participants were invited to explore individual and collective roles, first by seeing the actors' map and locating themselves in the complexity. After receiving a paradoxical question: Why, despite all our efforts, are we unable to solve the problem of violence against women or effectively minimise some of the issues we propose?

In the second part, they explore the causal map by listening to its storytelling, and after, in groups, a time for reflection helps them to understand and internalise the connections and dynamics presented. The third part of the session was dedicated to a co-creation process where they must develop possible solutions to disturb some negative reinforcement cycles.

Table 12 Waves of System Interaction for the co-creative process

Introduction	Project presentation is succinct but structured so that everyone is aware of the processes and methodologies that have brought us to the present moment. It also presents the current situation through the system that gave rise to this collaborative phase and the work that will be done that morning through the three waves that make up the proposed approach.
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	It consists of a PowerPoint presentation and a causal diagram of violence against women in Portugal. The focus is on the dynamics between different actors and the local context, presented using the interactive KUMU platform.
Wave 1	Consciousness and Presence We are all individual and collective elements. How do we perceive ourselves in this context? What forces define us individually and collectively? Belonging exercise (cards are placed on the actor map diagram) <u>Exercise: Drawing actor map</u> Objective: to understand how each participant sees their individual and collective role, what barriers they encounter, what mental models are present and to understand at the end of the dynamic, whether their perception of collaborative work was in any way changed with the application of the proposal of this process or whether they perceive value in the proposal. 
Wave 2	Paradox of systemic social change When we work on social change, we often come across good intentions that can sometimes result in unexpected situations. For example, a large corporation that wanted to quench thirst in an African region and created a product capable of purifying water but instead made those communities dependent on that product. In other words, our efforts should consider a series of stakeholders we often cannot see. Which brings us to the central question for many complex problems: Why are we unable to achieve the desired goals or solve a particular problem despite all our efforts? <u>Exercise: Collaborative board</u> – participants will answer the following question with post-it notes) Why, despite all our efforts, are we unable to solve the problem of violence against women or effectively minimise some of the issues we have set ourselves?



Objective: to understand how each element of the system perceives the problem and its potential responses, taking into account the different areas to which they belong.

Exercise: Cause-effect map of violence in Portugal: The map presented at the beginning of the session will be used again, now printed on the wall. Participants will be invited to do two things on this map: 1. Visualise and show on the map missing connections and new connections between items that already exist.

Objective: system design level - fill possible gaps between cause-effect connections that have not been interconnected, validate what is already mapped. Collective articulation level - understand the challenges of the collective process to define a common intervention point.



Wave 3

Disturb the system In this exercise, we will work on a section of the system map printed on a board on the wall and create alternatives for collective intervention. We will understand how the interventions behave with the other points of the cause-effect system.

1. Define which area is most relevant to them in terms of urgency for more effective changes – they should reach a consensus.

2. Brainstorm – create possible interventions that can address the answer posed in the question "Why, despite all our efforts, are we unable to solve the problem of violence against women or effectively minimise some of the issues we set out to address?"

3. Understand how the solution connects to other parts of the system and can have a positive or negative impact

Objective: To understand how the group uses the tool and the main challenges raised; to understand the ability to create leverage points and which points are possible from the perspective of those who work in the system against female violence.



9.4 Survey results in co-creation session

The survey presented in Appendix IV aims to evaluate the participants' experience with the map and its relevance to approaching domestic violence. In terms of relevance, six out of eight participants gave a maximum value (value 5), while the other two assigned a value of 4.

When asked who could benefit from this process involving a design social system approach, seven participants demonstrated a range of potential to this map. Three respondents considered that decision-makers and agents who work directly with the topic were the better users of the system. However, to the other five participants, the proposal can benefit society in general, emphasising schools, young people and different age groups that could learn by exploring the map.

Some comments can illustrate the overall participation. To one participant "All actors involved/potentially involved in situations of violence, as it helps to generate more awareness, cooperation, empathy and proactive ideas." Another participant evidenced the closeness in old mental models: "Central administration because beyond the laws they are far from intervention, they are closed in traditional processes."

Still, about the contexts of possible applications of this approach, the participants mentioned: "in employee training for the care and reception of assaulted people and aggressors,";

"in the institutions' organisational chart"; "rethinking performance protocols and individual and social roles"; "dynamization of groups in a community, school or other organisation"; "in the presentation of various complex problems related to violence against women, precisely due to the visual and didactic appeal of the tool", and "education professionals and managers and decision-makers".

Regarding the ability to activate positive changes through the systemic approach with actors/participants of the system, 7 of 8 participants believe that the applied process and its tools can promote awareness, the feeling of belonging, and empathy, giving greater visibility to the topic, highlighting the individual role and understanding interdependencies between actors, as demonstrated by the quotes: "Above all, awareness, and consequently empathy between peers and towards the people to be served and welcomed." And "Awareness of interdependencies and multiple causes and clarity in intervention."

Additionally, participants were encouraged to share possible improvements regarding the process, the following stand out:

- more structured activity goals in the sense of the allocated time;
- draw more on local experiences and cases to develop new proposals;
- show some important data in detail;
- could last two rounds in different days, precisely because of the ability of the topic and methodology to provoke debates;
- have more moments of debate and provocations and more time for more dynamics.

9.5 Discussion of the results

Approaching a complex phenomenon via design gives voice to multiple actors and helps them to see themselves in those dynamics (Ackoff & Emery, 2005). However, it is far from constructing the whole vision of the entire problem. What is certain is that this way of viewing complex issues allows participants to embrace the problem at a deep level, make it visible and accessible, evaluate from multiple worldviews, and redefine routes to collective learning and participation, exposing the role of design and the fragilities along the path.

Moreover, the use of design approaches such as visualisation and co-creation enhances our understanding of this phenomenon and its boundaries. While the analysis identifies and connects the causes and consequences of specific actions, or sets of actions, as part of their sociocultural contexts, the visual map using the system thinking approach helps people to understand multiple

dynamics between the related issues. Additionally, the information obtained through theoretical research reinforces the points made by the interviewees.

It elevates the contribution of design as a critical tool to raise awareness and visibility of complex social problems, access information, and promote a holistic view. Social Design as a form of liberation awakens self-criticism and encourages the identification of leverage points for future transformations and interventions in this complex and multifaceted topic that requires multiple fronts.

The exploratory session on the systemic approach to violence against women also raised questions about the design process as a facilitator. Being a sensitive topic designers must take into account the multiplicity of layers that people go through. Even professionals who put themselves forward to participate in the process as agents of change may, at some level, have some more personal experience with violence. Thus, never forget that violence can have multiple faces and subtle places of existence. The issue of informed trauma must be addressed to build a safe and welcoming space for all participants.

The challenge of bringing together central actors in the field of research with and for the system also evidenced the influence and necessity of a top-down decision by a committed government. Despite efforts made by the leading institutions to invite people to the session, participation was lower than expected, primarily women. This made us affirm that it is necessary to involve decision-makers in the process by using approaches that promote participation and systemic embodiment of complex topics.

Getting people on the same page using system maps is different from building the map with them. In this sense, telling stories and sharing narratives that illustrate the system can help people get involved. Just like navigating the system together, focusing first on the parts and then the whole, can help to better promote interventions. Another positive resource is to invite people to contribute with their narratives during map debate and understanding. It is helpful to find gaps and opportunities to elevate the structure.

Finally, siloed mindsets were another obstacle to trespass. Despite working on the same complex issue of GBV, the multiplicity of areas of intervention created fractal angles that generated myopic views of the system and affected decision-making. The challenge is to bring the pieces to life and, at the same time, prevent people from working only in the silos that interest them.

10 Case Study. Embracing complexity in three acts: acknowledging, exploring and disturbing

The two previous parts of this research process give a basis for understanding the domestic violence context on a deep level and preparing for visualising and intervening in the terrain. In the case study, the theoretical basis and the previous qualitative and empirical approaches constitute, in some way, a prototyped idea of social system design implementation in the field of Social Design and domestic violence. Thus, the case study started with a relational process to build trust and interest and pursue common results that benefit both research and community interests. The formal proposal is presented in Table 13 and highlights the central aim of this partnership.

Table 13 Proposal for design intervention in the domestic violence context at Póvoa do Lanhoso Region Portugal

Case Study Proposal at Póvoa do Lanhoso Region	
This initiative between the Póvoa do Lanhoso City Council and PhD student Raquel Lima invites members of the entities and institutions that make up the SIGO network—Service for the Promotion of Gender Equality—to participate in the Disturb project, a research project that aims to innovate responses to domestic violence through social innovation mechanisms. The objective is to promote innovation by understanding the phenomenon as a system of interconnections and through the involvement of social innovation agents. To this end, using social innovation tools, the research proposes to map the main dynamics that exist in the articulation of responses, together with the leading actors that make up the network for combating and preventing domestic violence, to generate a more holistic view of the issue in the locality and contribute to the creation of strategies to address the phenomenon and its dynamics.	The project's benefits focus on providing tools to support decision-making, a collective understanding of the phenomenon, a systemic view of domestic violence, and promoting innovation in interventions on the topic. The project lasts six weeks, starting in May. It consists of two rounds of surveys (individual), with a response period of 5 days, and a validation round (group and remote) by representatives of each institution that is part of the network. In addition to the co-creation stage in social innovation, it is executed with an external partner. More details of this proposal can be seen in the attached document, which lists each stage of the project (for more information, contact the researcher in charge Raquel Lima directly).

The study was carried out between 2025 May and July in cooperation with the Póvoa de Lanhoso City Council and the institutions that make up the SIGO network—Service for the Promotion of Gender Equality.

It aims to explore the application of design for social change tools to promote understanding and intervention in the phenomenon of gender violence and domestic violence. The research consisted of three distinct moments. The first, known as **Acknowledging**, sheds light on relevant information about the particularities of this case study context. Qualitative methodologies were used with open-ended question surveys that highlighted the themes addressed in the first qualitative approach, in the interviews mentioned in Chapter 8. The objective was to construct a macro view of the theme in the local spectrum and an internal view of the functioning of the network that works on the issue of domestic violence and its dynamics.

Two inquiries were conducted to construct a broad overview of this scenario; the first inquiry gathered perceptions about the causes and effects (zoom out) in domestic violence. The second collected information about the SIGO network actors (zoom in) and their roles. Second.

The second moment, or the **Exploring** phase, is dedicated to reflection on the process and deep understanding, confronting previous data and information with the new one to better prepare the co-creation phase. It serves as a self-conscious moment and analytical step for a critical mindset and preparation, which leads to a previous discussion around the process and its outcomes until now.

The third moment, known as **Disturb**, aimed to draw the attention of experts in social innovation and systemic thinking to the topic, inviting them to embrace and intervene in this complex social issue, contributing to a broader vision and action among different sectors and interests. To promote collective practice, considering the six dimensions of design for social change presented in chapter 4, the experts were guided by design methodologies that combine systems-oriented design, participatory design, and design justice, evidenced in the transition design tools used to generate understanding and agency in the process. The goal was, through this process, to activate awareness, the capacity for agency, and the connection between the participants and the topic. The processes, their tools, applications and results are presented in the following subchapters.

10.1 Acknowledging

From May to June 2024 was the phase to recognise the field, constructing bonds dedicated to relational work. In this period, contact with the Municipality and its participants at SIGO was made online, with some meetings and a formal presentation of the project, followed by the inquiries sent to respective institutions and their leaders. The first intention was to interview or create a moment with all participants together to debate the subjects. However, the difficulties of reuniting all representatives from institutions at the same time the process was adapted and reframed as a questionnaire.

Zoom out

As mentioned before, the first step to acknowledge the local context was the zoom out, through an in-depth questionnaire with a qualitative meaning due to the lack of sample, to assess the institutions' perceptions about the restrictions on significant changes in the topic, the barriers of the network itself, the role of bystanders or observers, the diffuse role of justice and security, and the role of local culture in the topic. Seven institutions participated in the survey, and the inquiry is presented in Appendix V.

The questions entangle areas of interest in domestic violence, which are: the role of networks and the impact of COVID-19, the role of bystanders, justice and security structures, and cultural structures. Here we present the central topics and valuable data gathered.

The first question: **In your opinion, what prevents the issue of violence against women from being resolved?** reflects a vision about why the system is stuck in solving the issue of domestic violence. For three respondents, domestic violence is an issue that needs to be resolved by confronting the cultural foundations of society, mainly related to patriarchy and stereotypes. For three other respondents, the phenomenon will only change significantly with basic education and training for everyone. However, for one of the respondents, other issues such as economic empowerment, strengthening of laws and access to support for victims are essential elements in achieving an end to domestic violence.

The second question: **The network is made up of a wide variety of very different actors. How do you perceive the role of the SIGO network, its synergies, dynamics and articulations to maintain its functioning? Describe positive aspects that differentiate and also describe what could be improved to improve these dynamics of the network and its actors?**, reflects upon the central role of the SIGO network while indicating some fragilities. Regarding the structure of the SIGO network, to all participants, the network plays a central role in supporting victims and operates in a close and effective manner, respecting each case's particularities. Another example of the network's good functioning is the channels used for communication between entities and the proximity between its participants.

However, the personal and financial components are fragile in this equation, as presented in Figure 30. For 5 out of 7 respondents, the network does not have the personal means to completely satisfy the demands. Other 5 out of 7 respondents state that their institutions do not have the financial means to meet the needs of each case.

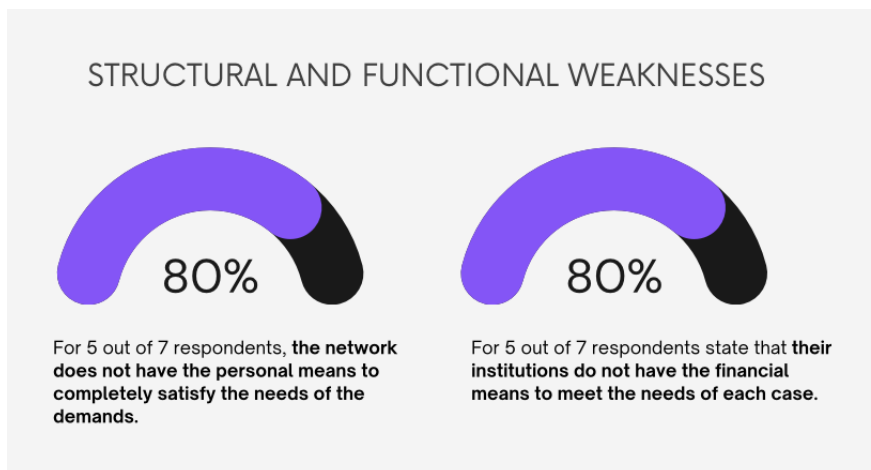


Figure 30 Structural and functional weakness in the SIGO network. Source: SIGO Report Appendix IV

The research also exposed areas of potential evolution and maintenance. According to respondents, the city council is the heart of all action to combat domestic and gender-based violence due to its managerial role and involvement. Despite having a recognised merit structure, when asked about potential improvements, we highlighted the lack of communication about the work hours of the network that operates 24/7. However, to one participant, the information was not clear, as we see in the comment: “(...) as most domestic violence cases occur on non-working days and after office hours”.

Another topic mentioned was improving financial and personnel resources: “On the part of the institution I represent, we could do much more with more human and financial resources.”

The plan also seeks to maintain good inter-institutional dynamics: “The existing connection between the various institutions and SIGO works very well, largely due to the close relationship created between the partner institutions and SIGO technicians”.

A participant mentioned strengthening the role of the network in prevention and victim autonomy: “The role of this network is crucial in combating domestic violence and in the emancipation of individuals exposed to this problem”. Additionally, it evidences a greater promptness in the justice system's response: “In Portugal, the judicial authorities are overwhelmed with cases, making their development slow. The speed of justice is not in line with the speed of the victim and the need to see their case concluded, or at least with the application of coercive measures that would undeniably bring much more peace and security to the victims”.

In another questionnaire session, the topic approached was the bystanders' roles in domestic violence regarding the participation of society. On the part of observers who witness or are aware of acts of domestic violence or intimidation, all seven respondents agree that society has an increasing participation in the issue of domestic violence. Participation in reporting and greater awareness of the issue stand out. However, all respondents mention that there is still much to be

done so that society can support victims more significantly. The following two quotes represent the perception in the inquiry:

There is still a long way to go to change mindsets regarding the role of women in the family. There are still some people who believe in the predominant role of men. Many people still do not want to get involved out of fear or because it will cause them too much trouble.

The willingness to get involved is still not a reality, which prevents many aggressors from being reported and consequently many victims from being protected. Ultimately, it also prevents justice from being served! There are situations in which people know what is happening, and when victims ask them to testify, they refuse to do so, which is still common and regrettable.

A relevant question is, in this sphere, **what prevents people from actively participating in helping victims?** Neither the victims nor other citizens file complaints with the authorities, nor are the complaints dropped persistently due to a series of factors, with no single issue standing out, but rather a set of factors that, when added together, do not constitute a form of incentive for social participation. To inquiries, the lack of involvement is related to fear, shame, minimisation of violence, lack of trust in authorities, prejudice, lack of solidarity and empathy, cultural stigma where other people do not intervene in a couple's issues, to avoid bureaucracy, the proximity with victims and/or perpetrators, and not lose work days going to the police station or court.

According to the research, the justice and security system does a good job; however, there is room for improvement. When we enter specific areas of the system, it is natural that other entities that do not work directly with the others do not want to express or are unable to express their perceptions. Therefore, of the seven respondents, only four wanted to explain how society perceives the legal and security system.

Regarding the role of justice and security, it is perceived as a central but inconsistent way of working, which, according to the respondents, is often seen as a slow process. One respondent said: "They cannot fully guarantee the safety of victims" and are not seen as effective or efficient. However, to another respondent, it is clear that the central role of justice and security is safeguarding the smooth running of processes: "Society understands that more could always be done, when a case goes wrong, it is always the fault of the justice system or the security forces".

The improvement in synergies between the justice system and other entities is important. Six respondents mentioned the positive role of the synergies created between security and justice agencies, highlighting a positive evolution in the functioning of the network. The respondents also mentioned the following positive factors: creating teams specialised in domestic and gender-based

violence crimes; training for police, military and judicial staff; highlighting the performance of DIAPE (Regional Department of Investigation and Penal Action) and Courts.

However, according to those surveyed, the security and justice system has some weaknesses that must be addressed. One respondent mentioned that it does not guarantee the safety of all those involved, professional secrecy in the referral of victims and more in-depth work on raising awareness about domestic violence. For another respondent, the justice and security system need to be reinforced regarding human resources to avoid a breakdown in its response capacity.

When asked to evaluate the perception of efficiency, revictimization in the process, and the presence of stereotypes in the system, Figure 31 presents the prevalence of revictimization and the influence of stereotypes in the justice and security system.

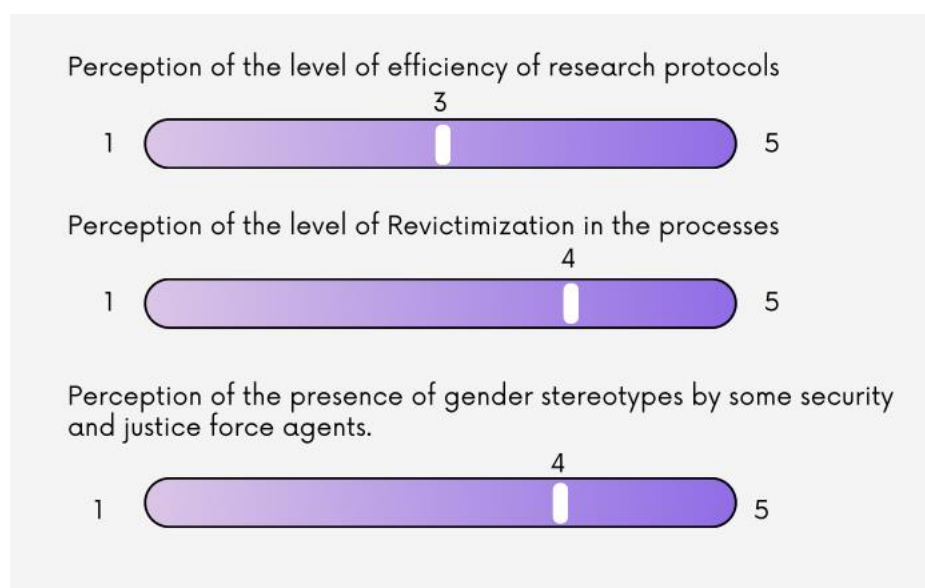


Figure 31 Grades of evaluation in the justice and security system. Source: SIGO Report Appendix IV

Another sensitive topic is the cultural sphere in society that shapes the collective. The cultural structures that shape issues of gender-based violence and domestic violence are the roots of many of the structural problems that permeate our societies. Understanding how these aspects are present locally helps us understand the context at its mesoscale. To those surveyed, the main topics are the existence of a patriarchal culture, the persistence of gender inequalities, the perpetuation of gender stereotypes, and the culture of silence regarding violence against women.

The fact that Portugal only gained its freedom 50 years ago and that women saw many of their rights guaranteed is a very decisive factor. We still have generations living in that time who still have many deep-rooted prejudices. (quote from survey)

Zoom in

The second part of the inquiry, presented in Appendix V, allowed us to outline an internal view of the network (Zoom in), its strengths, and its purpose for existing. However, it is worth noting that the process requires validation due to low participation (4 respondents) and may lead to future adjustments. The proposal summarised in Figure 23 contributes to a more assertive visualisation of the proposal, whose objective was bringing together mutual understanding and facilitating sharing among members and new network participants.

To validate the whole understanding of SIGO as a network, the research used a Canva from Community Waving, a group of researchers that developed a community-building framework co-created by Pfortmüller, Mombartz and Luchsinger (2023). The community canvas summarises the areas of interest in collective action, evidencing people, places, values, practices, roles, resources, purpose, power and channels. Figure 32 also presents the central components of SIGO's work and intends to create alignment between those participants by providing common information about their core vision. The information inside the frame reflects the vision of a managerial person, and the date is expressed in documents shared by the Póvoa de Lanhoso municipality. It also represents an outcome from the investigation that serves as a communication tool for old and new partners and participants of SIGO network, contributing to its alignment of values and actions.



Figure 32 SIGO community canvas - inside vision. Source: personal

Additionally, it was necessary to make visible all the components in this system that represent SIGO and understand those interactions and connections. To do that, we accessed information from contracts shared by Póvoa de Lanhoso Municipality and two online meetings to understand the whole structure better and validate the visual proposal represented in Figure 33, which presents 15 elements and their role in the SIGO network. The actors come from Public Interest institutions, non-governmental institutions, governmental institutions, social solidarity associations, and High School Institutions. The municipality is the central element that coordinates the processes and dynamics of each domestic violence case. Some institutions, such as the public ministry, GNR, House of Works Fontanaca and ASSIS, are constantly active due to their focus on accepting and accompanying victims during the court process. Other elements work as support, helping with food, clothes, and psychological support.

The whole network is coordinated in solidarity mode, which means that SIGO does not receive funds to exist; it is a self-coordinated system, centralised by the municipality, that works dynamically with cross-sectoral capacity to provide services for domestic violence victims and their families. According to Figure 33, the relationships among the actors involve the flow of physical resources. These resources can include equipment, materials, and products such as food and clothing. Additionally, services like mental health support and accommodation, as well as information shared about each case and its specific details, are also part of these interrelations.

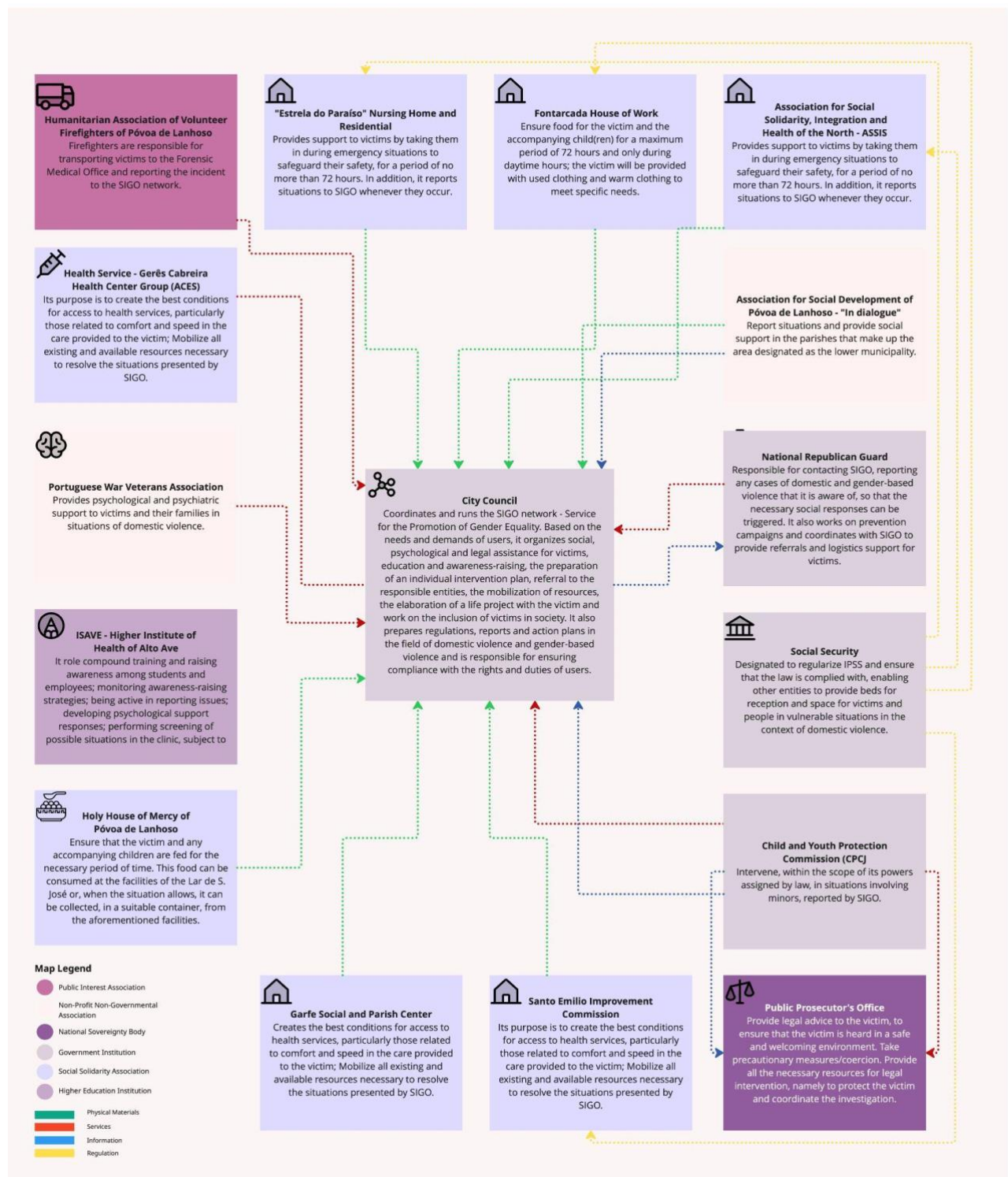


Figure 33 Actors dynamics map from the SIGO network. Source: Author

Each actor or institution has a particular role, as described in Figure 33, and interacts with the others in a dynamic way according to every case. In all situations, multiple institutions are activated to answer the needs of victims and their families. From finding shelter, clothes or even food, the articulation departs from the City Council to arrange partners to provide solutions in available time.

10.2 Exploring

This section exposes the process of creating systemic intervention in a complex social system in a cross-sector, including governmental and non-governmental institutions and specialists in systems thinking and design for social innovation. It is a reflexive moment that exposes the findings regarding the process for preparing the collective implementation and the system-oriented design approach. The result of this exploratory phase is centred on the design's view and inside work to prepare the terrain for social system design interventions.

Design is relatively new to the role of approaching complexity. Thus, it is meaningful to reflect on findings when creating a systemic design approach. Since there is no rule for doing this, this session was defined as an exploratory moment from a design perspective.

The identification of projects grounded in a Social Design, participatory, and systemic orientation has proven to be particularly complex. Yet, this very absence opened a space to critically reflect upon both the self and the collective responsibility assumed by designers in the engagement with multifaceted societal challenges. The scarcity of scholarly contributions in this domain further necessitated recourse to the researcher's own experiential trajectory, requiring the construction of material and immaterial instruments capable of supporting the intervention. In this sense, the scope of Social Design extends beyond the formulation of operational tools, such as frameworks, to encompass the cultivation of internal and dialogical spaces wherein sensitive issues, including domestic violence, may be meaningfully addressed. Ultimately, and especially in the case of women, it is almost inevitable to encounter lived experiences of violence that are, in varying forms, intertwined with gender.

On framing complex issues, the place of the self is rarely explored in design processes. Even when empathy is discussed, it is always in a very practical sense. What was experienced in this process is an internal advance in preparation for the topic, but also in how to welcome the issue and create space for dialogue. It is led with sensitivity, internalisation, and a shared responsibility with the process.

Leading on sensitive topics requires creating space for kindness and sensitivity, with an open conversation enabling the solution of taboos and blockages. There is more to building bridges than breaking walls. To lead in societal complexity, developing a sensitive presence that can open doors for unpleasant conversations and close windows, when necessary, without overwhelming participants, is necessary. At the same time, it is necessary to welcome discomfort and vulnerability because no one can solve the problem; thus, it must be embraced.

The path of being a translator of the context, to give the whole perspective, goes beyond constructing visual maps or communicating the facts without biasing the context. First, there is an

inner work of self-awareness, consciousness, and commitment. Second, working with others on a common path starts with informing and engaging, building trust and relational spaces for mutual learning and evolution. Third, creating space for envisioning possible futures and imagining from a common objective is central to exploring new pathways.

Otto Scharmer's pluriversal and regenerative perspective inspires this approach as an internal and external co-sensing process that builds collective accountability and exercises embedding ways of knowing through a meaningful narrative shared with participants from the start to the end of this research. This proposal invites participants to a pluriversal action and collectivises possibilities of the future, which, according to Scharmer (2009), by healing the disconnection with the whole, we can regenerate a new consciousness and counter-narratives that lead us to significant change.

In this sense, as designers have practical tools, but others must be learned in our senses and in sublinear layers to embrace sensitive topics, the multiplicity of actors and interests, the hardness of the system, and the capacity to embody the incapacity of solving problems.

A previous lesson in prototyping and allowing participants to understand the system tells us that simplification is key for system interaction with people from outside the system. Enabling people to see the system better is a focus of work in multiple studies and practitioners (Jones & Bowes, 2017; Sevaldson, 2013). Thus, the proposal for the case study was to adjust the initial map into a 2D version, rearranged in areas defined as: Social Issues; Mental Models; Economic Issues; Legal, Political and Governance; and Infrastructure, Human Resources and Technology. The map brought elements from the original causal map to present interrelated areas and their dynamics to start the conversation and build the current context of domestic violence. It is further discussed and presented in subchapter 10.3.

Within this moment of exploration, design assumes a particular role of decision-maker, not allowing the system participants to intervene in the choice of process selection and tools used in the investigation. It is important to shed some light on the multiple times design acts independently from participants and the oppressive potential it represents, even when the process drives good intentions.

On the one hand, it can be very frustrating to be unable to solve a problem, which can be a dichotomy in contemporary design. On the other hand, design has never been so close to helping the planet's issues as it is now. If well combined, the brilliant minds, the full potential of men and women, technology, models and frameworks could propel multiple transformations.

Social Design has the means to articulate and make social issues perceived in multiple spheres, questioning roles, inviting awareness-raising action, and generating synergy of forces. We

will have to develop these attributes increasingly if we want to transition to a more equitable and truly sustainable world, since the capitalist and Western logics of power have already exhausted our resources on several levels.

However, the difficulty we designers have in complex social problems is to embrace the problems and live with this paradox of observing but not solving, of questioning but not offering immediate or concrete answers. Because in many complex situations, the answers lie in the spheres of micro and macro policies, and it would be a mistake not to point out these issues simply because we cannot answer them alone or through tools that we consider to be within our sphere of practice.

In conclusion, this exploratory phase tells us that to address complex social issues, we need to develop, in addition to external materials, our internal structures capable of anchoring this collective action and raising awareness of collective responsibility and action. Thus, the next phase of the case study approach consolidates this approach because it brings in its proposal the results of a process that involved, guided, stimulated and directed towards a collective intervention in order to transform the issue of violence, starting from the previous phases of the process, but also this important point of reflection and individual exploration, but necessary so that choices could be made, safeguarding the initial intention of bringing proposals to this solidarity structure that provides solutions to domestic violence in Póvoa de Lanhoso, northern Portugal.

The next subchapter will explore the possible interventions on this issue, taking into account the context and Social Design tools that reframe the causal map, provide awareness and encourage collective action towards the complex social problem related in this case study.

10.3 Disturbing

To better suit the objectives of this phase of enabling people from outside the system to participate and collaborate in complex social problems, selected participants from the fields of design, social innovation, system thinking and social design were invited to participate in a three-hour co-creation session, which was conducted on July 12 2024, via Zoom using the platform Miro.

The selection of these professionals was made with the help of System Innovation Hub, a platform that unites professionals, students and practitioners in system-oriented approaches to evolve the field and share references and advancements. The following Table 15 exposes the participant's relevance and their main expected contribution to this proposal.

Table 14 Specialists selected relevance and contributions

Participant	Role area	Relevance	Main contribution
M P	Social innovation and system change specialist	Italian expert in social innovation and system change with more than 13 years as consultant and acceleration impact business for profit and non-profit initiatives. She has mentored more than 100 impact projects, integration design methodologies (Design Thinking and Systemic Design) Lean Startup approaches, and collaborative techniques. Trained at simplifying complex systems and challenges while guiding impact teams on their journey. Passionate about scaling and replicating impact models globally.	This expert brings extensive practical and strategic expertise to co-creation sessions aimed at tackling domestic violence through System-Oriented Design (SOD). Her work spans both for-profit and non-profit sectors, supporting and mentoring impact-driven initiatives by integrating design methodologies—including Design Thinking and Systemic Design—with Lean Startup principles and participatory techniques. Adept at simplifying complex systems and facilitating collaborative processes, she is well-equipped to guide multidisciplinary teams in navigating the multifaceted nature of domestic violence. She offers critical capabilities in framing challenges, fostering cross-sectoral dialogue, and translating systemic insights into actionable, scalable strategies for social change.
R T	Design manager, student and research in design, technology and social innovation	Master student in Design Management at IADE conducting studies on design, technology and violence against women. Researcher at Unidcom at DFH.Lab (Design for Humanity Lab) operates at the intersection of social sciences, including sociology, anthropology, public policy, and design, to address complex societal issues with a focus on fostering positive social change.	As a Master's student in Design Management at IADE and a researcher at UNIDCOM/DFH.Lab, this participant offers a valuable interdisciplinary perspective rooted in the intersection of design, technology, and gender-based violence. Their academic inquiry into violence against women, coupled with engagement in a research lab that integrates design with sociology, anthropology, and public policy, positions them to critically engage with the systemic dimensions of domestic violence. In a co-creation session informed by System-Oriented Design, they can contribute to mapping sociocultural structures, identifying institutional and policy-related leverage points, and translating complex social realities into

			actionable design insights. Their grounding in design management equips them to navigate stakeholder dynamics, while their orientation toward socially responsive design supports the development of ethically grounded, context-sensitive interventions aimed at fostering systemic change.
C V	Data Product Manager & Systemic Design Consultant in governance and funding	Current EMBA (Candidate) and With Life Fellowship 2025 - nRhythm (Regenerative Economics). His journey is around product development and governance, articulating impactful project cross-sectors.	The focus of the specialist and the practitioner is on community leadership and the integration of different stakeholders, can contribute to raising awareness of the sharing of responsibilities in social issues and adding governance elements that may be relevant to the development of proposals and understanding of possible barriers.
R F	Product designer and researcher in design and intimate partner violence	Completing a PhD in the School of Design at the Royal College of Art. It explores how design practice shifts when developing interventions to tackle intimate partner violence. Background in Masters in Design Research (MRes) from the RCA and Product Design Engineering Bachelor of Science (BSc) from Brunel University London. Conducted various Research Assistant jobs with Royal College of Art and Queen Mary University of London. Visiting Lecturer at the Royal College of Art. Currently, on-going development of a cleft palate training simulator (patent granted - GB2579817B) to train surgeons in low-resource countries in collaboration with Guy's and St Thomas' NHS Foundation Trust.	With a multidisciplinary background spanning product design engineering, design research, and a practice-based PhD at the Royal College of Art focused on intimate partner violence, this researcher brings a critical and system-aware perspective to co-creation sessions grounded in System-Oriented Design (SOD). Their doctoral work explores how design practice adapts when intervening in the complex, multi-scalar dynamics of domestic violence, offering valuable insights into systemic mapping, stakeholder engagement, and the identification of leverage points. Coupled with experience in research collaborations with institutions such as Queen Mary University of London and the NHS, and the development of a patented surgical training simulator for low-resource contexts, they demonstrate a strong capacity to translate research into context-sensitive, implementable solutions. The contributions to System-Oriented Design sessions lies in bridging disciplinary

			perspectives, grounding innovation in lived experience, and advancing ethically responsible interventions within the domestic violence ecosystem.
P P	Interdisciplinary intercultural specialists in the fields of creativity & compassion	An interdisciplinary intercultural, leading with emotional intelligence & intercultural acumen, creativity & compassion, Paula advises and facilitates co-created bespoke solutions for business, non-profit and grassroots organisations in order to co-sense emergent horizons in leadership for enterprise workplaces, digital spaces and global-local communities. A polyvalent professional (polyglot and polymath), Paula explores emergent data interconnections in diverse fields of technology with human dimensions of awareness and knowledge, enabling in-person & virtual collaborative solutions, integrating values of transparency, solidarity, intercultural awareness & diversity.	As an interdisciplinary practitioner whose expertise in emotional intelligence, intercultural competence, and creative facilitation positions her as a valuable contributor to co-creation sessions grounded in System-Oriented Design (SOD). With experience advising business, non-profit, and grassroots organisations, she brings a nuanced understanding of how cultural narratives, power dynamics, and emotional dimensions shape both systemic challenges and collective sense-making. Her capacity to co-sense emergent horizons in leadership across enterprise, digital, and global-local community contexts supports the cultivation of inclusive and reflexive design spaces. In the context of addressing domestic violence—a deeply relational and culturally embedded issue—Paula contributes by fostering empathic engagement, enabling culturally sensitive dialogue, and supporting the co-creation of contextually grounded and emotionally attuned systemic interventions.
BH	Independent consultant specialist in systems thinking, systemic design, strategic foresight, sustainability and regeneration	As an independent consultant for his own consultancy BeBrave, BH applies systems thinking, systemic design, strategic foresight, sustainability and regeneration and business design methodologies to drive value creation and innovative business models. As a certified management consultant and project manager, the specialist provides consulting, advisory services, coaching and workshops focused on strategy development,	His expertise in facilitating transformation processes through strategy development, project management, and participatory methodologies positions him to effectively guide complex, multi-stakeholder collaborations. As the lead of the Systems Innovation Hub Portugal and an active contributor to networks such as Catalyst Now and SI Organizations Hub, he has cultivated deep experience in convening and educating diverse actors around systemic change. In the context of a co-creation session addressing domestic

		transformation, facilitation, and project management. He leads the Systems Innovation Hub Portugal and is a core member of SI Organizations Hub, Catalyst Now Spain & Portugal, actively engaging in these networks as a speaker and educator. Additionally, he advocates for the role of systemic design in helping organisations evolve their purpose and strategies to support long-term human, economic and ecological flourishing.	violence through System-Oriented Design, BH offers critical capabilities in framing system boundaries, identifying leverage points, and aligning intervention strategies with long-term socio-ecological resilience. His advocacy for purpose-driven, future-oriented organisational transformation makes him particularly well-suited to support the development of interventions that are both contextually grounded and strategically scalable.
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The initial proposal included a more active participatory approach by SIGO stakeholders together with experts in design and system-oriented approaches. However, it was necessary to adapt the proposal to ensure continuity of the study, given the inability to effectively bring together the different partners and experts in a joint process. Thus, the initial process of data collection and analysis was carried out as previously explained, together with members of the SIGO network as a way of creating a context in which these experts could work to create new visions for the future and transition of social change with design tools.

Not being able to complete the whole process with all the actors of the SIGO network, under the umbrella of the Disturb Project, six experts in social innovation, design, and systemic thinking were invited to contribute with a vision of the future on the topic. This outsider's perspective had the objective of helping us to expand the horizons of action and partnerships to address the phenomenon of gender violence and domestic violence, and demonstrate the Social Design capacity to build bridges and feed the conversation for future solutions and leverage points.

In addition, the proposal explores collective engagement and responsibility with people from different backgrounds and related interests in design approaches to complex issues. None of these participants had worked directly related to the subject, thus it was an opportunity to see how the approach works with previous understanding and as a process of collective interaction, embracing and active participation.

Using a social system-oriented design approach and tools from transition design, the proposal establishes three moments of intervention. To recap the methodological proposal, the first moment introduces the context of domestic violence in Portugal by presenting facts, challenges and current evolution, represented in Figure 34 in a causal map representation and reconfiguration from

the original at Kumu platform Figure 23. Thus, the intervention started by aligning visions and contexts of the present, with their interrelations, stimulating critical thinking from a global view of the problem through a second map based upon the STEEP (Social, Technological, Environmental and Political), PESTLE (Political, Economic, Sociological, Technological, Legal and Environmental) adapted from Irwin and Kossoff (2022).

Social Design in Action

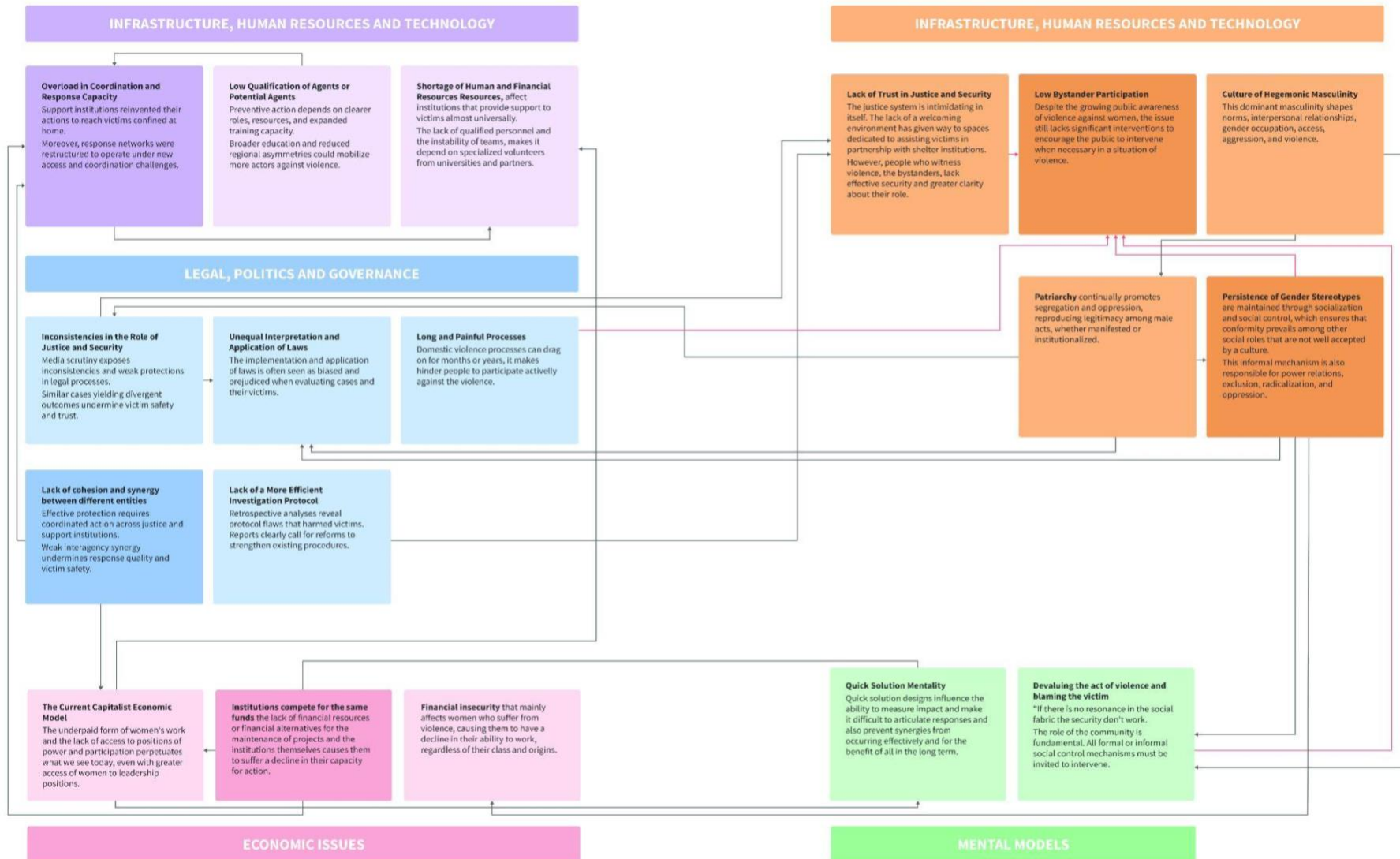


Figure 34 Domestic violence system map simplified. Source: Author.

The subject of the social issue has presented the behaviours related to society, such as the low participation of bystanders, the structural influence of patriarchy, the lack of trust in the justice and security system, the hegemonic culture and the persistence of gender stereotypes. In mental models, we highlighted the devaluation of the act of violence against women, blaming the victim, and the quick solution mentality. In the economic issue, the current capitalist model, the financial insecurity suffered mostly by women, and the institutions that compete for the same funds. Legal, political, and governance focus on unequal interpretation and application of laws, the inconsistent role of justice and security, the lack of a more efficient investigation protocol, cohesion and synergy between different entities, and long and painful processes. Finally, in infrastructure, human resources, and technology, the spotlight goes to the low qualifications of agents or potential agents, the institution's coordination and response capacity overload, and the shortage of human and financial resources.

After aligning the vision with the current moment, the workshop explored the elements, structures, and moments in our past story that could have influenced the current moment and reality. Participants must write on the board every aspect they think connects to the subject analysed, following the prompt question: How has the problem evolved? How can we map its historical evolution? What are the main events that may have influenced the evolution of the problem? Figure 35 illustrates the board process and its interactions on the influences of the past and creates an evolutionary vision.

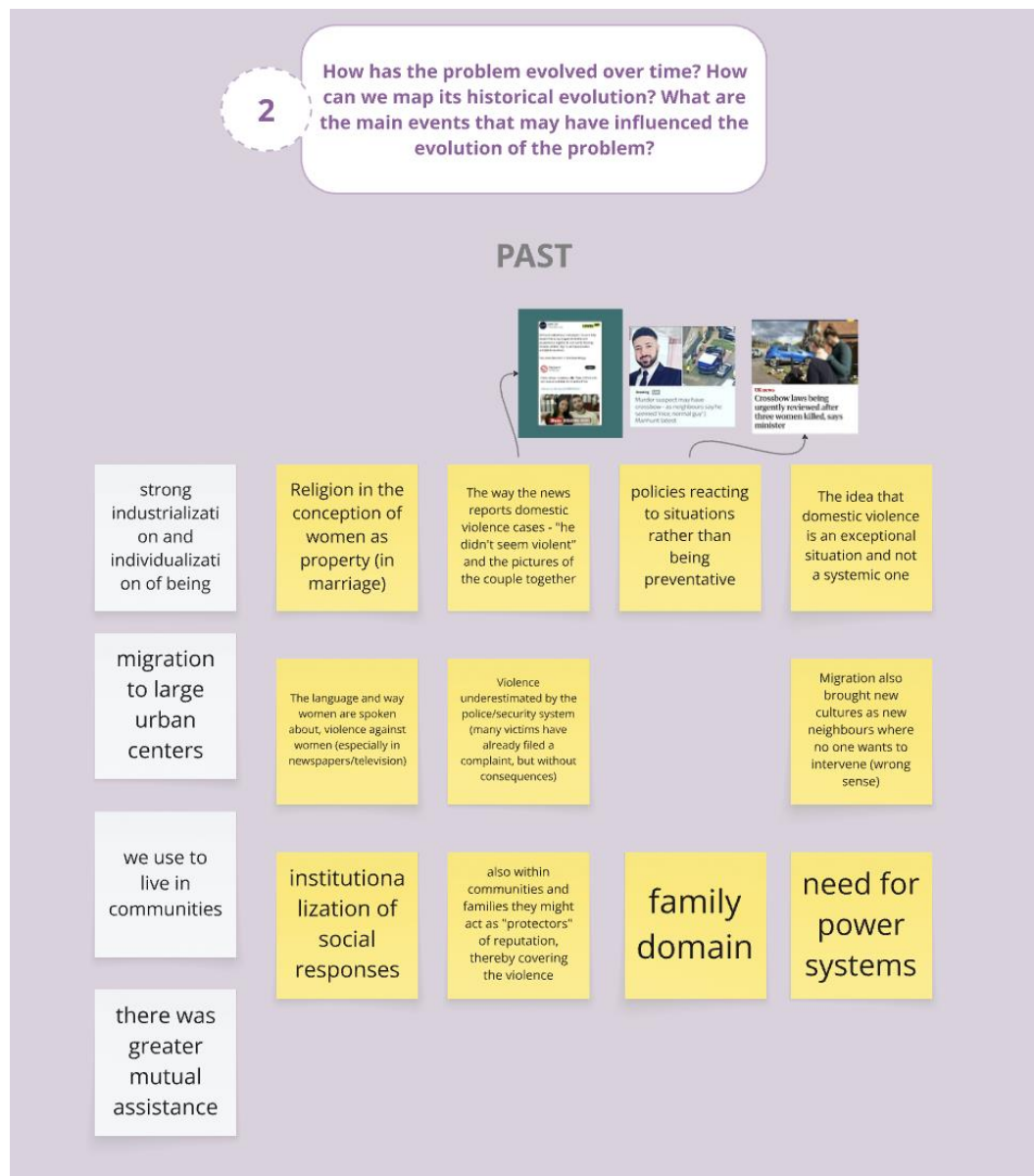


Figure 35 Influences on the evolution of the problem. Source: Author.

The results are a collection of past scenarios that reflect current days in our society, such as the strong industrialisation and individualisation of being; religion in the conception of women as property through marriage; the role of language and the way violence is spoken about, especially in newspapers/television exposing 'normality' centralising the women role and diminishing male violence; institutionalisation of social responses; police reacting to situations rather than being preventative; the idea that domestic violence is an exceptional situation and not a systemic one; the need for a power system and levels of dominance in society; the family dominance and families acting as "protectors" of reputation thereby covering the violence; the migration also brought new cultures as new neighbours where no one wants to intervene.

All the past aspects can be seen nowadays, but they expose some root causes and prevalent roles, such as gender dominance, the lack of state-inefficient interventions, the lack of community-

level interventions, the necessity of power deconstruction, and the awareness of the communication role. All the information presented exposes the understanding of these participants from their personal level, as well as their commitment and empathy with the subject explored. This point of reflection represented a valuable exercise to strengthen their connection with the theme and move to the next moment of this exploratory proposal.

The third moment of the session is dedicated to propelling future intentions and transitions. Following the question: What is the long-term future we want for the transition? Figure 36 presents the interactions during the process that allocated the future intentions on the issue and its related ideas for transitions.

Transitions	Future
How can we should we plan for a transition over decades? How can we develop systemic solutions to a systemic problem like this?	How can we should we plan for a transition over decades? How can we develop systemic solutions to a systemic problem like this?
• study of languages involving violence • share responsibilities • transforming cities for the safety of women and girls • moves citizenship and further philosophy content from SDGs towards IDGs as well as sense of community, empathy • mandatory intervention • Know how to identify signs of abuse. • Sex education from primary school and education for consent • all identities learn to express and practice emotions • Aggregate data - Fast/effective connection (e.g. between family doctor, police, hospital, school, companies...) to activate support in time/send an alert. Is there currently any type of connection? • citizenship class with a projective vision of the future • transformative justice • daily practice of accountability • active social surveillance on violence • activate the capacity building i in a community-led interventions	• we wouldn't have to have women's ministries because their safety would be assured • we wouldn't have to have women's ministries because their safety would be assured • letters of rights that are effectively equal for all, without distinction • new social relations • a society that accepts differences • transformative justice • effective legal practice • access to health and food for all • eliminate power labels that push people away • we will celebrate the generation of affection, without walls, barriers, divisions and separations • citizenship will be taught at school and violence will be a topic shared more comprehensively (model of no power, justice) and applied

Figure 36 Ideas for a long-term future for transition. Source: Author.

Participants discussed the main topics for a possible future in this path. The range of proposals was organised into four groups according to their representation. The intention was to rearrange them with a broader representation of each subject. Thus, four topics emerged as leverage points for social transformation: Changes in Human Relationships, Pluriversal consciousness, Transformative Justice, and Citizen Action, as presented in Table 16.

Table 15 Disturb session outcomes for future in domestic violence

Changes in Human Relationships	▪ New social relations will be the basis of society ▪ We will celebrate the generation of affection, without walls, barriers, divisions and separations. ▪ Emotional development will be a social issue
Pluriversal Consciousness	▪ We will eliminate power labels that push people away from each other ▪ End women's ministries and other areas that label, as these will not be necessary ▪ Full presence of multiple voices in decision-making
Transformative Justice	▪ Establishing an effective legal practice ▪ Society will not depend on justice and prisons ▪ Greater proximity to citizens
Citizen Action	▪ We will have a more vigilant and active society ▪ Greater confidence in taking action, as there is support for it ▪ Recovering the sense of community

As it presents, the outcomes for the future of domestic violence are far from the exclusive topic of victims, perpetrators, and the technical apparatus. Participants embodied a systemic perception of interests that can move society towards this issue, starting by acknowledging the importance of changes in human relationships and introducing affection and emotional development as central elements of harmful behaviours.

As Transition Design proposes, after looking at potential future outcomes, participants were invited to think about transitional aspects that could help to achieve the desired future. Thus, the challenge was to think about the transitional paths from Human relationship Degradation to Changes in Human Relationships, from Patriarchal society and binary model to a Pluriversal conscience, from Incongruent and victim-centred justice to Transformative Justice, and from Low collective participation to Citizen Action.

To inspire participants to connect the dots, they ask the following questions: How can or should we plan for a transition over decades? How can we develop systemic solutions to a systemic problem like this?

At first, the results seemed disconnected and did not follow a linear path. Thus, an analytical approach is used to construct a more inter relational connection between the proposed ideas in a way that can organise the proposals and an evolutionary scheme. The path to transition presents possible areas of approach that constitute a potential for actions to reach future visions. Exploring

how to reach visions helps us create multiple perspectives to innovate response approaches and explore potential themes that may be outside the immediacy of day-to-day interventions in complex issues such as domestic violence.

Table 17 provides the proposals for transition in the co-creation session using the framework from Transition Design in the subchapter 6.1.1. More than centralising efforts in domestic violence, the participants explored how to transition from one of the four elected positions and how to navigate this path to arrive at a desired future.

Table 16 Design transition against domestic violence

	5 years		15 years	30 years	60 years
Human relationship degradation	Citizenship class with a projective vision of the future Citizenship taught in schools	Study of languages involving violence - for all sectors of society	Citizenship and philosophy as content of the SDGs, activating a sense of community and empathy	All entities learn to express and practice emotions	Changes in Human Relationships
Patriarchal society and binary model	Gender equality and sex education from primary school to education for consent. Relate gender equality themes in other areas, football, science, history, arts, etc.	Connecting different movements that promote the search for inclusion, equity and diversity Better language in social media - better inclusion	Creation and enhancement of mechanisms that allow for the increased presence of a multiplicity of voices and identities	Ensure the deconstruction of power dynamics	Pluriversal Consciousness
Incongruent and victim-centred justice	Aggregate data - Quick/effective connection to activate support in time/send an alert.	Adjust laws and declarations of rights effective equal for everyone, without distinction Creation of more inclusive mechanisms aimed at improving the	Consolidation of a new approach to the legal and local security system	Transforming cities to be safer for everyone	Transformative Justice

individual development					
Low collective participation	Create tools and opportunities to generate community-led interventions	Provide training to intervene in different sectors	Collectivise - create mechanisms that ensure the support of others to intervene	Well-established mechanisms that ensure collective action as a daily practice	Citizen Action
		Sharing responsibilities			

To evolve from human relationship degradation to real changes in human relationships, the participants stated the importance of using future thinking, actively involving citizens in studying non-violent languages, and emphasising the importance of the educational role in citizenship, philosophy principles and the value of practice in expressing emotions. Such approaches collectively contribute to the cultivation of healthier and more constructive human relationships.

According to participants, achieving a pluriversal consciousness begins with foundational steps such as integrating gender equality and comprehensive sex education from primary school onward, including education for consent. Extending these values into areas like football, science, history, and the arts highlights how diverse contributions have been historically marginalised and opens space for more inclusive narratives. Movements advocating for inclusion, equity, and diversity are interconnected efforts that aim to dismantle dominant power structures and amplify underrepresented voices. Enhancing language use on social media, for instance, plays a key role in shaping perceptions and fostering belonging. Together, these efforts build mechanisms that elevate a multiplicity of identities and perspectives, ultimately supporting the deconstruction of hierarchical dynamics and paving the way for a truly pluriversal society.

To shift from incongruent, victim-centred justice to transformative justice, participants recommend integrating data and resources to visualise and access information about domestic violence. Changes in legislation and the establishment of more inclusive systems are necessary to ensure access without bias and provide a fair, non-oppressive process for victims. After making the necessary adjustments, the proposal should consolidate justice capacity and invest in scaling the new model to create a city that is safer for everyone.

To transition from low collective participation to citizen action, it is suggested that the creation of community-led tools as emancipatory proposal for collective practice and agency. The training and sharing of responsibility must be a practice to establish among the multiple spheres of society to arrive at a proposal structured for collectivisation as an act of social participation

supported by and for citizens. The final aim is to have a society living as a well-established mechanism of collective living.

The ideas suggested for the system transition approach are at the moral, compartmental, and policy levels. On human relationship degradation, changes in human relationships are evidenced by the presence of citizenship and emotional consciousness as drivers for change. Those interventions directly impact how people interact with each other and perceive each other. They elevate the capacity building to empathise and relate. Moreover, they catalyse ways of decentralising individuality over collective interaction and social participation.

Transitioning from a patriarchal society and binary model to a pluriversal consciousness starts by educating about sex and gender structures. A proposal for reorganising movements and civic organisations with related intervention subjects reinforces it. To participants, the organisation and coalition of multiple spheres of social intervention could be relevant to enhance the information and awareness of gender inequalities.

Additionally, the path of communication and language can increase knowledge around this subject and possibilities of access to multiple levels and a paradigm break from juridical to cultural areas. However, to ensure a solid transition, it is necessary to create mechanisms that allow multiple voices to participate as active members in this transformation. Finally, to achieve a pluriversal consciousness, the deconstruction of power is a continuous process that can start from individual to collective participation, elevating the amplitude of social involvement from time to time.

In the transition from incongruent and victim-centred justice to transformative justice, participants highlight the importance of collecting information from multiple domains to have more assertive data about domestic violence and better interventions. Other adjustments are regarding the law establishment and application, and creating more inclusive mechanisms to improve the individual. Consolidating a new approach to the legal and local security system can occur with an evolutionary practice and exploration of new models to approach the law and security system. To further achieve a safe city for all means that other elements in the proposal actively benefit each other. In this path, legal mechanisms, social structures, policies and values are established to evolve together.

Finally, considering the centrality of society in the social system to transition from low collective participation to citizen action, it is necessary to develop tools and opportunities to generate community-led interventions. Rather than treating symptoms, provide training to society to intervene in different sectors, allowing autonomy, liberation and the responsibility for social issues to be a shared path. Moreover, participants suggested that collectivisation, the act of creating

mechanisms that ensure the support of others to intervene, could be the social modus of collective existence to be practised collectively and daily.

10.3.1 Validation

The validation process was conducted twice. The first is related to the disturbing process of using design tools to embrace and act towards domestic violence. The second moment was the validation of outcomes from this section with the city council, the focus of this case study. The first validation occurred at the end of the co-creative session, when some time was dedicated to discussing the process and collecting perceptions about the tools and the level of acknowledgement.

Overall, participants considered the process and approach helpful in constructing a solid vision of the context and starting a conversation to tackle possible implementations and changes in the system. They recognise that even being outside the problem makes it possible to have information and tools to approach the explored issue in other contexts. As designers, the process experience gave a broad vision of the current context and allowed them to pursue the visualisation of a desirable future. This proposal can build, under the map, another layer that can identify stakeholder dynamics based on their values and relationships, identifying possible gaps and capacity building.

Another topic that could be interesting in how to create projects on top of this is because the map will help you visualise where the problem is, what the relationships are, and it could be interesting to identify the stakeholders and what relationships already exist, what relationships are missing, and which ones can be created. Relationships and values between the different stakeholders can be created. I think it is a deeper level of defining the areas and the problem in each area. Trying to define with the stakeholders how they will relate and how they will not. In other words, identifying problems and points that can be worked on. I would use the map to build on these levels of relationships and the context, for sure" (M.P. - Social innovation and system change specialist)

Additionally, they recognise the benefit of being outside the problem and contribute with a fresh vision, enhancing the capacity to innovate and accelerate transformations.

I think design can ultimately help with this broader and more external view. It can have greater weight and bring a different approach. I think it ends up being very good for progress, for keeping up with how the world develops and advances. However, I think people are generally somewhat afraid and suspicious of what design can deliver and may not have much confidence. It is important to show the impact and benefit this can have in our

work (R.T. - Design manager, student and researcher in design, technology and social innovation).

During the conversation session, participants discussed the limits and limitations of design to intervene in social issues. The limitations are evident with regard to the legal system and policy-making. However, it is recognised as a design intervention in a workaround way of law, creatively circumventing laws to create subversions that benefit people, as exposed by the Italian specialist in social innovation and systems based in Portugal:

There is an example of an NGO in the Netherlands that works to provide safe abortions in places where it is illegal. The solution was to place a boat in international waters and take women from where they live to the boat and then to their homes again. An alternative solution to facilitate safe access to doctors in a context of international waters, where there are no legal restrictions, and so it will work around the world to facilitate this process. So it is interesting to see systemic thinking where there is a blockage, and how I can overcome it.

(M.P. - Social innovation and system change specialist)

New concepts were added as a complementary vision for a mindset change in systemic approaches, such as changing stakeholders to careholders. Careholders are responsible for owning the place and the relationships that happen there. They are the sensitive part of the system that guarantees that care is part of its functioning. This approach is practised by native communities and their kinship and recognised by multiple social enterprises as a potential form to foster a more inclusive, less colonial, and more compassionate approach, recognising our shared deep connections and responsibilities.

Another concept that has been developed is that of caretakers, that is, people who identify with maintaining the care of this space. Those who act as guardians of this space who also have the best interests at heart and who can be supported to monitor their well-being, that of the group or the social structures. Keeping this idea of care in mind, thinking about the well-being of the group can be a theme. It can also be part of a part of system thinking or system design, which is important for us to have in order to change our mental map of what it means to be human in the system.” (P. P. - Interdisciplinary intercultural specialists in the fields of creativity & compassion)

Another lack evidenced in the conversation was the necessity of introducing a systems approach to education at all levels. According to participants, the dominant Western mindset prevents system change from bottom-up to top-down levels of decision-making.

It would be great to start training on metacognition from a young age, on how we learn about what surrounds us, and on this type of systemic analysis. This would help people, boys

and girls, and adults understand that they are part of a system, even though there are some social problems, that we are all part of it and have a responsibility to help solve them. (P. P. - Interdisciplinary intercultural specialists in the fields of creativity & compassion)

It is a gap, a necessity, because the teachers did not understand this idea of focusing 90% of the time on the problem and the last 10% on the solution. The course was very intense; they could not do it because their mindset was different. It was difficult for the course teacher to manage this situation. In other words, training for stakeholders in systemic thinking is necessary words, training for stakeholders in systemic thinking is absolutely necessary. (B.H. - Independent consultant specialist in systems thinking, systemic design, strategic foresight, sustainability and regeneration)

A specialist in social change and social funds also mentioned the dependency evidenced in the system map, which he proved to be a strong barrier to achieving long-term commitment to social transformation.

Many companies live and survive on European subsidies, and they jump from project to project and end up not having continuity in the medium term. I could give some examples, but it can end badly. Often in politics, I will talk about the environment, we ensure a certain thing, it works for three years and ends up without funds. Another fund is needed to regain awareness of the same issue; otherwise, it disappears completely over time. (C.V - Data Product Manager & Systemic Design Consultant in governance and funding)

Moreover, participants emphasise the contribution of the Social Design process in giving practical and contextual sources for active participation in this sensitive context. One of the participants, a father and designer, reports that as a parent representative at his daughter's school, he feels aware of the context they experienced in the collaborative process. It was an opportunity to gain more confidence to face these social challenges related to violence in the school context.

I congratulate you on the procedure and the Framework, because as a designer, completely outside of this subject, I feel capable of managing a situation in this context. I see an advantage in facilitating and having a perspective that is not so objective, but certainly more neutral than all the others (participants). I can see teachers, for example, saying: We do not have the resources, it is too much effort, that is up to the police, that is up to the health centre, it is not up to us. Yes, I could get involved in that and manage something. However, because I know these people, I am in the village environment, and I know everyone because there is this possibility of getting to know them at the level of trust". (B.H. - Independent consultant specialist in systems thinking, systemic design, strategic foresight, sustainability and regeneration)

The process and its outcomes were presented to SIGO participants in a presential meeting held in Póvoa de Lanhoso, north of Portugal. The meeting occurred on October 25th, as presented in Figure 37, and the report is in Appendix VI. The audience recognised the innovative approach and the benefits of outside interventions in the issue of domestic violence. They found that the overall presentation resonates with their reality and contributes to new ways to visualise and act upon the context in more creative and inventive ways. The proposal creates a new sense of decision-making and acknowledges gaps and opportunities to see all stakeholders and their potential to act. Some results on this investigation can also contribute to internal alignment of communication and values, such as the SIGO community canva presented in Figure 32.

Additionally, the outcomes from the co-creative session with specialists represent a call to action in many areas, especially in education, which they think is a domain to articulate more integrated interventions with a sense of shared responsibility. Rather than acting in prevention, education can be a domain for social change. These embedding mechanisms possibly contribute to changes in human relationships, as proposed by the future visions generated by specialists in social system change.



Figure 37 Presentation session at Povo de Lanhoso Council City

10.4 Discussion of Results

The case study consolidates Social Design interventive proposal through a real-based approach, considering barriers and constraints that forced an adaptive resolution. The proposal of exploring the multiple Social Design domains is relevant because it constructs a conscious understanding of the multitude of interests, knowledge and layers of design involved in social transition.

Understanding the local level in a complex system enables validating the enlarged system and seeing which differential conditions exist in local and global realities. In this case, multiple system points are entirely equal in reality to the local and the country. However, the distinguishing points are in those dynamics that evidence the role of network management from the city council. The proximity and relational approach between institutions has a potential reinforcement focus. Not by chance, the SIGO network is the pioneer of a cross-sector network governance system and is a model for other local institutions.

It recognises the acknowledgement in design for social system change practice from those who participated in collaborative sessions and those who contacted the system map and started to be aware of the interconnections in this structurally complex issue. To those who see the system perspective for the first time, we see some changes in perception about the cultural elements that populate this problem. Elements like quick-fix mentality and short-term solutions show how embedded cultural behaviour is and how it affects other system aspects. Moreover, cultural structural patterns such as gender stereotypes gain awareness when one can see their impacts of them even in the justice system. Thus, systemic practice builds cultural awareness and change, allowing people to embrace reality through a wide prism.

The case study exploratory session also evidenced the importance of design justice as an active role and contribution to constructing liberation tools through design. Critical practice is a two-way street when the researcher is confronted every moment in the process about the role and non-impartial approach. On the one hand, the participants are exposed to the possibility of gaining a critical tool that allows autonomy or generates dependency. On the other hand, there are moments where we see the participant's dependency on design to be guided throughout the process because of the lack of an intuitive model. However, the system-oriented design approach is relatively new, particularly in domestic violence, and deserves further discussion, presented in Session IV in the discussion chapter.

By conducting a process involving information collected separately, various studies on the context, mapping and the help of external experts, it was possible to envision a different and, why not, possible future. Imagine what this group could do if they were put to work together, in collaboration, in a proposal of reciprocity and collective responsibility, where we join forces,

capabilities and objectives for the benefit of everyone. This exploratory exercise aims to pave the way for new practices where social design can serve as an enabler for collaborative engagement centred on providing tools to activate agency, generate collective synergies, radical collaboration, cultural change, liberation and restoration of social systems, such as in the issue of complex social problems.

Solving this issue will require us to reinvent collective action regarding a radical commitment and responsibility. More than proposing solutions, this exploratory study aimed to create space for critical thinking, involvement and co-accountability on the issue of domestic violence. Although the results regarding ideas for transition seem unmanageable by design, they open doors for decision-makers to situate the need for a critically systemic policy intervention. The capacity to punctuate leverage areas of intervention can be considered a considerable contribution to Social Design, even when design cannot directly intervene in the system itself, but it can act as an enabler of knowledge. The epistemological result of this study is discussed in the following chapter.

PART IV

CONCLUSION

“A river does not cease to be a river when it merges with another river. It continues in its essence. That is the greatness of the confluence.” - Antônio Bispo dos Santos (1959-2023) ‘Nego Bispo’, quilombola leader, author of articles, poems, and the books.

11 Summarise and reflection

Design is navigating through other ontological places far from market-driven demand. Its role as a mechanism of hope explores and elevates a new commitment, demanding a critical self-consciousness of its impacts (Noel, 2022). Hence, if design gives meaning to all its creations, the possibility to transform systems by default into systems by design means contributing to a better understanding of systemic problems and future improvements, even when it serves as a form of feeding imagination and conversation.

The aim of this study is to consolidate Social Design as an articulating element of complex systems, whose fluidity of action has the capacity to bring together elements of the same community or different communities to create synergies, with the commitment to generate change. This capacity to activate communities for action is addressed by Manzini and Thorpe (2018), when they show some possibilities for forming active communities, whether as spaces of possibilities, which allow the coexistence of multiple ideas, ways of solving problems and an open perspective. Additionally, it represented a relevant approach to create collaborative meetings with specific focuses, where collaboration creates a favourable environment to activate systems and empower them.

Through the qualitative and case study approach and its research questions, we evidence the multidimensional contribution of Social Design as an instrument for cultural and social intervention restructuring approaches on complex systems. The results indicate Social Design as an approach to nurture systemic and critical thinking in multi-sectoral projects, contributing to propel collective processes and foster pluriversal decision-making space.

Furthermore, throughout this journey, in addition to the capacity of Social Design to address complex social issues and its relational articulation of dynamics, one can see the expectation that design is limited to the field of doing, much more than to the field of critical thinking and a liberatory

tool for social change. The expectation of a design that solves it is still very present, and it is difficult for many people to find this point in the space of critical inquiry and frictions. Even to accept that the role of design can, in fact, be to point out, unveil and open the field to the issues that shape our society and that there is no single answer that can solve them.

Hence, another evidenced contribution in this research are the Social Design mechanisms for dealing with complex fields and the paradox of embracing problems and living with them, observing and not solving, questioning and not offering immediate or concrete answers. Because in many complex situations, the answers lie in the spheres of micro and macro policies, and it would be a mistake not to point out these issues simply because we do not have the capacity to answer them alone or through tools that we consider to be within our sphere of action.

Additionally, this study shows Social Design capacity in articulating and making social issues perceived in multiple spheres, questioning roles, inviting action that is more about awareness and synergy of forces, attributes that must be developed if we want to make the transition to a more equitable and truly sustainable world, since the logics of capitalist and Western power have already exhausted our resources on several levels.

Through this study, we can also see that collective action needs to confront what makes us part of, the relations of power. Foucault (1982) states that discourse shapes society, which directly affects the construction of the problem, and the science focused on the solution.

However, a point of divergence is noticed in this study in what constitutes collaborative action, which presupposes joint action versus the inertia that shapes action in public spheres. In the search for an action network in the field of domestic violence, the institutions were expecting a ready and complete solution, without the need to get involved in the process. Partly due to the high demand for work, certainly, but on the other hand, a *modus operandi* common to the capitalist market seems to hover over these institutions, where one pays for something and receives in return an expected and personalised response. Or by a perception of design as a problem solver and product-driven domain. In practice, the design that aims to break consolidated systems comes up against the inertia of structures already accustomed to working with solution-oriented projects and that need to modify their internal scopes of action to make room for the new.

Additionally, to counter the logic of a design focused on creating solutions with a design that embraces problems, it is necessary to build critical foundations by opposing the logic expected for approaching social issues. In other words, in social approaches that prioritise invisible people, we counter the logic by questioning the system itself, in order to create spaces for possible interventions through this critical perspective. This is a challenge to decolonise the hegemonic approach and thinking pattern that persists in academia and design practice, without discrediting all

the work that has been done under the lens of a more problem-driven approach inherent to design itself. In this way, social design acts as a way of constructing a critique, in the positive sense of proposing, through its practice, critical and systemic thinking (Noronha, 2024; Morin, 2006).

In this role of contributing to a critique of the power dynamics that exist within systems, Social Design contributions are evidenced in three levels: 1-making visible the interactions on the multiple aspects of the system in question; 2-interrogating possible perpetuations and points of change; 3-creating possible interventions and speculations for possible futures. By this, we establish Social Design as a design area in which the task is response-able, which means developing models and tools, creating and sharing mechanisms that allow people, communities and technical structures to embrace a collaborative responsibility way of living.

12 Waves of learning and friction

To answer the central question, 'How can social design help the transition from an individualistic to a social collective responsibility model in gender-based violence?', the research used a case study that evidenced collective practice and explored, within multiple stakeholders, a Social Design approach that helped the collective tackle a complex societal problem.

First, it was necessary to understand the structural and cultural aspects that shape this complex theme. The transition from an individualistic model of action to a collective model, based on shared responsibilities, is one of the most significant challenges for the global transition in resolving the polycrisis we face. Looking at those systems and acknowledging how they interact, face barriers and explore opportunities enriches the Social Design role and its agglutinative proposal to interconnect and interrelate people and places to thrive.

To summarise, the key findings are divided into qualitative and empirical discoveries. A qualitative approach was the starting point of this investigation, and the most challenging part was collecting perceptions, knowledge, and inspiration from the field through specialist wisdom. The data evidenced the six conditions of system change proposed by Kania and Kramer (2013), showing the practices that allow the system to be overwhelmed, the lack of personal and financial resources, the dynamics of power and dependency in the system, exploring the economic dependence of institutions working in the field, and the vulnerabilities of a justice system that lacks relationality with other elements in the system. Moreover, data present the main transformative points related to mental models, revealing the structural beliefs and cultural system. The prevalence of gender stereotypes, the role of family and church, the hegemonic masculinity and patriarchy, verify the interconnectedness in those mental models affecting not just society and the perception of violence against women and girls, but all other related system actors and issues that were supposed to guarantee a safe place for victims, bystanders and children involved in domestic violence.

On the other hand, empirical research shares the practice of designing for social change. It evidenced the central role of relationality and the dialogical domain in social design to come close to the system, interact with it and understand its interrelations. Moreover, the friction between problem-solving and staying with the problem is presented as a paradigm for designers to embrace. Additionally, the capacity to envision the whole through design as a form of being related to and committed to social transformations is a practice that must be nested. The critical effect of the proposed process through transition questioning the current and the past contexts to propel the

future, evidencing other friction existing in the social design path. The practical approach also exposed the fragility of methodological design approaches in the collective and system approach. Finally, the empirical process flourishes in new ways of Social Design, approaching social system issues through the domestic violence case and exploring the role of cross-sector in developing collective wisdom in sharing responsibility and decision-making.

12.1 The friction of individuality and the collective

The creation of a frame with several, but not all, related issues enabled us to construct a solid representation of the current moment, from a critical perspective of what is hindering the progress of domestic violence in Portugal. It is important to reflect on the role of qualitative data as a social thermometer. As explored in the theoretical session, the design evolved to the social concern point by acknowledging societal challenges through multiple lenses, confronting the situation with the environment and its actors (Deserti et al., 2018). However, as the necessity to see problems from a wider perspective increases, Social Design aggregates more critical lenses to proceed towards (Noel, 2023).

The critical mindset in social complex investigations is primordial for connecting the dots and translating the information with accuracy and less bias. However, it does not neglect the individual's influence in information collection. The individual part of each component in research communicates with other parts; this dynamic interrelation with self, we, and us constitutes a reference of position and embodiment (Banathy, 2013).

The self-commitment to wholeness can reflect its presence in the system. Apart from the data supported by theory, we see interviewees' self-reflective participation. The subjectivity in qualitative research and the words not said configure valuable data about the issue. It is a key part of sensitive information.

The narrative collected analysis was centred on system dynamics, behaviours and beliefs, where interviewees were spectators. However, descriptions presented personal aspects where participants were the focus of the problem. In some moments, reflecting on their own experiences helping victims or reflecting on the system's actors, and, in some specific cases, even narrating the violence suffered by very close people. Hence, another valid reflection here is about the individual points of non-information perceived as data, that is not presented in the results or discussed in qualitative research but is considered in the positionality field.

As reflected by Noel (2023), positionality can position us, adding subtle layers of perception that can shape how we approach collective problems. As individuals and collectives co-exist, it is

necessary to provide means to live the act towards a shared responsibility that embraces individuality and propels a critical experience of what it means to be part of a system change. Hence, the prototyping moment after the construction of the system map was relevant to invite people to relate to the system, positioning themselves as actors of a lived system.

That makes us reflect upon how important it is to capture these subjective layers that demonstrate genuine interest, relation, bond, and kinship in social issues. The introduction of kinship is relatively new in Western culture and design. Ancestral wisdom to collectivise is generally a model of collective living. Original people from the South express their most profound connection with nature and each other by respecting their presence as kin (Escobar, 2016). Biological connections do not solely determine Haraway's interpretation of kinship. Instead, it is formed through relationships and connections, constructing a more expansive understanding that embraces diversity, challenges traditional norms, and recognises the interconnectedness of all beings. In her proposal, the practice of "Response-Ability" emphasises critical and ethical needs that directly impact others, activating a sense of awareness, responsibility and interconnectedness where one can build stronger and more resilient communities across sectors (Haraway, 2016).

This perception of responsibility can answer the central question (Q) in this investigation, propelling collective responsibility to pursue what Kania and Kramer (2013) proposed to compound a collective force. Kinship recognises our interdependence, fosters collaboration, "response-ability" practices and creates shared narratives that promote a sense of belonging and purpose. Relationality and proximity gain evidence in building a synergic network system if these responsibility principles are transferred to this exploratory research. On the next level, the sense of kinship could be activated using the Social Design model and its six domains to foster a stronger and aligned way to collectivise and bring new stakeholders in.

As Wahl (2016) highlighted, communities that recognise themselves as a cohesive whole can activate their potential to address various problems. Collectivising gender-based issues through a cross-sector or networking approach also involves acknowledging and fostering individual development, while simultaneously creating a sense of kinship among members. This path presents an alternative strategy for tackling societal challenges. To collectivise effectively, individuals must first cultivate a reflective awareness of themselves vis-à-vis the systemic context. In this journey, social design can offer a safe space to experience kinship by utilising collaborative tools that embrace the context and validate collective intelligence.

This proposal resonates with the expectation that people will be able to reflect upon the harmful culture proposed by the research question Q1 and its structure and perceive the other components of intersection in the system. The approach shows that acknowledging the map,

embracing the context, and navigating past and future can consolidate awareness and a sense of capacity for intervention and contribution to systemic change.

12.2 A space for pluriversal narratives: the qualitative findings

Besides being started in Session III, a previous discussion about the results of qualitative data collection, it is possible to extend the debate around qualitative findings and their points of friction and opportunities. Complexity research has multiple frictions and paradigms that confront the system traps explored by Udoewa (2023). As well as in governance, multiple environmental realities challenge the siloed logic to approach problems (European Environment Agency, 2024). To avoid traps, we must create space for diverse voices directly and indirectly involved in the issue. We need to understand who has not been called to the table.

In this research, we chose to rely on the plural vision and narratives of experts in the field, as a way of also confronting the centrality given to victims, as demonstrated in the theoretical session where we explored existing studies in design and systemic thinking in the approach to domestic violence and gender-based violence against women and girls. This shift in the context of construction lays the foundations for even more exploratory studies in the future. However, here we want to raise the importance of the responsibility of actors who are often not at the centre, such as institutions that support victims, the justice and security system itself, and society in general, as an important element in this system of perpetuating violence.

To deeply understand the problem through systems thinking, narratives are essential for creating the most accurate context possible (Banathy, 2013). While the processes may vary, the fundamental goal is to develop a holistic view of the system to establish a shared vision. Engaging with specialists from various fields that address gender-based violence (GBV) proved to be a valuable experience, as the narratives were complex and multifaceted. We were able to observe the interviewees from both professional and personal perspectives.

In some instances, the stories highlighted how individuals were directly affected by the issues, revealing personal and collective interests. The narratives of those on the ground also showcased the victims' perspectives. Some testimonies provided concrete examples of their experiences and illustrated how specific organisations treated them. Although this study did not focus on the services provided, the information gathered through this experiential approach is also considered a valid source for future investigation in service and product design and further recommendations.

Furthermore, examining the interviewee's experiences through pluriversal lenses reveals the existence of multiple worlds within their field. Often, these worlds were so specific that they

reflected a siloed mindset, addressing only particular aspects of the issue. However, other narratives interconnected various actors, providing a foundation for understanding dynamics and relationships.

Additionally, people often establish connections within the system across cultural and social domains. This highlights a lack of complex understanding and underscores the importance of building system capacity for autonomy and liberation.

According to pluriversal theories, embodiment and acceptance are essential for building new and multiple world visions (Escobar, 2018). Thus, although we consider the survey applied to be a framework of the issue and that creating a general context of domestic violence can be seen as naive, we still realise that the collectivisation of the topic would lead to a more assertive vision as other organisations actively participate in this approach. However, as it is a critical collective process that requires top-down decision-makers and synergies with those on the ground and citizens, articulating forces from a format where narratives and perspectives are valued becomes essential.

While navigating through the inquiry, participants reflected upon stakeholders' functions, visions and the whole system, making all the elements appear in the iceberg approach. As proposed, the pluriversal design, in its capacity to consider the locality in structural aspects, it was observed that it is necessary to situate participants as owners and real experts in the design process (Leitão, 2023). Their cosmovision is a valuable source from which to build presence, ownership, and power for change.

By doing this, we approach the sub-questions of this research, Q1 and Q2, that invite us to reflect upon the contributions of Social Design as a critical tool against harmful behaviour against women and the impact or benefits of the six domains proposed in this model. By activating the capacities to share visions and congregate a mutual understanding of the complex issue, we elevate the capacity to act towards it in synergy and "response-ability".

Radical participatory approaches are recommended when expanding the spectrum of services for this topic, as proposed by Udoewa (2022). In this proposal, everyone is a designer in this new reality. In the research process, the tools used focus on embodying the complexity and enhancing relationality among the system's participants. This research recognises the limits and difficulties of carrying out radical participatory processes but recommends that this approach be not only carried out but also trauma-informed and oriented towards healing or caring for the system.

12.3 Systems thinking in designing cultural change

Constructing knowledge through Social Design lenses supported by systems thinking constitutes a valuable source of approaches that are becoming a new reality for governance, policy, and social complexity issues (European Environment Agency, 2024). Enabling people to see multiple systems

inside a system was a challenging path that transformed the research. System-oriented design started as a form and became data and visual context.

In this reflexive proposal, people are invited to examine the harmful culture that perpetuates violence against women, including structures that participants are part of. This proposition activates the Q1 inquiry question and opens space to explore new ways of constructing knowledge around gender-based violence through design lenses, related to Q4.

Generally, our mindset tends to be programmed for linear, disconnected thinking. Over the decades, we have been introduced to Cartesian praxis and theories that construct thinking. As the Western approach evolves to incorporate ecosystem influence into social systems, the investigative mindset has been shaped to recognise systems everywhere. Each step of construction to practice towards this socio-cultural system was a process of mindset shift (Morin, 2005). Understanding how things relate, connect, and affect each other is a valuable personal, professional, and academic contribution.

After the investigation, it is possible to say that in the research, there exists an embodiment of this systemic process that is even harder to express because it is something one feels non-linearly. Translating what changes from linear to systemic thinking in work is as tricky as linearly explaining the whole system. Hence, an excellent advancement for this type of research can be to introduce other embodiment practices, such as oppressive theatre and the radical participatory design that actively enhances community capacity to act towards systemic structures (Udoewa, 2022).

Another important friction in the system-oriented approach is the problem-solver mindset versus the problem embracement. Design, in general, is paved in the path of solving problems and is directed to specific points of issues. Systems thinking does not necessarily solve problems. Instead, it elevates our capacity to live with them and evolves situations into more likeable ones. These frictions are necessary for questioning the design's capacity and path. What are the limits of design in interfering with social issues? From what perspectives should it be done?

Papanek (1973) states that designers must be able to recognise, isolate and solve problems. Deserti (2018) reinforces this role by situating design culture in orchestrating situations, agents and environment as a practice towards the context. However, these statements do not represent socially complex issues such as domestic violence, as no one can solve a structural problem. By tackling domestic violence, it was possible to see that the situation changes to a collection of dynamics configuring a structural context to relate to and live with. To collectivise at the level of agents, it is necessary to share responsibility and face a complex environment with many world visions, interrelations, patterns, and mental models that reinforce the system.

While interfering in the deepest levels of structures, Social Design, and design in general, one must acknowledge the responsibility to act ethically and in an emancipatory way (Noel, 2023). Hence, the limits of design are where it can conduct fair, shared decision-making with stakeholders, and embrace limitations, vulnerabilities and humbleness. In places facing complex challenges, such as the system analysed in Póvoa de Lanhoso, it is evident how stakeholders create collective wisdom by sharing responsibility through cross-sector interventions, uniting and coordinating within a solidarity network model. However, the challenges that lie ahead will demand a better-orchestrated collective force with the capacity to respond with resilience.

12.4 Participatory approach in Social Design: fractures and learnings

Besides settling the participatory approach as a methodological tool and acknowledging its "collective reflection-in-action" mode, we can discuss the frictions and fractures during the process in the case study. The intentions don't necessarily feed into the action due to the issue's complexity, especially in articulating collective participation through the lenses of 'design with' (Simonsen & Robertson, 2012). However, it is a good source of information for answering the Q1 and Q4 research questions since the reflexive results over the frictions in the practice can evidence the structural problems and foster a critical mindset under the subject of analysis.

The original intention was to adopt a participatory approach in designing the system. However, it was impossible to gather the elements of the system in three or more meetings that would determine the main stages of exploring the theme through the lens of social design. This would imply that at least fifteen representatives of the various institutions that make up the case study, represented by the SIGO network, would participate in the design and intervention of the proposal. In addition, it was necessary to qualify the participants for this new approach through Social Design and systemic thinking, since current thinking has strong Cartesian bases.

We must acknowledge that exploratory research occurs in a non-controlled environment, especially in complex situations. However, we can conclude that the objective of the participatory approach—understanding realities and collaborating with the group—was successfully achieved. Maintaining a continuous exchange of information and validation was essential to ensure participation.

The participatory approach proved to be valuable at various stages of the investigation. It helped to understand and accept the phenomenon as an interdependent system, introducing new layers of relevant content and intentions to transform it. Initially, it was useful to establish the context by gathering information and validating design elements created without participation from

the system. In the next phase, the collaborative nature of this approach allowed participants to feel connected to the system, recognising themselves as part of the force capable of implementing and contributing to meaningful changes.

In this sense, the visual tools generated through data collection and participatory sessions make participants aware of their role in the system, provide knowledge about the topic, its dynamics and interactions, and expand the capacity to act on it.

Engaging with the system's participatory approach elevates how people relate to problems they do not encounter in everyday life. It also creates new layers of perception for those who commonly approach the problem based on current practices. This enabler function potentiates the capacity to empathise and construct a repertoire to action (Freire et al., 2011; Sanders, 2002). Participants mentioned in session III the contributions of participating in the co-creative session to enhancing their perception of the topic and propelling their capacity to act towards it.

Using participatory methods to address collaboration challenges is a powerful tool for building trust and relationships. As we walk through the unknown together, and the environment fostered is one of mutual learning, the flow of information and exchanges becomes richer. However, frictions, especially those involving linear thinking models and siloed mindsets, are the main issues observed in participatory processes. In these cases, we sought to work on the mutual understanding of the problem as a system of interrelations that did not privilege the specific side of the participants, but that understood the participants as a group with the collective intelligence necessary to address the issue.

The contribution in this process relies on the capacity to embrace unpredictability and explore alternatives to contribute and give participants decision-making power. Participatory support envisions a future where all participants can access shared tools, allowing them to contribute openly based on their unique abilities. This collaborative process empowers individuals to translate diverse perspectives into meaningful interpretations of their realities.

Finally, building the capacity to participate in societal change may be one of the most significant contributions of Social Design through participatory lenses. Elevating people's ability and relevance to the whole encourages agency. Simultaneously, in complex societal issues where bystanders are central to women's safety and the dismantling of patriarchal structures, the participatory approach builds instruments for collective acts and constructs a sense of ownership.

12.5 Social Design as relational enabler

This investigation also led to a dialogical approach while analysing the narratives and their interrelations. Dialogue plays a crucial role in shaping our social interactions and is essential for integrating communities. It serves as a central reference for building trust during the investigative process. Additionally, dialogue is fundamental to the interaction and integration of systems, especially when establishing strong partnerships within networks. As evidenced in current studies, it constitutes a relational aspect that constitutes the human natural being since the ancestors (Goodchild, 2021).

The investigation process represented a challenge in creating meaningful connections that enabled the researcher to connect with elements of the whole system. It evidenced the importance of relationality in the process of social transformation. From the researcher's perspective, raising awareness about the institutional structures surrounding socio-technical systems that prevent other sectors from participating in the solution was important. Also, understanding the limitations of understanding design concepts, tools, and contributions to a broader aspect of human needs was important.

Regarding the system perspective, participants must recognise the significance of the investigation, the extent of their contributions, and the potential outcomes that may arise. When invited to participate, individuals were more interested in contributing once they realised that the investigation aimed to develop an innovative approach. However, most people believed the research was focused on the design communication of graphic design. The subject of Social Design and a system-oriented approach is relatively new and requires more dedication to be disseminated.

The investigation exposed a fragmented understanding of the problem, where each actor easily identifies themselves with a specific related part of the system. This was evidenced in the prototype session when they were introduced to the causal system map. During that session, some participants had difficulty dealing with the whole system problem and found leverage points aside from their areas.

To build context, frame from collective to individual in an iterative form. Hence, positionality played a significant role in shaping this research and guiding its execution. This positionality should also be considered in the collective process, embracing these paradigms necessary to confront how we construct learning. We must confront our position within the system, along with our beliefs and perceptions, to construct a critical proposal for addressing complex social issues, which contribute to answering the central question of this investigation and explore Q2 in the system-oriented discipline and other social design domains.

In this path, Social Design enables system change to provide critical space that goes beyond the individual space and places the collective at the centre, guiding common objectives and strategies that stand out from the silo mentality.

Another central contribution of dialogical design is undoubtedly the capacity to build connections and reinforce the value of interconnection, bond and relational nature of the network in GBV. The interviews and inquiries in the case study reveal the importance of an integrated proposal to help women and work in prevention with society, where education, justice, social service, wealth and security are aligned. However, after we construct the system vision, it is observed that there is a lack of consciousness about the whole system. This consciousness enables the system to change (Goodchild, 2021).

Dialogical design, viewed through the lens of Social Design, enhances awareness of how systems interrelate and foster social thriving (Romm, 2024). The path to social responsibility plants a seed for long-term relationships and micro to macro levels of involvement in society.

Understanding that networks for social change work for integration with multiple actors, with the lenses of a dialogical approach, they should and could relate synergistically, not merely integrate. This approach works similarly in diversity, inclusion, and belonging. Diversity brings diverse elements and people to the table, while inclusion has allowed them to belong to the place, path, or beauty of existence.

Hence, synergy is a profound outcome desired by multiple spheres of those dealing with complex social systems. We woke up to the reality that we cannot live by ourselves; we must cooperate to achieve collective purposes. The enabler of action starts by creating the collective group, providing guidance, acknowledgement, and tools to approach problems, promote transition and support the waves of transformation.

12.6 Social Design in a critical path

As proposed by Constanza-Chock (2018), justice figures are designed as a changing force that questions the status and its role in the prevalence or absence of inequalities. This accountability is a greater challenge than what comes with lots of responsibility. This investigation process and its tools noticed that participants embraced critical thinking about their role and the dynamics between the multiple elements exposed in the causal map.

Another significant contribution inspired by feminist speculative design (Martins, 2014) is the capacity to stimulate future thinking over interrelated problems. Such an approach helped thinkers to decentralise the problem, elevating the proposals to a collection of answers that

naturally interconnect with other fields of action. When participants proposed to change human relationships, they reinforced the necessity to tackle mental health, community and proximity, sexual education and emotional intelligence. When proposing a pluriversal consciousness, they also consider the multicultural realities worldwide and the current reality of migration that must be embraced.

In critically thinking about transformative justice, they evoke the central role of justice in its multiple levels, from society's proximity to a positive legal system, to its results and impacts on people's lives. This topic is directly related to what Escobar (2016) proposes when emphasising the need to infuse the design with a more explicit sense of politics, particularly radical politics, as a form to build community capacity to act towards their challenges.

According to Freire (2011), design can creatively articulate knowledge and shared experience with the potential to transform the value to communities. Reflecting on citizen action, specialists emphasise the importance of cross-sector alignment and involvement in social change. In providing basic needs and sources for collective intervention through design or not, the idea of sharing responsibility and decision-making is seen as having the potential to ensure that society has an active participation in domestic violence. This process means activating other sectors, such as private enterprises, the education system, and wealth, to guarantee basic needs, educational support, and structure in long-term strategies and tactics.

Escobar (2016) also proposes an "autonomous design" framework that centres community agency and revitalises communal practices. Its capacity to enhance the pluriverse of socio-natural configurations, moving away from the single-world ontology of modernity, is strong enough to confront the status quo critically. The communal autonomy proposed by the author is strictly related to recovering the capacity to imagine futures. It encourages speculative design practices that allow for collective discussion about how things could be.

However, criticality does not guarantee the liberatory proposal as framed in theory. For critical design to arrive at liberatory capacity building, it is necessary to have collective work where thinking becomes a source of action that enables autonomy over the problems. It is the capacity to enhance collective wisdom through collective adversity. Thus, such a desire for liberation from structures of oppression must be a common goal, intertwined with other goals, when addressing complex social issues.

Not all aspects proposed in Social Design for Action are independent. Some of the six domains presented in Part I, Chapter 4, must relate and interact to strengthen collective capacity, an affirmation that should be explored in further investigation.

During the research process, it was possible to observe that criticality is evidenced when facing the context through visualisation resources, which required the ability to connect and reflect upon multiple aspects, as well as internal and personal knowledge and beliefs. Engaging with the system was another moment in which design justice was central to establishing a bond with the challenge, empathising and acting. Developing proposals for transition required a critical mindset to enable connection and reflect upon possible interventions.

Although there is openness for future findings, it is the central role of Social Design as a critical domain to confront our society at a systemic level. In the average process, it is possible to identify in the results, proposals generated and personal experience the impact of building a critical mindset towards domestic violence.

Finally, this search for justice that design is achieving through its practice and its ability to critically articulate its role and the role of everything that can be created for the benefit of the whole is something to be cultivated through a presence concerned with the systemic impact of our actions, whether at an individual or collective level.

12.7 Social Design for transition in domestic violence

By considering transition design as an evolving approach to Social Design and an actionable form to tackle complex problems collectively, the exploratory session developed in this research could confirm its capacity to enable people to act, answering Q1 and Q3. As Irwin (2015) mentioned, empowering stakeholders to engage with the problem systemically collectively enables them to face complexity and avoid dominance over decision-making, creating equity in all processes.

Besides the exploratory case study not allowing a fully collaborative practice as proposed by Irwin, it was observed in specific moments how powerful navigating together and sharing the same decision capacity is. In the co-creation, at Part III, Chapter 10, it was possible to see how participants engage in the collective responsibility to think critically and decide about the system's future directions. To be able to decide about the future vision for domestic violence, participants listened to each other's perspectives. They confronted past perceptions and limitations to arrive at proposals that constituted various possible elements in system transition.

This highlights the value of social design within system-oriented approaches and the importance of considering individual worldviews within the collective and how they can conflict with the whole. It also stresses the necessity of implementing educational tools of systemic thinking that enable people related to systemic problems to act boldly on them.

The central point of TD is its capacity to generate long-term proposals, and its limitation is its capacity to evaluate those impacts over the years. However, the shared decision-making approach is relevant to developing equity in policy-making and enabling governments to embrace complexity in governance. This path has two layers: the complexity of problems and their domains, and the dynamics among multiple stakeholders to be managed. In both challenges, social design through transition design is a good source to explore collective wisdom.

Its capacity to congregate voices, develop a context, and involve people to embrace this context represented a significant finding capable of driving collective attention and building capacity for critical thinking. Participants not only got on the same page about the subject but were also able to be challenged to think beyond the surface. Different from what was experienced using the causal system map, in designing transitions, the specialists had no direct contact with domestic violence in their work field. This approach enables one to navigate through the information with an open mind. They could explore their references and confront the information on the map to elaborate answers to contribute to the challenge.

Another relevant piece of information concerns the capacity of transition design to expose people to their own biases, mental models, and cultural differences. The proposal of revisiting the past is an invitation to reflect upon the situations we are currently facing. It allows people to critically place their universe in the system and relate to others.

Moreover, they transition from problem-solving to system-related. When participants start to see the problem of domestic violence as a systemic interconnected problem, it forces them to open the spectrum of possibilities and abandon a centralised mindset. To connect the dots in cultural aspects with technical structures, develop another sensemaking. Participants are more open to thinking about solutions that benefit the whole against some specific part of the system. Even when a proposal can be related to a specific part of the problem, it is possible to interconnect with other elements.

It is possible to see when participants propose changes in human relationships. It is related to domestic violence; however, it can add other elements that go beyond the central issue but are also connected with our relationship with the world. For example, our relationships with other cultures, specifically with migration, are a current reality in Europe. The path of emotional intelligence or relationship brings other layers that, if from the feminist perspective (Lugones, 2010), with intersectionality, one can critically think about the relationships at the community level, not just in the individual.

Finally, an important contribution of this approach is the capacity to build agents of transition by involving participants in relating to the problem in a way they did not experience when

they did not work directly with them. It can be a relevant approach to developing cross-sector agency in solidarity networks, as this investigation is evidenced by inviting specialists from other fields to contribute with social workers, governmental institutions, associations, and the municipality. The way people get informed, create sensemaking, relate to the problem, share visions and navigate through complexity is a favourable use of Social Design in the transition design domain to develop a cross-sector alliance to tackle domestic violence.

13 The responses from a social design model for collective action

In this proposal, Social Design is highlighted as a congregation of six domains represented in Figure 27 that, towards social complexity, act in three levels of theory, activation and outcome, as was explored in theoretical and empirical analysis through Parts I, II and III of this investigation. Those domains represent powerful areas of intervention and concepts substantially used by designers to tackle complex problems. Hence, those multiple domains were used and reflected throughout the process to answer this investigation's primary and subsequent questions (Q1, Q2, Q3).

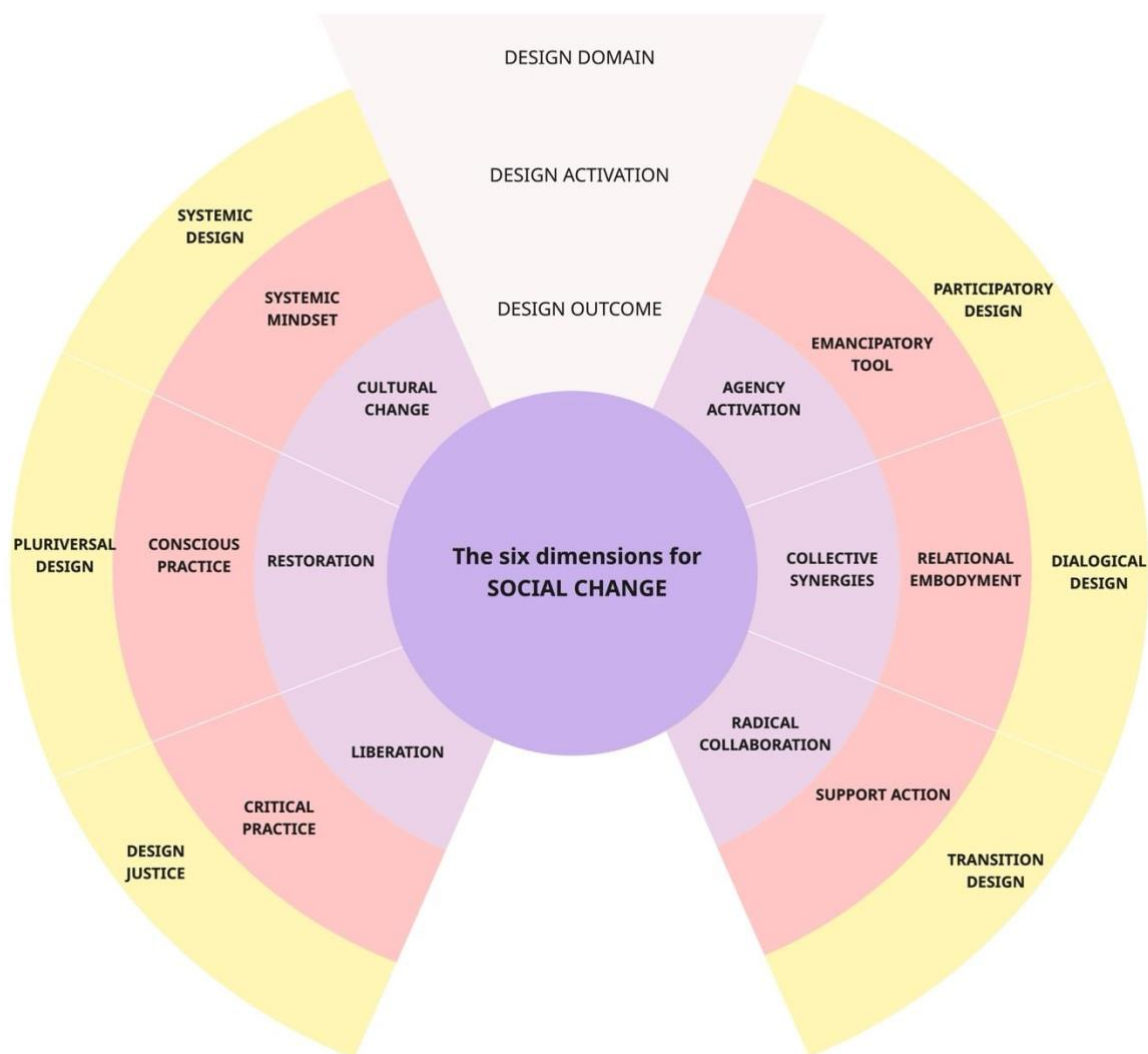


Figure 11 The six design dimensions for social change. Source: Author.

Note that in the social system approach, these elements do not appear in a linear form through the proposed design research. However, we can allocate some domains related to a specific moment due to the project's necessity. Domains such as dialogical design may be central to articulating stakeholder dynamics and constructing the participatory design approach. The relational nature of this system requires that much work be done in this area to ensure the effective participation of multiple stakeholders, or what was previously exposed, to build kinship within the system.

At first, it was necessary to understand the structural and cultural aspects that shape this complex theme. The transition from an individualistic model of action to a collective model, based on shared responsibilities, is one of the most significant challenges for the global transition in resolving the polycrisis we face. Looking at those systems and acknowledging how they interact, face barriers and explore opportunities enriches the social design role and its agglutinative proposal to interconnect and interrelate people and places to thrive.

Besides, although the process does not directly use the six proposed domains in the case study, they were all present in every aspect of it, from the initial part of context understanding to the final transition proposition. To recap the whole process, we went back to our design research proposal from a more detailed perspective.

Table 17 presents every research phase, reframed in Figure 27, and places the domain according to the contribution of one or multiple proposed Social Design areas, making it easier to visualise the presence of the Social Design domains.

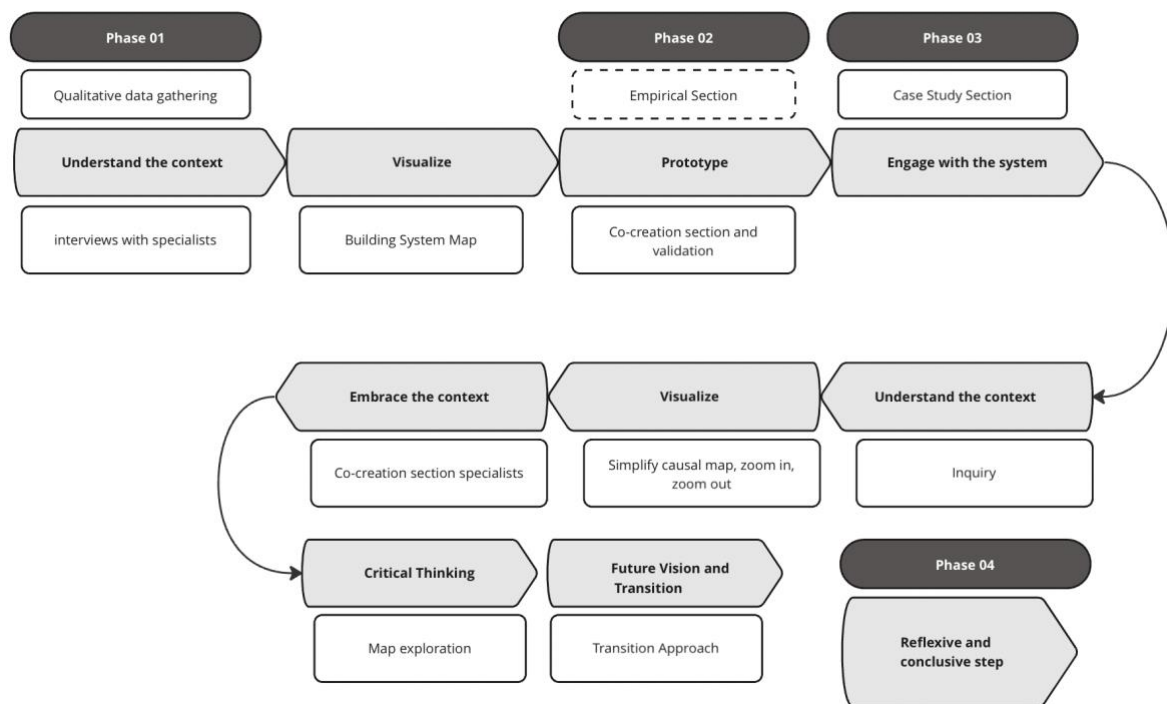


Figure 38 Research phases and design research recap. Source: personal.

The prevalence of the systemic approach as a system-oriented proposal is apparent. It is a way of structuring a critical construction on the elements of the system and possible interventions. Therefore, conceptual and practical elements of the systemic approach appear throughout the investigation.

The six domains of Social Design proposed in this research as theoretical territories also demonstrated their practical capacity. They not only guided the approach but also highlighted points of friction that need to be addressed in social themes. Table 18 demonstrates the six domains through the investigative process.

Table 17 Social design domains visualization in research phases

	system-oriented design	Participatory design	Dialogical design	Pluriversal design	Design justice	Transition design
Understand the context	X	X	X	X		
Visualize	X		X	X	X	X
Prototype	X					
Engage with the system	X	X	X		X	X
Embrace the context	X	X	X		X	
Visualize	X	X	X	X	X	
Understand the context	X	X		X	X	X
Critical Thinking	X	X			X	X
Future Vision and Transition	X	X	X	X	X	X
Reflexive and conclusive step	X		X	X	X	X

Understanding the social domain of design from a hybrid perspective, where a confluence of knowledge is proposed, is also a provocation to the very structure of thought we are exposed to and more biasedly disposed to create, which forms clusters or segregates domains with the idea of guiding.

On the one hand, it is possible to direct the proposed domains of Social Design to specific points, in a proposal for intervention oriented towards change and transition to a collaborative state among various actors. On the other hand, the proposal can find several intersecting domains at the same time of application. What makes the approach complete in its reflective proposal is precisely the congregation and even the possibility of friction that this combination can create, opening debate, questioning current models and even starting new paths of symbiosis of world views.

The result is a model about how people from different areas can collectively tackle gender-based violence from a systemic perspective using a social design approach. To mobilise collective intelligence and agency, providing waves of disturbance, commitment and 'Response-Ability'³¹.

The model is based on the adaptive cycle by Gunderson and Holling (2002), whose framework is valuable for understanding emergence that evidences structures, patterns, and self-organised complex systems. It helps to build resilience from small-scale and fast-changing events,

³¹ 'Response-Ability' is a term coined by Haraway (2016) that emphasises the need to respond thoughtfully and ethically to the needs of others. This concept encourages us to consider the impact of our actions on other stakeholders and to act in ways that promote well-being for all. We can build stronger and more resilient communities across sectors by taking responsibility for our interconnectedness.

such as pandemics. It is relevant to this proposal because it can promote reflexive cycles of change and encourage the pursuit of new levels of advancement and long-term commitment.

To recap what was explained in theoretical Part I, its four phases of development as characterized by: **Growth (r)**: This phase is characterized by rapid colonization and accumulation of resources, low connectedness, and high resilience; **Conservation (k)**: The system matures and stabilizes, accumulating more resources, while connectedness increases and resilience decreases; **Release (Ω)**: The system becomes increasingly fragile and vulnerable until a disturbance causes a rapid release of accumulated resources; and, **Reorganization (α)**: The system reorganizes, minimizing losses, and creating the potential for a new cycle.

The adaptive cycle can be visualised as a three-dimensional figure-eight, with the loop from r to k representing the slow, incremental phase of growth and accumulation (front loop), and the loop from Ω to α representing the rapid phase of reorganisation and renewal (back loop), as exposed in Figure 40.

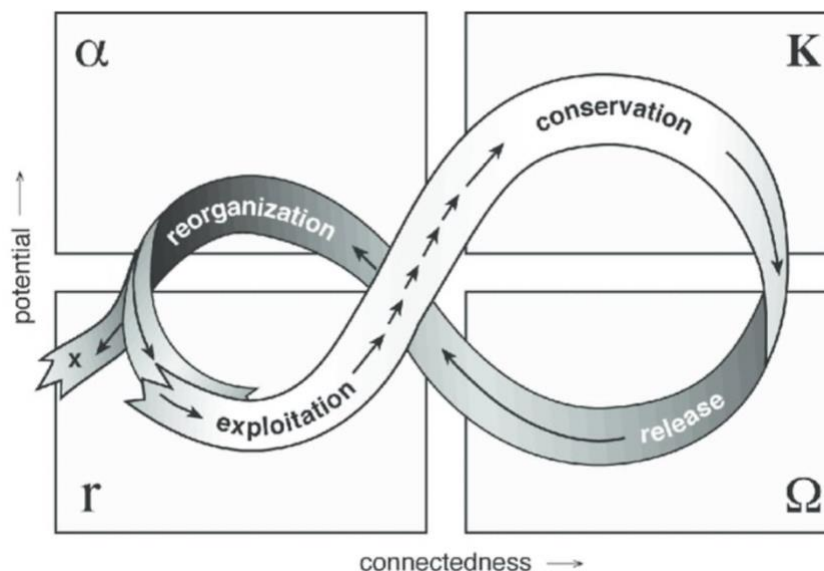


Figure 39 The adaptive cycle by Gunderson and Holling (2002, p. 34)

Panarchy theory offers insights into how systems respond to change, particularly during the reorganisation phase after a collapse, when new regimes can emerge. Additionally, it recognises the importance of scale where key processes unfold at different steps of evolution, and interactions occur both within and across scales. This proposal considers feedback as dynamics at small scales that can cascade to larger scales, while dynamics at larger scales constrain possibilities at smaller scales.

Moreover, panarchy theory and its adaptive cycle can foster novelty and innovation due to the emergence from the interactions of system components and their responses to disturbances. It also increases a system's ability to adapt to changing conditions, which is crucial for sustainability.

The six domains of Social Design can foster the adaptive capacity of a cross-sector collective responsibility action to tackle domestic violence.

Hence, the Social Design model for collective action, presented in Figure 41, establishes that in the Release phase (Ω), COVID-19 evidenced the capability to answer this disruptive moment, and external discrepancies around the country emerged from that. Proposes that in the Reorganisation phase (α), a calling for collective action is activated to lead to a new participatory approach, inviting cross-sector actors to act upon gender-based violence and domestic violence. In the growth phase (r), by applying social design domains, a pluriversal world vision is added to reinforce the system's capacity to build synergy, 'response-ability' and collective impact. Finally, in the conservation phase (k), critical perspectives are established to reinforce the liberatory nature of the system, and kinship is a practice that sustains commitment and new levels of the cycle.

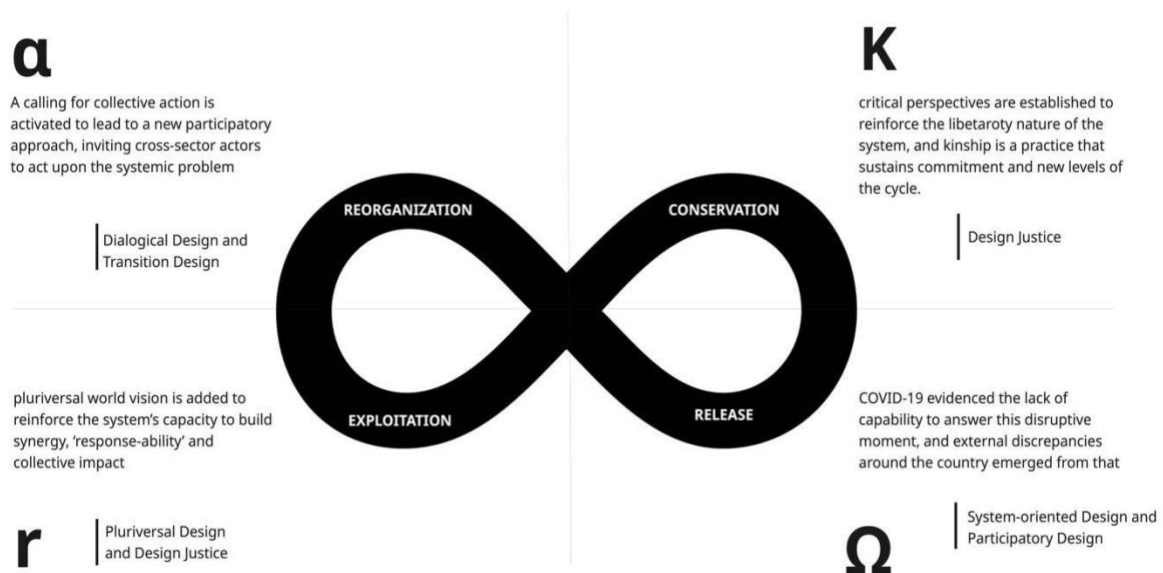


Figure 40 Adaptive cycle in social design for domestic violence. Source: Author.

In this model, the adaptive cycle is an incremental force for a collective distribution of responsibility. The system expands to a broader collaborative participation where social design is one more element of this collective force, enabling the participation, translation and exploration of tools, world visions and apprenticeship, as presented in Figure 30. The domains are no longer tools to be followed but principles that guide a fair approach through complex social challenges. The exchanges between participants, their bonds of trust and empathy, resonate with a critical vision of self and collective wisdom.

The model in Figure 42 presents Social Design through its six dimensions, which activate collective intervention within the system against domestic violence, inviting partners from outside the system to actively contribute, not as a siloed or punctual action, but with the compromise of a long-term transition. Embodying every aspect of the systemic problem, joined forces to explore self-reliability in social issues, collective responsibility and commitment to change.

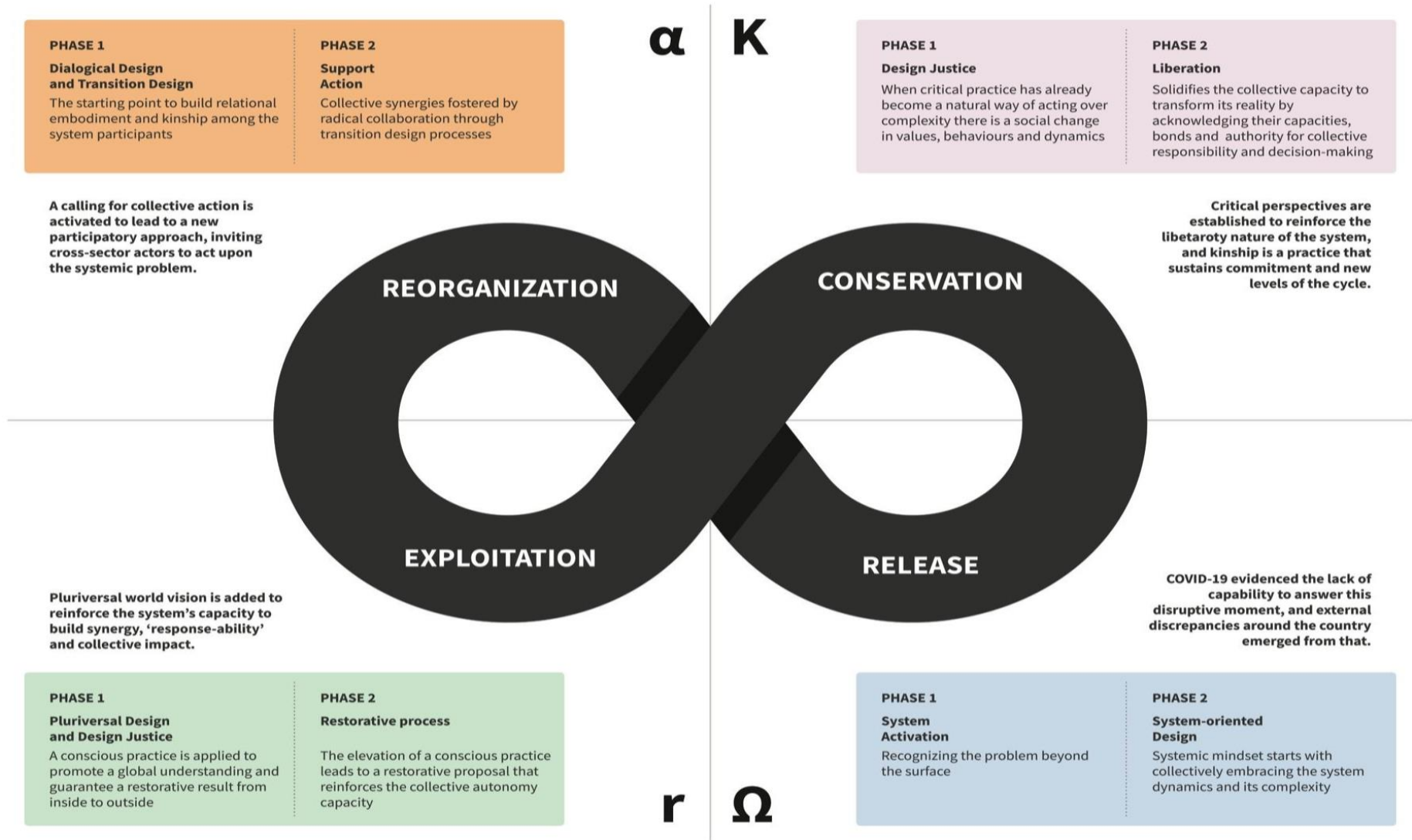


Figure 41 Social design model against domestic violence. Source: personal

The Release moment is a call for awareness and recognition of the problem's systemic implications, where a systemic mindset starts from collectively embracing the system's dynamic, introducing system-oriented tools and mindset within cross-sector participants. From settling the tools and the approach, the elements start to navigate through the problem, recognising all the elements beyond the surface.

From this point, it is possible to intervene in what is not working and rearrange in the reorganisation moment, applying and activating relational elements, tools and processes to invite new participants and reorchestrate a more effective action towards the problem. The relational and the kinship over the problem can represent a real source of commitment and agency that can be propelled through collective participation. In this phase, collective synergies are fostered strategically and radically, emphasising the importance of joint forces and elevating individual capacity and collective wisdom.

As a natural process of forced degradation or deviation, the Exploitation phase reminds us of the necessity of amplifying our vision of allyship and the pluriversal world that exists in between. To activate the capacity to envision and invite new participants to address the problem, pluriversal and Justice Design are the source of conscience, self-awareness and 'response-ability' that activate a conscious practice starting a restorative process where practice leads to a collective autonomy capacity.

Once established an autonomous capacity to embrace the problem in its multi-level and cross-sector alignment, the Conservation phase will sustain through the practices, the commitment and new levels of the cycle. It is a moment where the critical practice has become a natural way to act towards complex systems, and a possible change of behaviours, values and dynamics can more easily occur. The sense of justice can lead a liberatory pulse that solidifies the collective capacity to transform reality by acknowledging their capacity for bond, relatedness and authority for collective responsibility and decision-making.

Projects such as RIS3CAT³² are conducted in Catalunya, sharing agendas with multiple stakeholders, exploring participatory methodologies with communities and partners and evolving the responsibility of collectively facing societal and environmental problems. The transformative innovation proposed by Catalonia creates structures to support a green transition with a regional

³² Fernández, T and Romagosa, M. (2020). *L'articulació d'agendes compartides per a la sostenibilitat i el canvi social*. Col·lecció de Monitoratge de la RIS3CAT, núm. 9. Generalitat de Catalunya. En línia <http://catalunya2020.gencat.cat/web/.content/00_catalunya2020/Documents/e-strategies/fitxers/agendes-compartides.pdf> [Consulta: 19 gener 2022]

focus. Capacity building is developed through training programs, methodologies and tools to address the challenges. This collective construction has been made on a place-scale, evoking local realities to embrace multilevel capacity for transition.

This project highlights the relevance, impacts and opportunity of a designed collective responsibility and commitment to transforming local realities through system-oriented design and participatory approaches. Suppose we place the role of social design as an evolving area that tackles social issues. In that case, its capacity to promote confluences of thematic areas, domains and actors is relevant if not central to articulate projects like RISCAT3 or the proposals European countries are making to governments navigate in complexity (European Environment Agency, 2024).

Finally, all roads seem to lead to a collective integration of domains, values, beliefs, aims and roles, provoking a thoughtful reflection that invites decision-makers to embrace the frictions in this journey of human and community evolution. To summarise the answers and findings in this investigation, Table 19 presents the main findings that consolidate the efforts applied in this research, previously discussed in this final chapter.

Table 18 Questions and answers in the investigation

Questions & Answers	
<i>How can Social Design activate collective action towards social complex issues?</i>	
The research found the relevant contribution of Social Design in nurturing systemic and critical thinking in multi-sectoral projects, contributing to propel collective processes and foster a pluriversal decision-making space. It can unveil and open the field to the issues that shape our society, and there is no single answer that can solve them. SD can conduct collective processes that embrace the paradox of being a problem solver and staying with the problem, propelling long-term cycles of regenerative approaches to restore the collective capacity to share responsibility.	
Q1:How can Social Design enable people to reflect and act against a harmful culture that affects mostly women?	Through its capacity to articulate the relational spheres of the problem, from multifaceted and causal to individual relationships with the whole, the proposal of six dimensions of Social Design enables system actors to tackle social issues by evaluating the potential for transforming their perceptions and actions throughout the journey of system interventions and change. The internal transformations that enable people to act towards system change are forces that can positively affect transformations in the suggested adaptive cycle model, as applied to domestic violence.
Q2:Social Design itself is a systemic tool for social change; thus, how design sub-disciplines can give them the most to tackle complex societal problems?	The six dimensions of Social Design are forms of approach that can be combined in a process of social change. Enhancing the capacity and awareness of its uses, effects, and outcomes, this proposal can flourish in both individual and collective forms of addressing complex problems. This fluid proposal enables people to navigate with a critical mindset, acknowledging the interrelatedness of systems, positionality, and enhancing participatory capabilities, as well as relational aspects throughout the entire process, thereby stimulating future imagination.

Q3:How can Social Design contribute to a more systemic intervention in gender equality issues?	By conducting and facilitating participants to navigate through the complexity with visual resources of causal map, collaborative and co-creative processes and transition tools, the research allowed participants being more related to the problem and each other, increased their capacity to understand in deep and holistic levels the problem and feeling comfortable to act towards it, in particular to those people that do not deal with domestic violence in professional roles.
Q4:What epistemology can flourish from this perspective and exploration that could be used to address sensitive subjects, such as domestic violence?	Through complexity, this research on Social Design emphasises the importance of understanding social constructs, community engagement, and the role of Design in promoting social change. The present understanding of domestic violence is shaped by societal norms and power dynamics, which can vary over time and the interrelations between other elements in this complex web. Enabling one to see those interrelations, the knowledge produced can enhance the capacity for action in multi-level and dimensional areas. Social Design can serve as an awareness tool and contribute broadly to a process of societal transformation through cross-sector articulation, where knowledge and decision-making are constantly shared and improved. It is also a relevant support for networks and empowers communities as they begin to participate in participatory processes and share collective responsibilities.

14 Unexpected frictions

The proposed approach exceeded expectations, as it proved to have a beneficial effect in terms of awareness and involvement with the issue to promote alternatives for change. It was seen that even with people who were not involved in the issue of domestic violence, it was possible to bring them closer to a sense of commitment, knowledge and empathy with the issue, capable of activating a sense of action.

Emphasising the context and experiencing it by visualising the past and future proved to be a useful tool for collectively addressing the issue and establishing a common starting point. However, we must recognise that a deeper understanding of the issue can and should be pursued to foster greater accountability and genuine collective responsibility through embodiment. In this proposal, radical collaborative approaches offer an additional benefit for working on social issues with multiple actors. Incorporating concepts such as embodiment through theatrical practices, for example, in the theatre of the oppressed, can be a step forward for this approach.

However, it was not reasonable to expect to encounter so many difficulties in accessing the system that works on domestic violence issues and the feeling of inability to independently articulate a participatory proposal involving all actors in the process. It would be necessary to have a project-level involvement funded to have an involvement proposal that would be considered a top-down decision, so that all actors would be willing to continue with a project like this with an even more participatory proposal at all levels of research.

Since they already work in a network, bringing together interests and making this proposal valuable for everyone would be easier. However, what was achieved was the involvement of only some of the key actors in the system in parts of the process. Building relationships with complex systems is perhaps the greatest challenge of working on these issues independently, without an agreement made by a top-down decision maker.

However, another positively unexpected aspect was the participation of other sectors, namely design, social innovation and systemic thinking, and their ability to embrace the challenge and build capacity for action through the approach used. The way they navigated the topic demonstrated the positive impact of the proposal, providing input and forming a critical basis for thinking about future issues.

Another point of friction also found in D'inazio's (2024) work in femicide is the different contexts and conceptuality of violence against women, which can vary over the geographic places and in people's understanding. The concept of femicide is politically contested, with significant

variation in how it is defined and understood across legal systems, media outlets, and activist groups. This high level of complexity presents a challenge for designing technological systems that seek to collect, analyse, and communicate data about femicide, as any attempt to formalise the concept risks overlooking the complexities and nuances of the issue.

Intersectionality is a friction present in collective works and remains a challenge to every project related to social change. Violence against women disproportionately affects marginalised groups, including Indigenous women, women of colour, trans women, and sex workers. However, data collection and analysis often fail to capture the intersectional nature of this violence, resulting in biased and incomplete datasets (D'Ignazio, 2024). Design must account for these power dynamics and develop tools that can accurately represent the experiences of diverse communities.

These frictions and barriers demonstrate that design cannot simply be a technical solution to femicide or other societal issues. Instead, it requires a critical, ethical, and politically engaged approach, collaborating with activists and communities to develop tools that support their efforts to challenge power and create meaningful change.

15 Future recommendations

Future advancements in this research could be articulated around two primary themes: essential developments for social design in addressing complex societal issues and potential enhancements specifically related to domestic violence.

To more thoroughly explore the implications of these findings, subsequent studies should consider a practical exploratory application of this model, engaging cross-sector agencies to collaboratively gather insights at each stage of the process. This approach would solidify the relevance of design and its phases, as previously proposed. Incorporating radical participatory methodologies, as well as tools that foster empathy and agency, would enrich our collective responsibility. Additionally, further research is warranted to assess the scalability of this model, evaluating its applicability in real-world contexts and its potential to cultivate a sustainable culture of collaboration.

Moreover, this research opens avenues for dialogue regarding the field of design for social change and the pivotal role that education can play in fostering impactful design contributions in these domains. The identification and validation of the six domains and their respective contributions can facilitate the development of educational projects in design that embrace the fluidity, intersections, and tensions inherent in social change design. This endeavour not only aims to build essential skills but also serves as a framework for long-term societal transformation through design. Such contributions are vital in preparing future generations to perceive the world through a conscious, critical, and systemic lens, ultimately equipping them with the confidence to enact meaningful change.

In the realm of domestic violence and gender-based violence, further research can drive advancements in the creation of products and services. The data, processes, and tools utilised in this study represent a foundational stepping stone towards coherence and future transformations that can significantly enhance the services available to victims and their families. This includes the development of digital applications for prevention that seek to connect various stakeholders and facilitate cross-sector collaboration, as well as supporting professionals in the field to embark on collective action against violence towards women.

The existing siloed mindset within sectors addressing domestic violence highlights a critical gap in practical application. Future investments should aim to develop a comprehensive framework that simplifies and enhances everyday practice. By recognising and empowering stakeholders in the

co-creation of their frameworks and roadmaps, institutions could transform into active agents responding to complexity.

Lastly, broadening the scope of the proposal to encompass other domains of complexity—such as climate change, food security, and housing—could significantly strengthen the overall proposition, enabling it to serve as a model for wider implementation and practice adoption for everyday use. Acknowledging the stakeholders' capacity and embracing them in creating their own framework and roadmap for future studies collectively could help institutions to better transform themselves into active actors towards complexity.

Bibliography

- Acebillo-Baqué, M., Velasco, D., & Boni, A. (2025). Policy entrepreneurship in collaborative governance: transformative innovation in Catalonia's sustainability transition. *Policy Design and Practice*, 1–16. <https://doi.org/10.1080/25741292.2025.2515732>
- Ackoff, R. L. (1974). *Redesigning the future: A systems approach to societal problems*. New York: John Wiley & Sons Inc.
- Aicher, O. (1994). *El mundo como proyecto*. Barcelona: GG.
- Adisa, O., & Bond, E. (Eds.). (2024). *Tackling domestic abuse and sexual violence: A systems approach*. Palgrave Macmillan. <https://doi.org/10.1007/978-3-031-58600-2>
- Aguirre Ulloa, M. (2020). *Transforming public organizations into co-designing cultures: A study of capacity-building programs as learning ecosystems*. <https://aho.brage.unit.no/aho-xmlui/handle/11250/2654789>
- Almeida, A., Flesler, G., Noronha, R. G., & Loschiavo, M. C. (2024). *Design e Gênero: Experiências coletivas de ensino*. EUFMA:Universidade Federal do Maranhão.
- Amatullo, M., Boyer, B., May, J., & Shea, A. (Eds.). (2021). *Design for Social Innovation: Case Studies from Around the World* (1st ed.). Routledge. <https://doi.org/10.4324/9781003021360>
- Andreotti, A., Mingione, E., & Polizzi, E. (2012). Local Welfare Systems: A Challenge for Social Cohesion. *Urban Studies*, 49(9). <https://doi.org/10.1177/0042098012444884>
- Anheier, H., Krlev, G., & Mildenberger, G. (2018). *Social Innovation: Comparative Perspectives* (1st ed.). Routledge. <https://doi.org/10.4324/9781315158020>
- Antoine, C., Aránguiz, S., & Montt, C. (2019). Formación para el diseño social: Percepciones y expectativas entre los estudiantes de la Facultad de Diseño de la Universidad del Pacífico, Chile. *Cuadernos del Centro de Estudios en Diseño y Comunicación*, 69, 235–249. <https://doi.org/10.18682/cdc.vi69.1119>
- Ararat, M. (Ed.). (2020). *Business against intimate partner violence: A case of participatory action research and social action* (Accounting, Finance, Sustainability, Governance & Fraud: Theory and Application). Springer Singapore. <https://doi.org/10.1007/978-981-32-9652-7>
- Armstrong, L., Bailey, J., Julier, G., & Kimbell, L. (2014). *Social Design Futures: HEI Research and the AHRC*. Eastbourne: University of Brighton. <http://eprints.brighton.ac.uk/13364/1/Social-Design-Report.pdf>
- Arroyo, A. (2019) Descolonizar la memoria, descolonizar los feminismos. La paz: Tarpuna Muya.
- Attride-Stirling, J. (2001). Thematic networks: An analytic tool for qualitative research. *Qualitative Research*, 1(3), 385–405. <https://doi.org/10.1177/146879410100100307>
- Avelino, F., Dumitru, A., Cipolla, C., Kunze, I., & Wittmayer, J. (2019). Translocal empowerment in transformative social innovation networks. *European Planning Studies*, 28(5), 955–977. <https://doi.org/10.1080/09654313.2019.1578339>
- Banathy, B. H. (2013). *Designing Social Systems in a Changing World*. Springer New York.
- Banathy, B. H., & Jenlink, P. M. (2005). *Dialogue as a means of collective communication*. Kluwer Academic/Plenum Publishers.
- Bardin, L. (1977) *Análise de Conteúdo*. Edições 70, São Paulo.
- Bauman, Z. (2000). *Liquid modernity*. Polity Press.
- Bauman, Z., & Donskis, L. (2016). *Cegueira Moral A perda da Sensibilidade da Modernidade Líquida* (R. D. Editores, Ed.).
- Baumeister R. F., Leary M.R. Writing narrative literature reviews. *Review of General Psychology*. 1997;1(3):311–320.
- Bausch, K. C., & Flanagan, T. R. (2013). A Confluence of Third-Phase Science and Dialogic Design Science. *Systems Research and Behavioral Science*, 30(4), 414–429. <https://doi.org/10.1002/sres.2166>
- Beauvoir, S. de. (2015). *The second sex*. Vintage Classics.

- Bernard, H. R. (1940). Research Methods in Anthropology: Qualitative and quantitative approaches. In *East African Medical Journal: Vol. 4th ed* (Issue 9). Rowman&Littlefield Publishers, inc.
- Bijl-Brouwer, M. V. D., & Malcolm, B. (2020). Systemic Design Principles in Social Innovation: A Study of Expert Practices and Design Rationales. *She Ji*, 6(3), 386–407. <https://doi.org/10.1016/j.sheji.2020.06.001>
- Brandes, U. (2017). *Gender Design: Streifzüge zwischen Theorie und Empirie*. Birkhäuser.
- Breines, I., Connell, R., & Eide, I. (2000). Male roles, masculinities and violence: A culture of peace perspective. In *UNESCO Publishing*. <https://unesdoc.unesco.org/ark:/48223/pf0000120683>
- Boal, A. (1996). Teatro legislativo. Rio de Janeiro: Civilização Brasileira.
- Boehnert, J. (2019). Transition Design and Ecological Thought. *Cuadernos Del Centro de Estudios de Diseño y Comunicación*, 73, 133–148. <https://doi.org/10.18682/cdc.vi73.1042>
- Bowen, S., McSeveny, K., Lockley, E., Wolstenholme, D., Cobb, M., & Dearden, A. (2013). How was it for you? Experiences of participatory design in the UK health service. *CoDesign*, 9(4), 230–246. <https://doi.org/10.1080/15710882.2013.846384>
- Boyd, H., McKernon, S., Mullin, B., & Old, A. (2012). Improving healthcare through the use of co-design. *The New Zealand Medical Journal*, 125(1357), 76–87. <https://pubmed.ncbi.nlm.nih.gov/22854362/>
- Buchanan, R. (1995). Rhetoric, humanism, and design. In R. Buchanan & V. Margolin (Eds.), *Discovering design* (pp. 23–66). University of Chicago Press.
- Buckley, C. (2020). Made in patriarchy II: Researching (or re-searching) women and design. *Design Issues*, 36(1), 19–29. https://doi.org/10.1162/desi_a_00572
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Butler, J. (2017). *Problemas de Género* (O. Negro, Ed.). Orfeu Negro.
- Câmara, R. H. (2013). Análise de conteúdo: Da teoria à prática em pesquisas sociais aplicadas às organizações. *Gerais: Revista Interinstitucional de Psicologia*, 6(2), 179–191. http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1983-82202013000200003
- Capra, F. (2007). Sustainable living, ecological literacy, and the breath of life. *Canadian Journal of Environmental Education*, 12, 9–18. <https://cjee.lakeheadu.ca/article/view/624>
- Carne, S., Rees, D., Paton, N., & Fanslow, J. (2019). Using systems thinking to address intimate partner violence and child abuse in New Zealand. *New Zealand Family Violence Clearinghouse, Paper 13*, 37. <http://nzfvc.org.nz>
- Ceschin, F., & Gaziulusoy, İ. (2020). *Design for sustainability: A multi-level framework from products to socio-technical systems*. Routledge. <https://doi.org/10.4324/9780429456510>
- Chamberlain, J., Turpin, B., Ali, M., Chatsiou, K., & O'Callaghan, K. (2020). Designing for collective intelligence and community resilience on social networks. *Human Computation*, 7(1), 1–20. <https://doi.org/10.15346/hc.v7i1.3>
- Chandra, Y., & Shang, L. (2019). *Qualitative Research Using R: A Systematic Approach*. Springer Nature Singapore. <https://doi.org/10.1007/978-981-13-3170-1>
- Chen, D.-S., Cheng, L.-L., Hummels, C., & Koskinen, I. (2015). Social design: An introduction. *International Journal of Design*, 10(1), 1–5. <https://www.ijdesign.org/index.php/IJDesign/article/view/2622/723>
- Challender, S. (2000). *Systems thinking, systems practice*. By Peter B. Checkland (book review). *Systems Research and Behavioral Science*, 17(S1), S78–S80. [https://doi.org/10.1002/1099-1743\(200011\)17:1+<::AID-SRES384>3.0.CO;2-N](https://doi.org/10.1002/1099-1743(200011)17:1+<::AID-SRES384>3.0.CO;2-N)
- Christakis, A. N. (1998). Book review: *Designing social systems in a changing world*, by Béla H. Bánáthy (1996). *Systems Research and Behavioral Science*, 15(1), 71–74. [https://doi.org/10.1002/\(SICI\)1099-1743\(199801/02\)15:1<71::AID-SRES206>3.0.CO;2-A](https://doi.org/10.1002/(SICI)1099-1743(199801/02)15:1<71::AID-SRES206>3.0.CO;2-A)
- Cilliers, P. (1998). *Complexity and postmodernism: Understanding complex systems: Vol. First Published*. Routledge.

- Cipolla, C. (2009). Relational services and conviviality. In S. Miettinen (Ed.), *Designing services with innovative methods* (pp. 232–243). TAIK Publications/University of Art and Design Helsinki. <https://doi.org/ISBN: 978-952-5018-42-4>
- Cipolla, C., & Manzini, E. (2009). Relational Services. *Knowledge, Technology & Policy*, 22(1), 45–50. <https://doi.org/10.1007/s12130-009-9066-z>
- Cipolla, C., & Bartholo, R. (2014). Empathy or inclusion: A dialogical approach to socially responsible design. *International Journal of Design*, 8(2), 87–100. <https://www.iidesign.org/index.php/IJDesign/article/view/1255/633>
- Cipolla, C., Afonso, R., Pel, B., Bartholo, R., Silva, É., & Proença Júnior, D. (2017). Coproduced game-changing in transformative social innovation: Reconnecting the “broken city” of Rio de Janeiro. *Ecology and Society*, 22(3), 3. <https://doi.org/10.5751/ES-09362-220303>
- Cipolla, C. (2018). Designing for vulnerability: Interpersonal relations and design. *She Ji: The Journal of Design, Economics, and Innovation*, 4(1), 111–122. <https://doi.org/10.1016/j.sheji.2018.03.001>
- Collins, C. S., & Stockton, C. M. (2018). The Central Role of Theory in Qualitative Research. *International Journal of Qualitative Methods*, 17(1), 1–10. <https://doi.org/10.1177/1609406918797475>
- Collins, P. H. (2015). Intersectionality’s Definitional Dilemmas. *Annual Review of Sociology*, 41(2015), 1–20. <https://www.jstor.org/stable/24807587>
- Collste, D., Pedercini, M., & Cornell, S. E. (2017). Policy coherence to achieve the SDGs: Using integrated simulation models to assess effective policies. *Sustainability Science*, 12(6), 921–931. <https://doi.org/10.1007/s11625-017-0457-x>
- Comissão para a Cidadania e a Igualdade de Género - CIG. (n.d.). *Instrumentos de Política Pública*. Retrieved 5 Apr, 2025 <https://www.cig.gov.pt/area-a-cig/instrumentos-de-politica-publica/>
- Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic masculinity: Rethinking the concept. *Gender & Society*, 19(6), 829–859. <https://doi.org/10.1177/0891243205278639>
- Cook, J. W., & Tönurist, P. (2021). *From transactional to strategic: Systems approaches to public service challenges*. Observatory of Public Sector Innovation. <https://cp-catapult.s3.amazonaws.com/uploads/2021/01/Observatory-of-Public-Sector-Innovation.pdf>
- Cooper H. M. Organizing knowledge syntheses: A taxonomy of literature reviews. *Knowledge in Society*. 1988;1(1):104–126.
- Costanza-Chock, S. (2018b, June 28). *Design Justice: Towards an intersectional feminist framework for design theory and practice*. Design Research Society Conference 2018. <https://doi.org/10.21606/drs.2018.679>
- Costa Junior, J., Diehl, J. C., & Snelders, D. (2019). A framework for a systems design approach to complex societal problems. *Design Science*, 5, e21. <https://doi.org/10.1017/dsj.2019.21>
- Costa Junior, J. D. (2020a). A Systems Design Approach to Sustainable Development: Embracing the Complexity of Energy Challenges in Low-income Markets. [Dissertation (TU Delft), Delft University of Technology]. <https://doi.org/10.4233/uuid:8bbf71f1-48bd-4844-84f5-fe8c7ca5398c>
- Costa, J., Diehl, J. C., Snelders, D., & Secomandi, F. (2020b). A systems design approach to sustainable development: Embracing the complexity of energy challenges in low-income markets. *MIX Sustentável*, 6(1), 175–180. <https://doi.org/10.29183/2447-3073.MIX2020.v6.n1.175-180>
- De Beauvoir, S. (1980). *O segundo sexo: Fatos e mitos* (Vol. 1). Rio de Janeiro: Nova Fronteira.
- De Luca Picione, R., Martino, M. L., & Troisi, G. (2019). The Semiotic Construction of the Sense of Agency. The Modal Articulation in Narrative Processes. *Integrative Psychological and Behavioral Science*, 53(3), 431–449. <https://doi.org/10.1007/s12124-019-9475-9>
- Demirel, F. (2019). The role of education in human nature and future human design according to Edgar Morin. *New Trends and Issues Proceedings on Humanities and Social Sciences*, 6(6), 18–29. <https://doi.org/10.18844/prosoc.v6i6.4464>
- Desai, B. H., & Mandal, M. (2021). Role of climate change in exacerbating sexual and gender-based violence against women: A new challenge for international law. *Environmental Policy and Law*, 51(3), 137–157. <https://doi.org/10.3233/EPL-210055>

- Deserti, A., Rizzo, F., & Çobanlı, O. (2018). From social design to design for social innovation. In J. Howaldt, C. Kaletka, A. Schröder, & M. Zirngiebl (Eds.), *Atlas of social innovation: New practices for a better future* (pp. 66–69). Sozialforschungsstelle, TU Dortmund University. https://www.socialinnovationatlas.net/fileadmin/PDF/kapitel/01_SI-Landscape_Global_Trends_v02.pdf
- D'Ignazio, C. (2024). *Counting Feminicide: Data feminism in action*. MIT Press. http://direct.mit.edu/books/book-pdf/2368363/book_9780262378017.pdf
- DeTombe, D. (2017). Societal problems more complex than presumed: The Compram methodology. *Journal of Systems Science and Systems Engineering*, 26(3), 303–320. <https://doi.org/10.1007/s11518-017-5334-8>
- Dias, I. (2008). Violência de Género em Portugal Abordagem e Intervenção. *Cuestiones de Género de La Igualdad y La Diferencia*, 3, 153–171. <https://doi.org/10.18002/cg.v0i3.3829>
- Di Bella, D. V. (2023). Transition Design II [Special Issue]. *Cuadernos Del Centro De Estudios De Diseño Y Comunicación*, 8(183). <https://doi.org/10.18682/cdc.vi183.8956>
- Dickinson, J., Crain, R. L., Reeve, H., & Schuldt, J. P. (2013). Can evolutionary design of social networks make it easier to be 'green'? *Trends in Ecology & Evolution*, 28(9), 561–569. <https://doi.org/10.1016/j.tree.2013.05.002>
- Djamba, Y. K., & Neuman, W. L. (2002). Social Research Methods: Qualitative and Quantitative Approaches. In *Teaching Sociology* (Vol. 30, Issue 3). <https://doi.org/10.2307/3211488>
- Donato, S. (2020). Gender-Based Violence against Women in Intimate and Couple Relationships. The Case of Spain and Italy during the COVID-19 Pandemic Lockdown. *Italian Sociological Review*, 10(3S), 869. <https://doi.org/10.13136/isr.v10i3S.402>
- Dreyfuss, H. (2003). *Designing for people* (3rd ed.). Allworth Press.
- Drydyk, J. (2021). Capability and Oppression. *Journal of Human Development and Capabilities*, 22(4), 527–550. <https://doi.org/10.1080/19452829.2021.1982880>
- Dunleavy, P., Margetts, H., Bastow, S., & Tinkler, J. (2006). New public management is dead—Long live digital-era governance. *Journal of Public Administration Research and Theory*, 16(3), 467–494. <https://doi.org/10.1093/jopart/mui057>
- Du Plessis, C. (2012). Towards a regenerative paradigm for the built environment. *Building Research and Information*, 40(1), 7–22. <https://doi.org/10.1080/09613218.2012.628548>
- Emery, F. (2005). *On Purposeful Systems: An Interdisciplinary Analysis of Individual and Social Behavior as a System of Purposeful Events* (1st ed.). Routledge. <https://doi.org/10.4324/9781315125640>
- Escobar, A., & Gnecco, C. (2019). *Autonomía y diseño: La realización de lo comunal* (1st ed.). Universidad del Cauca. <https://doi.org/10.2307/j.ctvpv50jd>
- Escobar, A. (2018). *Design for the Pluriverse* (D. U. Press, Ed.). Duke University Press.
- Espinosa, A., Harnden, R., & Walker, J. (2008). A complexity approach to sustainability—Stafford Beer revisited. *European Journal of Operational Research*, 187(2), 636–651. <https://doi.org/10.1016/j.ejor.2007.03.023>
- European Environment Agency. (2024). *Governance in complexity: Sustainability governance under highly uncertain and complex conditions*. Publications Office. <https://data.europa.eu/doi/10.2800/597121>
- European Institute for Gender Equality. (2021). *The costs of gender-based violence in the European Union*. <https://eige.europa.eu/publications-resources/publications/costs-gender-based-violence-european-union#>
- Faith, B. (2022). Tackling Online Gender-Based Violence; Understanding Gender, Development, and the Power Relations of Digital Spaces (Version 1). The Institute of Development Studies and Partner Organisations. <https://hdl.handle.net/20.500.12413/17822>
- Farrugia, B. (2019). WASP (write a scientific paper): Sampling in qualitative research. *Early Human Development*, 133, 69–71. <https://doi.org/10.1016/j.earlhumdev.2019.03.016>
- Felgueiras, S., Pais, L., & Machado, P. (2021). 'O Ministério Público e os desafios no combate à violência contra a mulher'. *Passado, Presente e Futuro Do Ministério Público Brasileiro: 50 Anos Da*

Associação Do Ministério Público Do Estado Do Maranhão.

<http://hdl.handle.net/10400.26/37185>

- Félix de Souza, N., & Rodrigues Selis, L. (2023, February 22). Gender Violence, Colonialism, and Coloniality. *Oxford Research Encyclopedia of International Studies*. Retrieved 5 Apr. 2025, from <https://oxfordre.com/internationalstudies/view/10.1093/acrefore/9780190846626.001.0001/acrefore-9780190846626-e-729>.
- Fiadeiro, R., Stevens, J., & Bichard, J.-A. (2023). *Structure Surrounding the 'User' in User Engagement: Gender-based Violence Design Engagements*. 28(May). <https://doi.org/10.7764/disen.22.Article.2>
- Foot, J., Taylor, A., Nicholas, G., Carswell, S., Wood, D., Winstanley, A., & Hepi, M. (2014). *Toward a transformed system to address child abuse and family violence in New Zealand*. Report commissioned by the Glenn Inquiry. Institute of Environmental Science and Research.
- Foucault, M. (1982). The subject and power. *Critical Inquiry*, 8(4), 777–795. <https://doi.org/10.1086/448181>
- Frankel, L., and Racine, M. (2010) The Complex Field of Research: for Design, through Design, and about Design, in Durling, D., Bousbaci, R., Chen, L, Gauthier, P., Poldma, T., Roworth-Stokes, S. and Stolterman, E (eds.), *Design and Complexity - DRS International Conference 2010*, 7-9 July, Montreal, Canada. <https://dl.designresearchsociety.org/drs-conference-papers/drs2010/researchpapers/43>
- Freire, K., Borba, G., & Diebold, L. (2011). Participatory Design as an Approach to Social Innovation. *Design Philosophy Papers*, 9(3), 235–250. <https://doi.org/10.2752/144871311x13968752924950>
- Freire, K. de M., & de Oliveira, C. M. M. (2017). Soluções habilitantes para formação de comunidades criativas: Um caminho possível do design para inovação social. In *Design e Inovação Social* (Vol. 2, pp. 109–132). <https://doi.org/10.5151/9788580392647-06>
- Freire, P. (1985). *The Politics of Education: Culture, Power, and Liberation*, Greenwood Publishing Group, 1 January 1985.
- Freire, P. (2012). *Pedagogy of the oppressed* (Repr). Bloomsbury.
- Friedman, M. S. (1954). Martin Buber's Theory of Knowledge. *Philosophy Education Society Inc.*, 8(2), 264–280. <https://www.jstor.org/stable/20123437>
- Fitzpatrick, H., Luthe, T., & Sevaldson, B. (2024). Methodological Pluralism in Practice: A systemic design approach for place-based sustainability transformations. *Contexts—The Systemic Design Journal*, 2. <https://doi.org/10.58279/v2003>
- Fry, T. (2010). *Design as Politics* (1st ed.). Bloomsbury Publishing.
- Gaitto, J. (2019). La función social del diseño o el diseño al servicio social. *Cuadernos Del Centro De Estudios De Diseño Y Comunicación*, (69), 21 a 29. <https://doi.org/10.18682/cdc.vi69.1075>
- Gazulla, E. D. (2021). Exploring Education Techno-Monitoring Futures: A Participatory Speculative Critical Design Case. *Interaction Design and Architecture(s)*, 51, 202–218. <https://doi.org/10.55612/s-5002-051-009>
- Giubilini, A., & Levy, N. (2018). What in the World Is Collective Responsibility? *Dialectica*, 72(2), 191–217. <https://doi.org/10.1111/1746-8361.12228>
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15–31. <https://doi.org/10.1177/1094428112452151>
- Gofman, A. (2014). Durkheim's theory of social solidarity and social rules. *The Palgrave Handbook of Altruism, Morality, and Social Solidarity: Formulating a Field of Study*, 45–69. https://doi.org/10.1057/9781137391865_3
- Gonzalez, L. (2020). *Por um feminismo afro-latino-americano: Ensaio, intervenções e diálogos*. Rio de Janeiro: Zahar.
- Gonzatto, R. F., & Van Amstel, F. M. C. (2022). User oppression in human-computer interaction: A dialectical-existential perspective. *Aslib Journal of Information Management*, 74(5), 758–781. <https://doi.org/10.1108/AJIM-08-2021-0233>

- Goodchild, M. (2021). Relational Systems Thinking. *Journal of Awareness-Based Systems Change*, 1(1), 75–103. <https://doi.org/10.47061/jabsc.v1i1.577>
- Guba, E. G., & Lincoln, Y. S. (1994). Competing Paradigms in Qualitative Research. In *Qualitative Methodologies in Organization Studies* (pp. 105–116). https://doi.org/10.1007/978-3-319-65217-7_2
- Gunderson, L. H., & Holling, C. S. (2001). *Panarchy*, Island Press.
- Gustavsen, B. (2005). *Innovation and action research*. *International Journal of Action Research*, 1(3), 267–289. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-379448>
- Guzmán Arroyo, A. (2019). *Descolonizar la memoria, descolonizar los feminismos*. La Paz: Tarpuna Muya.
- Haraway, D. J. (2016). *Staying with the Trouble: Making Kin in the Chthulucene*. Durham, NC: Duke University Press. <https://doi.org/10.1215/9780822373780>
- Heise, L. (1998). Violence Against Women: An Integrated, Ecological Framework. *Violence Against Women*, 4(3), 262–290. <https://doi.org/10.1177/1077801298004003002>
- Heise, L., Ellsberg, M., & Gottmoeller, M. (2002). A global overview of gender-based violence. *International Journal of Gynecology and Obstetrics*, 78, S5–S14. [https://doi.org/10.1016/S0020-7292\(02\)00038-3](https://doi.org/10.1016/S0020-7292(02)00038-3)
- Heise, L. (2011). *What works to prevent partner violence? An evidence overview* [Working paper]. STRIVE Research Consortium, London School of Hygiene and Tropical Medicine. <https://strive.lshtm.ac.uk/system/files/attachments/What%20works%20to%20prevent%20partner%20violence.pdf>
- Hekler, E. B., Taylor, J. C., Dow, S. P., Morris, M., Grant, F. J., Phatak, S. S., Norman, D., Schraefel, M. C., & Lewis, D. M. (2019). Exploring, defining, & advancing community-driven design for social impact. *DIS 2019 Companion - Companion Publication of the 2019 ACM Designing Interactive Systems Conference*, 373–376. <https://doi.org/10.1145/3301019.3319998>
- Heller, C. (2018). *The intergalactic design guide: Harnessing the creative potential of social design*. Island Press. <https://doi.org/10.5822/978-1-61091-882-4>
- Hetherington, L. (2013). Complexity Thinking and Methodology: The Potential of ‘Complex Case Study’ for Educational Research. *Complicity: An International Journal of Complexity and Education*, 10(1/2). <https://doi.org/10.29173/cmplt20401>
- Hovmand, P. S. (2014). *Community Based System Dynamics*. Springer New York. <https://doi.org/10.1007/978-1-4614-8763-0>
- Htun, M., & Weldon, S. L. (2012). The civic origins of progressive policy change: Combating violence against women in global perspective, 1975–2005. *American Political Science Review*, 106(3), 548–569. <https://doi.org/10.1017/S0003055412000226>
- Huysman, M., & Wulf, V. (2004). Fostering social creativity by increasing social capital. *Proceedings of the Hawaii International Conference on System Sciences*, 1–10. <https://doi.org/10.1109/HICSS.2004.1265278>
- Inglehart, R. F., Ponarin, E., & Inglehart, R. C. (2017). Cultural change, slow and fast: The distinctive trajectory of norms governing gender equality and sexual orientation. *Social Forces*, 95(4), 1313–1340. <https://doi.org/10.1093/sf/sox008>
- Ingold, T. (2017). Anthropology contra ethnography. *HAU: Journal of Ethnographic Theory*, 7(1), 21–26. <https://doi.org/10.14318/hau7.1.005>
- ILO. (May, 2020). *Policy Brief. The COVID-19 response: Getting gender equality right for a better future for women at work*. May, 14. <https://www.movimientocarmona.org/wp-content/uploads/2020/05/ILO-policy-brief-covid-response.pdf>
- Irwin, T. (2015). Transition design: A proposal for a new area of design practice, study, and research. *Design and Culture*, 7(2), 229–246. <https://doi.org/10.1080/17547075.2015.1051829>
- Irwin, T. (2018) The Emerging Transition Design Approach, in Storni, C., Leahy, K., McMahon, M., Lloyd, P. and Bohemia, E. (eds.), *Design as a catalyst for change - DRS International Conference 2018*, 25–28 June, Limerick, Ireland. <https://doi.org/10.21606/drs.2018.210>

- Irwin, T. (2022). Teaching and Researching Transition Design. *Cuadernos Del Centro de Estudios de Diseño y Comunicación*, 157. <https://doi.org/10.18682/cdc.vi157.6853>
- Irwin, T., & Kossoff, G. (2022). Teaching and Researching Transition Design. *Cuadernos Del Centro de Estudios de Diseño y Comunicación*, 157. <https://doi.org/10.18682/cdc.vi157.6853>
- Jenlink, P. M., & Banathy, B. H. (2008). *Dialogue as a Collective Means of Design Conversation* (Vol. 21, Issue 1). Springer Science+Business Media,. <http://journal.um-surabaya.ac.id/index.php/JKM/article/view/2203>
- Jones, P. (2014). *Systemic Design Principles for Complex Social Systems* (Issue January 2014). https://doi.org/10.1007/978-4-431-54478-4_4
- Jones, P. (2017). The Systemic Turn: Leverage for World Changing. *She Ji*, 3(3), 157–163. <https://doi.org/10.1016/j.sheji.2017.11.001>
- Jones, P., & Bowes, J. (2017). Rendering Systems Visible for Design: Synthesis Maps as Constructivist Design Narratives. *She Ji: The Journal of Design, Economics, and Innovation*, 3(3), 229–248. <https://doi.org/10.1016/j.sheji.2017.12.001>
- Jorgensen, D. L. (2020). *Principles, Approaches and Issues in Participant Observation* (1st ed.). Routledge. <https://doi.org/10.4324/9780367815080>
- Jost, F., Newell, R., & Dale, A. (2021). CoLabS: A collaborative space for transdisciplinary work in sustainable community development. *Heliyon*, 7(2), e05997. <https://doi.org/10.1016/j.heliyon.2021.e05997>
- Julier, G., & Kimbell, L. (2019). Keeping the system going: Social design and the reproduction of inequalities in neoliberal times. *Design Issues*, 35(4), 12–22. https://doi.org/10.1162/desi_a_00560
- Kania, J., & Kramer, M. (Winter, 2011). Collective Impact. *Stanford Social Innovation Review*, 9(1), 36–41. <https://doi.org/10.48558/5900-KN19>
- Kania, J., & Kramer, M. (Jan. 21, 2013). Embracing Emergence: How Collective Impact Addressing Complexity. *Stanford Social Innovation Review*, 7. http://www.ssireview.org/blog/entry/embracing_emergence_how_collective_impact_addresses_complexity
- Katirai, Negar, Retraumatized in Court (March 10, 2020). 62 Arizona Law Review 81 (2020), Arizona Legal Studies Discussion Paper No. 19-10, Available at SSRN: <https://ssrn.com/abstract=3389573>
- Kelly, M. (2019). *Indigenous Design Thinking Conversations: Engaging with cultural design protocols*.
- Kidd, S., Davidson, L., Frederick, T., & Kral, M. J. (2018). Reflecting on Participatory, Action-Oriented Research Methods in Community Psychology: Progress, Problems, and Paths Forward. *American Journal of Community Psychology*, 61(1–2), 76–87. <https://doi.org/10.1002/ajcp.12214>
- Kimbell, L., & Julier, J. (Oct, 2012). The Social Design Methods Menu In perpetual beta. *Perpetual Beta*, 1–56. http://www.lucykimbell.com/stuff/Fieldstudio_SocialDesignMethodsMenu.pdf
- Kimbell, L. (2015). Applying Design Approaches to Policy Making: Discovering Policy Lab. *University of Brighton-Centre for Research and Development Faculty of Arts, University of Brighton, January*, 1–43. <http://www.nesta.org.uk/event/labworks-2015-global-lab-gathering-london>
- Koskinen, I., & Hush, G. (2016). Utopian, molecular and sociological social design. *International Journal of Design*, 10(1), 65–71. <https://www.ijdesign.org/index.php/IJDesign/article/view/2414/728>
- Klumbyte, G., Britton, R. L., Laiti, O., Prado De O. Martins, L., Snelting, F., & Ward, C. (2022). Speculative Materialities, Indigenous Worldings and Decolonial Futures in Computing & Design. *Matter: Journal of New Materialist Research*, 3(1). <https://doi.org/10.1344/jnmr.v3i1.38967>
- Kwieciński, L. (2022). Gender equality and innovation – towards sustainable development and social innovation using the example of activities undertaken by the European Union. *Przegląd europejski*, 2022(4), 11–28. <https://doi.org/10.31338/1641-2478pe.4.22.2>
- Lakatos, I. (1978). The methodology of scientific research programmes. In *Philosophical Papers* (Vol. 1). <https://doi.org/10.4337/9781845423490.00016>
- Law, J. (2015). What's wrong with a one-world world?. *Distinktion: Scandinavian Journal of Social Theory*, 16(1), 126–139.

- Leal Filho, W., Kovaleva, M., Tsani, S., Țircă, D.-M., Shiel, C., Dinis, M. A. P., Nicolau, M., Sima, M., Fritzen, B., Lange Salvia, A., Minhas, A., Kozlova, V., Doni, F., Spiteri, J., Gupta, T., Wakunuma, K., Sharma, M., Barbir, J., Shulla, K., ... Tripathi, S. (2023). Promoting gender equality across the sustainable development goals. *Environment, Development and Sustainability*, 25(12), 14177–14198. <https://doi.org/10.1007/s10668-022-02656-1>
- Leitão, R. M. (2023). Pluriversal Worlding: Design, Narratives, and Metaphors for Societal Transformation. *AM Journal of Art and Media Studies*, 30, 17–35. <https://doi.org/10.25038/am.v0i29.551>
- Lewis, E. D. (2016). *Gendered systemic analysis: Systems thinking and gender equality in international development* (Doctoral thesis, University of Hull Business School). University of Hull. https://hull-repository.worktribe.com/preview/4219037/content-hull_14575a.pdf
- Liedauer, S. (2021). *Dimensions and Causes of Systemic Oppression*. January, 101–111. https://doi.org/10.1007/978-3-319-95882-8_91
- Light, A. (2019). Design and Social Innovation at the Margins: Finding and Making Cultures of Plurality. *Design and Culture*, 11(1). <https://doi.org/10.1080/17547075.2019.1567985>
- Lima, R. C. O. (2019). *Design for equality: Building tomorrow's creative universities* [Master's thesis, IADE – Universidade Europeia]. Comum Repositório Científico.
- Lima, R., Guedes, G., Mardones, S., & Tormo, E. (2023, October 9). Social design and regenerative theories: A possible intersection to address gender-based violence. *IASDR 2023: Life-Changing Design*. IASDR 2023: Life-Changing Design. <https://doi.org/10.21606/iasdr.2023.281>
- Lima, R., & Guedes, G. (2024). Sustainable Development Goals and Gender Equality: A Social Design Approach on Gender-Based Violence. *Sustainability*, 16(2), 914. <https://doi.org/10.3390/su16020914>
- Lindberg, M., Hallencreutz, D., & Tengqvist, A. (2019a). Bridging Participatory Policy Trends and Research Traditions through Social Innovation. *Technology Innovation Management Review*, 9(4), 27–36. <https://doi.org/10.22215/timreview/1231>
- Lindberg, M., Hallencreutz, D., & Tengqvist, A. (2019b). Bridging participatory policy trends and research traditions through social innovation. *Technology Innovation Management Review*, 9(4), 27–36. <https://doi.org/10.22215/TIMREVIEW/1231>
- Lindsey, L. L. (2016). Gender Roles a Sociological Perspective. In *Archives of Sexual Behavior* (Vol. 45, Issue 3). Routledge. <https://doi.org/10.1007/s10508-015-0634-x>
- Lisboa, M., & Pasinato, W. (2018). *Intercâmbio Brasil e União Europeia sobre o Programa de Combate à Violência Doméstica Contra as Mulheres*. <https://www.cnmp.mp.br/portal/publicacoes/244-relatorios/12025-intercambio-brasil-uniao-europeia-sobre-o-programa-de-combate-a-violencia-domestica-contra-a-mulher>
- Lugones, M. (2010). Toward a Decolonial Feminism. *Hypatia*, 25(4), 742–759. doi:10.1111/j.1527-2001.2010.01137.x
- Lugones, M. (2014). Rumo a um feminismo descolonial. *Revista Estudos Feministas*, 22(3), 935–952. <https://doi.org/10.1590/S0104-026X2014000300013>
- Luke, D. A., & Stamatakis, K. A. (2012). Systems science methods in public health: Dynamics, networks, and agents. *Annual Review of Public Health*, 33, 357–376. <https://doi.org/10.1146/annurev-publhealth-031210-101222>
- Magalhães, M. J., Pontedeira, C., Iglesias, C., Martelo, V., Guerreiro, A., Felgueiras, R., & Teixeira, M. (2018, February). *Portuguese country report about bystander's implementation*. BYSTANDERS Project, Faculdade de Psicologia e de Ciências da Educação da Universidade do Porto. https://fpce.up.pt/love_fear_power/bystanders/publicacoes/fev_2020/Bystanders_Implementation_Report_PT.pdf
- Mannell, J., Amaama, S. A., Boodoosingh, R., Brown, L., Calderon, M., Cowley-Malcolm, E., Lowe, H., Motta, A., Shannon, G., Tanielu, H., & Vergara, C. C. (2021). Decolonising violence against women research: A study design for co-developing violence prevention interventions with communities in

- low and middle income countries (LMICs). *BMC Public Health*, 21(1), 1147.
<https://doi.org/10.1186/s12889-021-11172-2>
- Manzini, E., & Jégou, F. (2008). *Collaborative Services: Social innovation and design for sustainability*.
- Manzini, E. (2014). Making things happen: Social innovation and design. *Design Issues*, 30(1), 57–66. https://doi.org/10.1162/DESI_a_00241
- Manzini, E., & Coad, R. (2015). *Design, When Everybody Designs: An Introduction to Design for Social Innovation*. Boston, MA: MIT Press.
- Manzini, E. (2017). Designing coalitions: Design for social forms in a fluid world. *Strategic Design Research Journal*, 10(2), 187–193. <https://doi.org/10.4013/sdrj.2017.102.12>
- Manzini, E., & Thorpe, A. (2018). Weaving People and Places: Art and Design for Resilient Communities. *She Ji: The Journal of Design, Economics, and Innovation*, 4(1), 1–10.
<https://doi.org/10.1016/j.sheji.2018.03.003>
- Margolin, V., & Margolin, S. (2002). A “social model” of design: Issues of practice and research. *Design Issues*, 18(4), 24–30. <https://doi.org/10.1162/074793602320827406>
- Martins, L. (2014) Privilege and Oppression: Towards a Feminist Speculative Design, in Lim, Y., Niedderer, K., Redström, J., Stolterman, E. and Valtonen, A. (eds.), *Design's Big Debates - DRS International Conference 2014*, 16-19 June, Umeå, Sweden.
<https://dl.designresearchsociety.org/drs-conferencepapers/drs2014/researchpapers/75>
- Meadows, D. H. (2008). *Thinking in Systems* (D. Wright, Ed.). Chelsea Green Publishing.
- Metcalf, G. S. (Ed.). (2014). *Social systems and design*. Springer Japan. <https://doi.org/10.1007/978-4-431-54478-4>
- Michau, L. (2005). Good practice in designing a community-based approach to prevent domestic violence. “*Violence against women: Good practices in combating and eliminating violence against women*” Expert Group Meeting: UN Division for the Advancement of Women.
<https://www.un.org/womenwatch/daw/egm/vaw-gp-2005/docs/experts/michau.community.pdf>
- Midgley, G., & Lindhult, E. (2021). A systems perspective on systemic innovation. *Systems Research and Behavioral Science*, 38(5), 635–670. <https://doi.org/10.1002/sres.2819>
- Milic, N. (2021). Assemblages of social design. *UAL Social Design Institute Position Papers*. University of the Arts London. https://ualresearchonline.arts.ac.uk/id/eprint/17076/1/SDI_Milic_2.1_Final%20copy.pdf
- Montagud Rubio, N. (2019, noviembre 2). *La teoría del pensamiento complejo de Edgar Morin*. Portal Psicología y Mente. <https://psicologiymente.com/inteligencia/teoria-pensamiento-complejo-edgar-morin>
- Montuori, A. (2007). Edgar Morin: Communication and complex thought. *Hermes*, 48, 179–184.
<https://doi.org/10.4267/2042/24119>
- Morgan, D. L. (1996). Focus groups. *Annual Review of Sociology*, 22, 129–152.
<https://doi.org/10.1146/annurev.soc.22.1.129>
- Morin, E. (2003). *A Cabeça bem-feita. Repensar a reforma*. Bertrand Brasil.
- Morin, A. (2005). Possible Links Between Self-Awareness and Inner Speech: Theoretical Background, Underlying Mechanism, and Empirical Evidence. *Journal of Consciousness Studies*, 12(4-5), 115–134.
- Morin, E. (2006). Introdução ao pensamento complexo. In *PRACS: Revista Eletrônica de Humanidades do Curso de Ciências Sociais da UNIFAP*. Editora Sulina.
<https://doi.org/10.18468/pracs.2019v12n3.p141-148>
- Mortati, M., Mullagh, L., & Schmidt, S. (2022). Design-led policy and governance in practice: A global perspective. *Policy Design and Practice*, 5(4), 399–409.
<https://doi.org/10.1080/25741292.2022.2152592>
- Mouffe, C. (1999). Deliberative Democracy or Agonistic Pluralism? *Social Research*, 66(3), 745–758.
<https://www.jstor.org/stable/40971349>
- Muratovski, G. (2016). Empowerment by Design. *Journal of Design, Business & Society*, 2(2).
<https://doi.org/10.1386/dbs.2.2.121>

- Murhula, P. B. B., Singh, S. B., & ende, S. M. M. (2021). The COVID-19 Pandemic and Its Impact on Gender-Based Violence: A Global Review and Analysis. *International Journal of Criminal Justice Sciences*, 16(1), 84–96. <https://doi.org/10.5281/zenodo.4762356>
- Murray, Robin, Caulier-grice, J., & Mulgan, G. (2010). The Open Book of Social Innovation. In Young.
- Murray, C. E., Horton, G. E., Johnson, C. H., Notestine, L., Garr, B., Pow, A. M., Flasch, P., & Doom, E. (2015). Domestic Violence Service Providers' Perceptions of Safety Planning: A Focus Group Study. *Journal of Family Violence*, 30(3), 381–392. <https://doi.org/10.1007/s10896-015-9674-1>
- Naimi, A. I. (2016). Commentary: Integrating Complex Systems Thinking into Epidemiologic Research. *Epidemiology*, 27(6), 843–847. <https://doi.org/10.1097/EDE.0000000000000538>
- Nayak, A. K., Khuntia, T., & Suna, B. (2019). Transition Strategies for Sustainable Community Systems: Design and Systems Perspectives. In *Transition Strategies for Sustainable Community Systems: Design and Systems Perspectives*. http://dx.doi.org/10.1007/978-3-030-00356-2_16
- Nelson, H. G. (2004). A Whole System Design Approach to Decentralized Governance for Human Development. *The United Nations Development Programme*, 2–30. <http://onlinelibrary.wiley.com/doi/10.1002/cbdv.200490137/abstract>
- Noel, L.-A. (2023). *Design Social Change: Take action, work toward equity, and challenge the status quo*. Ten Speed Press.
- Norman, D. A., & Stappers, P. J. (2015). DesignX: Complex sociotechnical systems. *She Ji: The Journal of Design, Economics, and Innovation*, 1(2), 83–106. <https://doi.org/10.1016/j.sheji.2016.01.002>
- Noronha, R. G. (2024). Narrativas em design e gênero: Crítica e especulação para futuros possíveis. In A. J. M. Almeida, G. Flesler, M. C. L. dos Santos, & R. G. Noronha (Eds.), *Design e gênero: Experiências coletivas de ensino* (pp. 92–127). EDUFMA.
- OECD (2017), *Systems Approaches to Public Sector Challenges: Working with Change*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264279865-en>.
- OECD (2018), *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/eag-2018-en>.
- OECD. (2021). Eliminating Gender-based Violence. In *Eliminating Gender-based Violence*. <https://doi.org/10.1787/42121347-en>
- Olsson, P., Folke, C., and Hahn, T. (2004) Social-ecological transformation for ecosystem management: the development of adaptive co-management of a wetland landscape in southern Sweden. *Ecology and Society* 9(4): 2. <http://www.ecologyandsociety.org/vol9/iss4/art2/>
- Öz, G. (2020). 'Project Kapıdağ: Locality of production': A case of research for social design in complex collaboration. *Strategic Design Research Journal*, 13(3), 488–497. <https://doi.org/10.4013/sdrj.2020.133.15>
- Papanek, V. (1985). *Design for the real world: Human ecology and social change* (2nd ed., with an introduction by R. Buckminster Fuller). Academy Chicago Publishers.
- Peretz, T., & Vidmar, C. M. (2021). Men, masculinities, and gender-based violence: The broadening scope of recent research. *Sociology Compass*, 15(3). <https://doi.org/10.1111/soc4.12861>
- Perez, C. C. (2020). *Invisible women: Exposing data bias in a world designed for men*. Vintage Publishing.
- Pfortmüller, F., Mombartz, S. and Luchsinger, N. (2023, March 5). *Minimum Viable Community template*. The Community Canvas. <https://community-canvas.org/home-old>
- Pulay, G. (May, 2018). *Post-crisis politics, social resistance, and equality policy paths: New social movements and forms of citizens' cooperation for solidarity*. Center for Policy Studies: Working Paper Series. <https://cps.ceu.edu/sites/cps.ceu.edu/files/attachment/publication/3100/cps-working-paper-transcrisis-new-social-movements-2018.pdf>
- Portuguese Penal Code, Article 152. Retrieved from <https://diariodarepublica.pt/dr/legislacao-consolidada/decreto-lei/1995-34437675-169645609>
- Ramos, G., Hynes, W., Müller, J.-M., & Lees, M. (2019). Systemic Thinking for Policy Making—The Potential of Systems Analysis for Addressing Global Policy Challenges in the 21st Century. *Ocde*, 129.

- Reiter, B. (2017). *Theory and methodology of exploratory social science research* (Government and International Affairs Faculty Publications No. 132). University of South Florida. https://digitalcommons.usf.edu/gia_facpub/132
- Rescher, N. (1998). Collective responsibility. *Journal of Social Philosophy*, 29(3), 46–58. <https://doi.org/10.1111/j.1467-9833.1998.tb00120.x>
- Ritchie, J., & Lewis, J. (2003). *Qualitative Research Practice—A Guide for Social Science Students and Researchers*. London, Thousand Oaks, CA: Sage Publications Ltd. http://www.sxf.uevora.pt/wp-content/uploads/2013/03/Ritchie_2003.pdf
- Rizzo, F., Deserti, A., & Çobanlı, O.M. (2018). From Social Design to Design for Social Innovation. *The Social Innovation Landscape – Global Trends*.
- Romm, N. R. A. (2024). An Indigenous Relational Approach to Systemic Thinking and Being: Focus on Participatory Onto-Epistemology. *Systemic Practice and Action Research*. <https://doi.org/10.1007/s11213-024-09672-4>
- Rughani, P. (2020). Design for Dialogue: Valuing Doubt in an Age of Conviction. *Univeristy of the Arts London*.
- Russo, N. F., & Pirlott, A. (2006). Gender-based violence concepts, methods, and findings. *Annals of the New York Academy of Sciences*, 1087, 178–205. <https://doi.org/10.1196/annals.1385.024>
- Sachs, J. D., Schmidt-Traub, G., Mazzucato, M., Messner, D., Nakicenovic, N., & Rockström, J. (2019). Six transformations to achieve the Sustainable Development Goals. *Nature Sustainability*, 2(9), 805–814. <https://doi.org/10.1038/s41893-019-0352-9>
- Sadabadi, A. A., & Aramipour, N. (2022). Combining social innovation and systems thinking to improve charity's performance in downtown of Tehran. *Systemic Practice and Action Research*. <https://doi.org/10.1007/s11213-022-09622-y>
- Sanders, L. (2008, November). *On modeling: An evolving map of design practice and design research*. *Interactions*, 15(6), 13–17. <https://doi.org/10.1145/1409040.1409043>
- Santos, M. R. dos. (2018). Gênero e cultura material: A dimensão política dos artefatos cotidianos. *Revista Estudos Feministas*, 26(1), e37361. <https://doi.org/10.1590/1806-9584.2018v26n137361>
- de Saussure, Ferdinand (ed.) (2011). *Course in General Linguistics*. Columbia University Press.
- Scharmer, C. O. (2009). *Theory U: Learning from the future as it emerges*. Berrett-Koehler Publishers.
- Schawrtz, B. (2004). *The paradox of choice: Why more is less*. HarperCollins Publishers.
- Schön, D.A. (1992). *The Reflective Practitioner: How Professionals Think in Action* (1st ed.). Routledge. <https://doi.org/10.4324/9781315237473>
- Schutz, Alfred (1970). *On phenomenology and social relations*. Chicago,: University of Chicago Press.
- Schultz, T., Abdulla, D., Ansari, A., Canlı, E., Keshavarz, M., Kiem, M., Martins, L. P. D. O., & J.S. Vieira De Oliveira, P. (2018). What Is at Stake with Decolonizing Design? A Roundtable. *Design and Culture*, 10(1), 81–101. <https://doi.org/10.1080/17547075.2018.1434368>
- Seelos, C. (Winter, 2020). Changing Systems? Welcome to the Slow Movement. *Stanford Social Innovation Review*, Winter 2020. https://ssir.org/articles/entry/how_to_tease_out_the_complex_dynamics_of_systems_change
- Segato, R. L. (2003). *Las estructuras elementales de la violencia* (1st ed.). Universidad Nacional de Quilmes.
- Serpa, B. O. (2022). *Por uma politização do design: Caminhos entre o feminismo e a educação popular* (Tese de doutorado). Escola Superior de Desenho Industrial, Universidade do Estado do Rio de Janeiro. Biblioteca Digital de Teses e Dissertações da UERJ. <http://www.bdt.d.uerj.br/handle/1/19197>
- Sevaldson, B. (2013) Systems Oriented Design: The emergence and development of a designerly approach to address complexity, in Reitan, J.B., Lloyd, P., Bohemia, E., Nielsen, L.M., Digranes, I., & Lutnæs, E. (eds.), *DRS // Cumulus: Design Learning for Tomorrow*, 14-17 May, Oslo, Norway. <https://doi.org/10.21606/learnxdesign.2013.133>

- Sheehan, N. W. (2011). Indigenous Knowledge and Respectful Design: An Evidence-Based Approach. *Design Issues*, 27(4), 68–80. <https://www.jstor.org/stable/41261957>
- Shils, E. (1984). Tradition and the Generations: On the Difficulties of Transmission. *The American Scholar*, 53(1), 27–40. <http://www.jstor.org/stable/41211577>
- Shreeves, R., & Prpic, M. (2022). *Violence against women in the EU: State of play* (Issue November, pp. 21–29). <https://euagenda.eu/publications/violence-against-women-in-the-eu-state-of-play>
- Silva, M. C. (Ed.). (2016). *Desigualdades de género. Família, Educação e Trabalho*. Humus.
- Simonsen, J., & Robertson, T. (2012). *Routledge International Handbook of Participatory Design* (0 ed.). Routledge. <https://doi.org/10.4324/9780203108543>
- Simon, H. (1972). Theories of Bounded Rationality. In *Decision and Organization* (pp. 161–176). North-Holland Publishing.
- Sitaker, M. (2008). The ecology of intimate partner violence: Theorized impacts on women's use of violence. *Journal of Aggression, Maltreatment and Trauma*, 15(3–4), 179–219. <https://doi.org/10.1080/10926770802097335>
- Snyder, H. (2023). Designing the literature review for a strong contribution. *Journal of Decision Systems*, 33(4), 551–558. <https://doi.org/10.1080/12460125.2023.2197704>
- Soini, K., & Birkeland, I. (2014). Exploring the scientific discourse on cultural sustainability. *Geoforum*, 51, 213–223. <https://doi.org/10.1016/j.geoforum.2013.12.001>
- Souza, O. (2020). Racist Motifs in Design, in Leitão, R., Noel, L. and Murphy, L. (eds.), *Pivot 2020: Designing a World of Many Centers - DRS Pluriversal Design SIG Conference*, 4 June, held online. <https://doi.org/10.21606/pluriversal.2020.013>
- Spinuzzi, C. (2005). The methodology of participatory design. *Technical Communication*, 52(2), 163–174.
- Stake, R. (1995). Case study research. Thousand oaks. In *Case study research. Thousand oaks* (pp. 233–285). Sage. https://doi.org/10.1007/978-3-030-85124-8_7
- Statista. (2024, October 9). *Number of domestic violence crimes in Portugal from 2019 to 2023*. Statista. <https://www.statista.com/statistics/1426572/portugal-number-of-domestic-violence-crimes/>
- Stephens, A. (2011). Feminist Systems Thinking: The effectiveness of practicing the principles. *Proceedings of the 55th Annual Meeting of the ISSS - 2011, Hull, UK*, 55(1). Retrieved from <https://journals.issis.org/index.php/proceedings55th/article/view/1686>
- Stephens, A. (2023). Feminist-Systems Thinking: From mere principles to a United Nations Framework. *Journal of Systems Thinking*, 3. <https://doi.org/10.54120/jost.0000026>
- St John, N. (2024). Purta ngkarrama (In dialogue together): Co-designing and co-learning in Ntaria. *CoDesign*, 20(1), 174–193. <https://doi.org/10.1080/15710882.2024.2317950>
- Stroh, D. P. (2015). *System Thinking for Social Change* (1st ed.). Chelsea Green Publishing.
- Sunstein, C. R. (1996). *Social norms and social roles* (Chicago Law & Economics Working Paper No. 36). University of Chicago Law School. <https://ssrn.com/abstract=10001>
- Tonkinwise, C. (2015). Design for Transitions – from and to what? *Design Philosophy Papers*, 13(1), 85–92. <https://doi.org/10.1080/14487136.2015.1085686>
- Tracy, M., Chong, L. S., Strully, K., Gordis, E., Cerdá, M., & Marshall, B. D. L. (2023). A Systematic Review of Systems Science Approaches to Understand and Address Domestic and Gender-Based Violence. *Journal of Family Violence*, 38(6), 1225–1241. <https://doi.org/10.1007/s10896-023-00578-8>
- Udoewa, V. (2022). Radical Participatory Design: Awareness of Participation. *Journal of Awareness-Based Systems Change*, 2(2), 59–84. <https://doi.org/10.47061/jasc.v2i2.3816>
- Udoewa, V. (2023, September). Learnings from Black Liberation System Entanglements—Part I. *Relating System Thinking and Design RSD12*. Relating Systems Thinking and Design, Georgetown University. <https://rdsymposium.org/black-liberation-system-decolonial-healing>
- Ulrich, W. (1987). Critical heuristics of social systems design. *European Journal of Operational Research*, 31(3), 276–283. [https://doi.org/10.1016/0377-2217\(87\)90036-1](https://doi.org/10.1016/0377-2217(87)90036-1)

- United Nations. (2018). Turning Promises Into Action: Gender Equality in the 2030 Agenda. In *United Nations*.
- United Nations. (2020). *Policy Brief: The Impact of COVID-19 on Women* (p. 21). United Nations. <https://www.unwomen.org/en/digital-library/publications/2020/04/policy-brief-the-impact-of-covid-19-on-women>
- UNODC. (2018). *Global Study on Homicide—Gender-Related Killing of Women and Girls*. https://www.unodc.org/documents/data-and-analysis/GSH2018/GSH18_Gender-related_killing_of_women_and_girls.
- United Nations. (2023). *Climate Change Exacerbates Violence against Women and Girls*. United Nations. <https://www.ohchr.org/en/stories/2022/07/climate-change-exacerbates-violence-against-women-and-girls>
- United Nations Development Programme. (2023a). *Breaking Down Gender Biases: Shifting Social Norms Towards Gender Equality: 2023 Gender Social Norms Index*. United Nations. <https://doi.org/10.18356/9789210028028>
- United Nations Development Programme. (2023b). *The Path to Equal: Twin indices on women's empowerment and gender equality* (Human Development Reports). United Nations Development Programme. <https://hdr.undp.org/content/paths-equal>
- UN Women. (2024). *16 Days of Activism against Gender-Based Violence 25 November*. https://www.unwomen.org/sites/default/files/2024-10/unite_16_days_2024_concept_note_final_oct4.pdf
- van Amstel, F. M. ., Noel, L.-A., & Gonzatto, R. F. (2022). Design, Oppression, and Liberation. *Diseña*, (21), Intro. <https://doi.org/10.7764/disena.21.Intro>
- van der Bijl-Brouwer, M. (2017). Designing for social infrastructures in complex service systems: A human-centered and social systems perspective on service design. *She Ji: The Journal of Design, Economics, and Innovation*, 3(3), 183–197. <https://doi.org/10.1016/j.sheji.2017.11.002>
- van der Bijl-Brouwer, M., & Malcolm, B. (2020). Systemic design principles in social innovation: A study of expert practices and design rationales. *She Ji: The Journal of Design, Economics, and Innovation*, 6(3), 386–407. <https://doi.org/10.1016/j.sheji.2020.06.001>
- van Tulder, R., & Keen, N. (2018). Capturing Collaborative Challenges: Designing Complexity-Sensitive Theories of Change for Cross-Sector Partnerships. *Journal of Business Ethics*, 150(2), 315–332. <https://doi.org/10.1007/s10551-018-3857-7>
- Veale, J. A. (2014). Systemic government and the civil servant: A new pattern for systemic design. *FormAkademisk – Research Journal of Design and Design Education*, 7(3), 1–25. <http://openresearch.ocadu.ca/id/eprint/2172/>
- Ventura, J., & Bichard, J. (2016). Design anthropology or anthropological design? Towards 'Social Design'. *International Journal of Design Creativity and Innovation*, 5(3-4), 222–234. <https://doi.org/10.1080/21650349.2016.1246205>
- Villa Alvarez, D. P., Auricchio, V., & Mortati, M. (2022). Mapping design activities and methods of public sector innovation units through the policy cycle model. In *Policy Sciences* (Vol. 55, Issue 1). Springer US. <https://doi.org/10.1007/s11077-022-09448-4>
- Von Bertalanffy, L. (1968). *General System Theory: Foundations, Development*. New York: George Braziller.
- Wahl, D. C. (2016a). *Designing Regenerative Cultures* (T. Press, Ed.). Triarchy Press.
- Wahl, D. C. (2016b). *Designing Regenerative Cultures invites us to co-create thriving communities*. Monday, March 21st, 201. <http://www.gaiaeducation.org/index.php/en/why/news-and-articles/184-designing-regenerative-cultures>
- Walby, S., Towers, J., & Francis, B. (2014). Mainstreaming domestic and gender-based violence into sociology and the criminology of violence. *The Sociological Review*, 62(Suppl 2), 187–214. <https://doi.org/10.1111/1467-954X.12198>

- Walker, J. N. (2016). *Design Journeys: Strategies For Increasing Diversity In Design Disciplines* [Master's thesis, Ohio State University]. OhioLINK Electronic Theses and Dissertations Center. http://rave.ohiolink.edu/etdc/view?acc_num=osu1469162518
- Webster, J., & Watson, R.T. (2002). Analyzing the past to prepare for the future: Writing a literature review. *Management Information Systems Quarterly*, 26(2), 3.
- Weitz, N., Carlsen, H., Skånberg, K., Dzebo, A., & Viaud, V. (2019). *Systems thinking for SDG implementation Report* (pp. 2–5). Stockholm Environment Institute. <https://www.jstor.org/stable/resrep25071.4>
- World Economic Forum. (2023). *Annual Report 2022-2023*. https://www3.weforum.org/docs/WEF_Annual_Report_2022-23.pdf
- World Wide Web Foundation, Feminist Internet, & Walker, C. (2021). *Tech Policy Design Lab: Online Gender-Based Violence and Abuse Outcomes & Recommendations*. https://uploads-ssl.webflow.com/61557f76c8a63ae527a819e6/61557f76c8a63a65a6a81adc_OGBV_Report_June_2021.pdf
- Yin, R. K. (1993). *Applications of case study research*. Sage Publications, Inc.
- Young, J. C., Rose, D. C., Mumby, H. S., Benitez-Capistros, F., Derrick, C. J., Finch, T., Garcia, C., Home, C., Marwaha, E., Morgans, C., Parkinson, S., Shah, J., Wilson, K. A., & Mukherjee, N. (2018). A methodological guide to using and reporting on interviews in conservation science research. *Methods in Ecology and Evolution*, 9(1), 10–19. <https://doi.org/10.1111/2041-210X.12828>
- Yunkaporta, T., García Pérez, R., & Cabré, T. (2023). *Escrito en la Arena : Cómo el Pensamiento Indígena Puede Salvar Al Mundo*. (1st ed.). Herder, Editorial S.A.
- Zia, A. (2008). Feminism, Gender and Social Policy. *Global Social Policy*, 8(3), 397–404. <https://doi.org/10.1177/1468018108095635>

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Appendix

Appendix I – Designing the interview Domestic Violence Specialists

Semi-structured interview guide, focused on creating a multidimensional perspective on the macro themes designed through a single script, where we can perceive differences and similarities in the perception and experience of the experts interviewed.

Introduction/presentation of the interview:

“The main focus of this interview is to understand the phenomenon of gender violence and to delve deeper into the issue. By gathering information from experts in different areas who have experience in the field, we will formulate with greater rigor the subsequent questions of the investigation that will be carried out with volunteers who work on the issue studied here.”

The survey is divided into three macro themes relevant to the study, which were chosen based on a bibliographical survey that intersects several areas of knowledge. They are cultural and social heritage, social roles and mechanisms of action.

Theme: Cultural and Social Heritage

Let's start by talking a little about the cultural and social heritage that makes up the construction of agents who act against gender violence. After all, from victims to volunteers and agents who create responses to issues of gender violence, we are all social beings and made up of cultural references.

Q1: What social and cultural aspects do you believe contribute most to issues of gender-based violence?

Q2: Do you think that solidarity participation is important in reducing GBV? What social and cultural aspects can positively or negatively influence this solidarity participation of citizens in the phenomenon of gender-based violence?

Q3: What cultural, social and political mechanisms do you consider important for developing responses to gender-based violence?

Theme: Social roles

Let's now talk about social roles, this element that is so necessary in social dynamics and that has been highlighted in the current issues of gender-based violence, since there is an increasing demand for citizen participation.

Q1: There is a lot of talk today about the role of 'bystanders' or spectators in situations of gender-based violence. What does your experience say about this aspect?

Q2: To what extent do you think citizens can take action in situations of gender-based violence?

Q3: In the field of volunteering, what is the role of volunteers in issues of gender-based violence today?

Q4: In your opinion, what are the main motivational elements that lead a person to become a volunteer and act as an agent in issues of gender-based violence?

Q5: Would it be possible to change the actions of the agents of this system (Police Office, Public Prosecutor's Office, Victim Support Offices, associations, shelters, etc.) to an active participation focused on the collective and on synergy between participants?

Topic: Mechanisms of Action

In general, the mechanisms of action for gender-based violence issues were created and adjusted according to social needs and existing resources. Thus, most of the current social action mechanisms in this area are institutionalized, with the government determining public policies and allocating funds for government and non-governmental institutions to implement actions in the field.

Q1: What level of effectiveness do you consider to exist in the current action mechanisms? What could be done to improve them?

Q2: Do you think that the same values, objectives and strategies are shared by all those who participate in this network that works against gender-based violence? What form does this sharing take?

Q3: Does this network of agents that intervene in the process (Police Office, Public Prosecutor's Office, Victim Support Offices, associations, shelters, etc.) have any level of hierarchy over one another? How do you consider this hierarchical relationship?

Q4: From your point of view, how do you see the levels of synergy between the agents of this action network? How would it be possible for this network of agents to have greater synergy among its participants?

Q5: How do you see the impact of this synergy on your work (institution, association, entity)?

Suggestions

Q6: What do you consider important to improve support in responding to gender-based violence issues

Appendix II – Kumu platform website to access Domestic Violence Causal Map

<https://wedisturb.kumu.io/domestic-violence-causal-map>

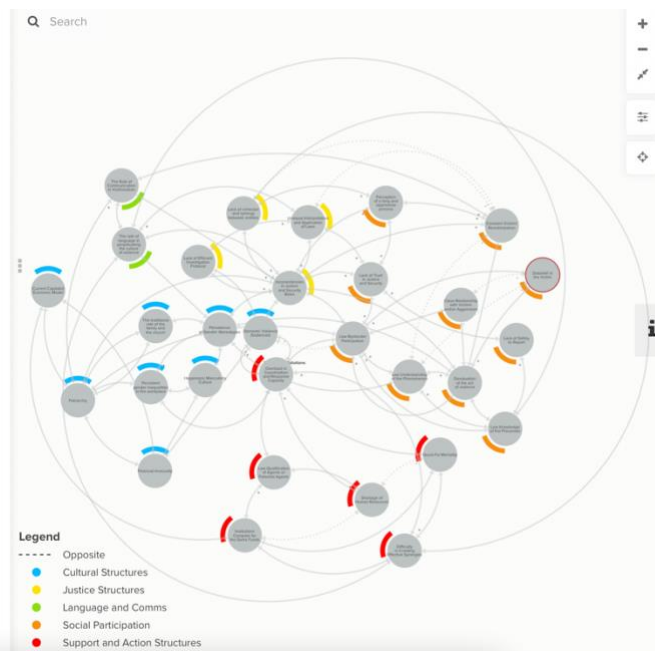


Causal Map of Domestic Violence in Portugal

This map helps to visualize the existing dynamics in the phenomenon of violence against women, with emphasis on domestic violence and framed dimensions of the issue and its interrelations in Portugal.

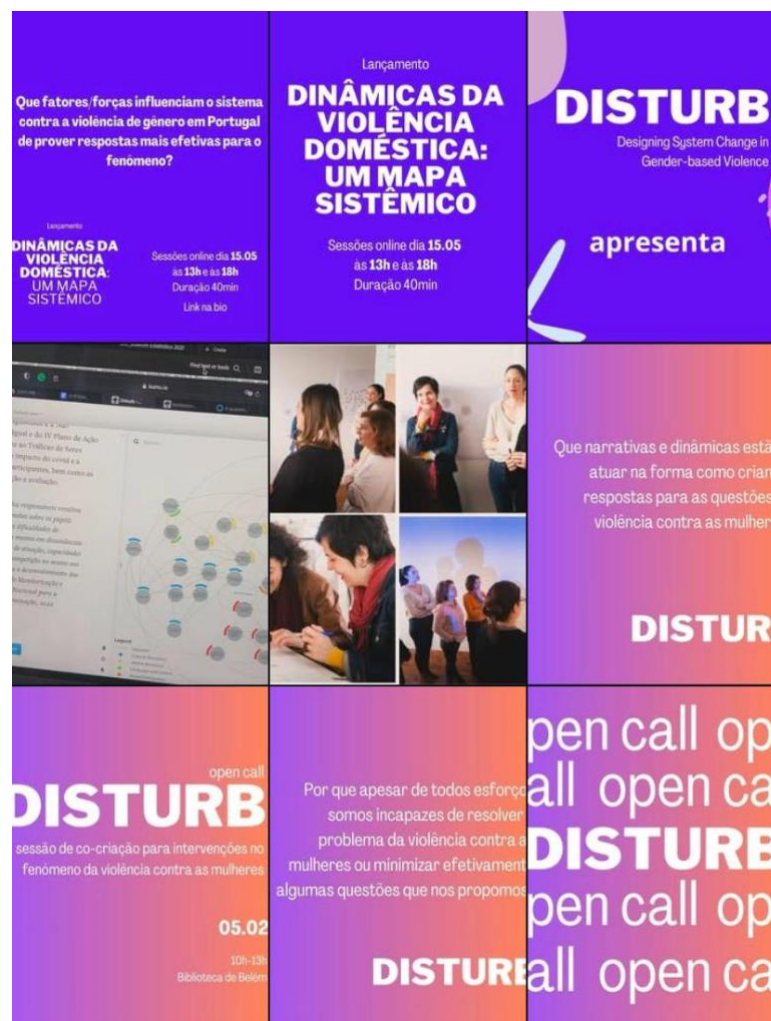
Through it, you can explore how various issues intersect with violence against women and their responses to the issue of domestic violence. To compose this set of issues, the context is framed in five spheres: cultural structures (blue), security and justice structures (yellow), language and communication (green), social participation (orange) and support and action structures (red).

The objective is to give visibility to the phenomenon, provide a tool for accessing information and a holistic view, which can at the same time awaken self-criticism, help in decision-making and encourage the identification of leverage points for future transformations and interventions in this complex issue that requires multiple fronts.



Appendix III - DISTURB Communication - Community Engagement with Domestic Violence





Appendix IV – Survey validation results in co-creation session

This survey helps us capture individual perceptions about the proposed exercise. We appreciate your participation.

1. On a scale of 1 to 5, how would you rate the experience of this collaborative process to contribute to the topic addressed?
2. On a scale of 1 to 5, how do you assess that this process can contribute to visualizing the problem of violence against women and domestic violence?
3. On a scale of 1 to 5, what was the experience of creating new interventions and solutions through this process?
4. Do you believe that this process is capable of catalysing collective and collaborative participation?
 - a.Yes
 - b.No
 - c.Just a little
 - d.Don't know to answer
5. Who do you think could benefit from this co-creation process and why?
6. Do you see this type of process and tools being applied in other contexts or moments related to this phenomenon, which ones?
7. Do you believe that this process is capable of activating positive changes in the participants who work on this phenomenon of violence? If so, what type of changes?
8. What could be improved? Leave here any additional contributions, comments or suggestions:

Appendix V – Inquiry interview specialists SIGO Zoom Out and Zoom In

Dear Madam/Sir,

I would like to thank you for your willingness to take part in this study that is being carried out as part of the PhD in Design at the University of Barcelona by researcher Raquel Lima. This survey was designed to contribute to the work of those working in the field on the complex issue of domestic violence. To this end, it is divided into four topics: the network of responses to domestic violence, bystanders in situations of violence, the security and justice structure, and the cultural structures that contribute to the perpetuation of the phenomenon. Please note that there are no right or wrong answers, and the information collected here serves the exclusive purpose of this academic research.

This survey may last 15 to 20 minutes, so we recommend that you reserve some space so that you can answer it with focus and calm.

For any questions, please contact researcher Raquel Lima at roliveli8@doct.ub.edu

ZOOM OUT

About you

We would like to have a brief description of your role at Rede Sigo.

1. Which organisation/institution do you work for?
2. What role(s) does your institution/organisation play in the issue of violence against women/domestic violence?
3. What role(s) do you play in this institution/organization?

Session 1

Starting point

A paradigm for many who address the issues of violence against women is the inability to resolve this structural and systemic issue that demands multiple interventions.

1. In your opinion, what prevents the issue of violence against women from being resolved? Think in general terms, cultural terms and even about the structure created to respond to this issue, of which you are directly or indirectly a part.

Session 2

The Rede SIGO

Let's explore perceptions about the network, its dynamics, contributions and barriers.

1. SIGO is made up of a wide variety of very different actors. How do you perceive the role of the SIGO network, its synergies, dynamics and articulations to maintain its functioning? Describe positive aspects that differentiate, and also describe what could be improved to improve these dynamics of the network and its actors.

2. During the pandemic, was there an increase or decrease in cases of DV (domestic violence) in the region?

a. Increase

b. Decrease

3. What do you think caused this increase or decrease?

4. How did you perceive the impact of COVID-19 on the response capacity, structures and synergies among members? Was the network prepared for COVID-19? Tell us about this period and how you acted to overcome the problem.

5. In the following questions, answer to what degree you completely disagree (1) or completely agree (5) with the statements.

a. Currently, the actors (institutions and people) existing in the network are sufficient to resolve the issue.

b. We are able to provide financial and human resources efficiently and tailored to each case.

c. Our communication channels between network participants are very well used and work well.

d. How do you see the role of the network and how could it evolve or improve? And, in your opinion, which aspects or issues need greater efforts to change? Discuss the subject.

Session 3

Bystanders

The role of people who witness or know about acts of violence in intimate relationships has been widely studied. We would like to know your perception of these important agents in this phenomenon.

1. Today, spectators play a very important role in issues of violence against women, especially domestic violence: how do you perceive the role of these people in your context? How has society acted in the municipality? How do you perceive the participation of the general population?
2. In your opinion, why do bystanders not report cases of domestic violence?
3. In the following questions, answer to what degree you completely disagree (1) or completely agree (5) with the statements.
 - a. There is a lack of confidence in security and justice on the part of society.
 - b. The bureaucracy involved in making a complaint is very long, which is why people don't do it.
 - c. People don't know how to report. We need to explain it to them.
 - d. Citizens see the processes and effectiveness of justice in cases of domestic violence as flawed.
 - e. Viewers do not report it because they are afraid of becoming victims themselves.
 - f. Spectators do not report it because the justice system and security forces do not guarantee their protection.
 - g. Bystanders do not report it because they often have a close relationship with the victim and/or aggressor.
 - h. Bystanders do not report the crime because they do not believe the victims, as they may end up with their attackers again.
4. Add any aspect about the viewers that you consider relevant. (open question optional)

Session 4

Justice and Security System

Now let's talk a little about the role of justice and security structures in the issue of domestic violence.

1. How do you perceive the role of security and justice as viewed by society in your region, on the issue of violence against women?
2. What kind of synergies are created with the security and justice bodies? Do you feel that these structures are close enough to act together when necessary? If not, what is preventing better synergy from happening?
3. In the following questions, answer to what degree you completely disagree (1) or completely agree (5) with the statements.
 - a. There is a lack of a more efficient investigation protocol, from collecting evidence to caring for the victim.

- b.Sometimes the victim continues to be revictimized throughout the often-exhausting process.
- c.There is an unequal application and interpretation of laws
- d.Cultural issues and gender stereotypes sometimes prevail among some security and justice force agents.
- e.Cultural issues and gender stereotypes sometimes prevail among some security and justice force agents.
- f.There is a lack of cohesion and more active synergy on the part of justice and/or security with the entire network that provides support and works on prevention.
- g.There is a lack of personal and financial resources for a better response from the legal and security system.

4. Describe any project/action that you are aware of that has been carried out between your institution and the security or justice forces. Or tell us about an occasion that illustrates the synergy of work carried out with the security or justice forces.

Session 5

Cultural Structures

Cultural structures are structurally present in our societies. Let's explore this topic a little, as it often reinforces issues of violence against women.

- 1.In your opinion, what socio-cultural issues do you think most contribute to the perpetuation of violence against women in your region? (e.g. strong patriarchal values, gender inequalities, influence of the church and family)
- 2.In the following questions, answer to what degree you completely disagree (1) or completely agree (5) with the statements.
 - a.The persistence of gender stereotypes is a central cultural factor contributing to violence against women here in the region.
 - b.The traditional role of the family and the church has greatly contributed to maintaining gender stereotypes in the region.
 - c.Patriarchy reinforces the current economic model, which in turn reinforces the persistence of gender inequalities at work.
 - d.Describe any projects carried out by the network that have helped to overcome these issues that culturally affect the solution to the problem of violence against women.

3. Please, if you believe that any topic was not mentioned or if you would like to discuss a topic that you consider important and there was no opportunity to do so in the previous questions, describe it here. (open question)

(Final Message)

We appreciate your participation and essential contribution to the development of this project. This survey will be analysed and your answers will be shared in this co-participatory methodological process, so that we can move on to the second phase of the project. We will be in touch soon. Thank you.

ZOOM IN

Presentation

Dear Madam/Sir,

I would like to thank you for your willingness to take part in this study that is being carried out as part of the PhD in Design at the University of Barcelona by researcher Raquel Lima. This survey was designed with the aim of contributing to the work of those working in the field on this complex issue of domestic violence. To continue the study, we invite you to answer questions involving your internal and future vision on the issue of domestic violence in the second stage.

This survey can last 10 to 15 minutes, so we recommend that you reserve a space so that you can answer it with focus and calm.

For any questions, please contact researcher Raquel Lima at roliveli8@doct.ub.edu

Internal Questions

Let's explore some internal perceptions about the SIGO Network within the scope of shared and perceived values, its purpose and routines.

Q1: In your opinion, what is the purpose that unifies the work of the SIGO Network? If you could define it in one short sentence, what would it be?

Q2: What are the principles that guide the existence and actions of the SIGO Network?

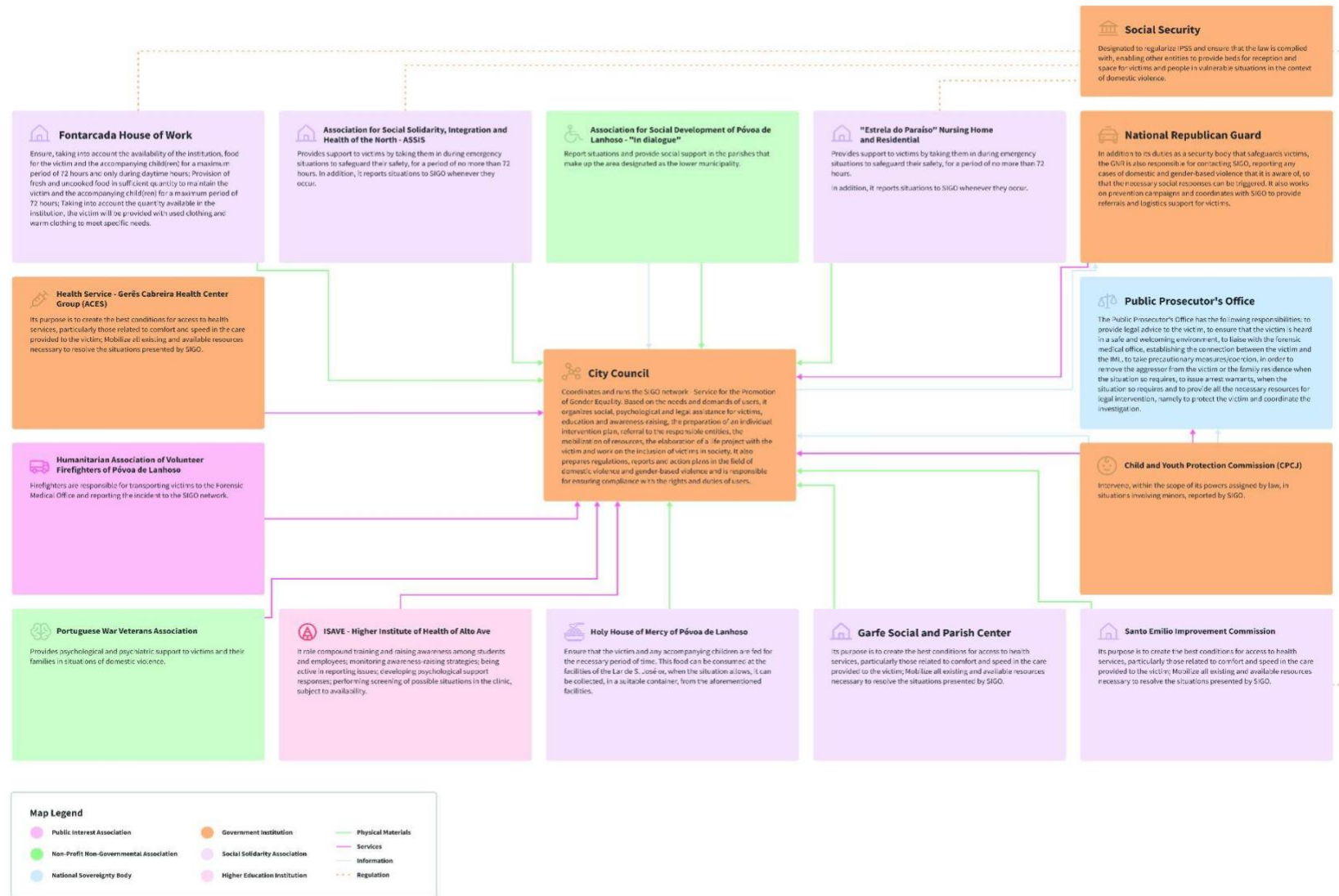
Q3: What values are perceived by those who use the Network?

Q4: What practices contribute to a better connection with the other members of the Network? (e.g. meetings, training, role of leaders)

Q5: What do you think needs to be improved/remedied/adjusted within the Network?

Q6 How are decisions made together? Are there processes, models or rituals that accompany these moments?

Appendix VI - Actors dynamics map from SIGO network



Appendix VII - Report presented to Póvoa de Lanhoso Municipality

PROJECT DISTURB
Raquel Lima
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SEPTEMBER
2024

DISTURB

Report case study Rede SIGO
a systemic perspective against domestic violence



UNIVERSITY OF BARCELONA
Faculty of Fine Arts

PROJECT DISTURB
Raquel Lima

UNIVERSITY OF BARCELONA
Faculty of Fine Arts

AGENDA

- 01 INTRODUCTION
A joint look at the issues of domestic violence
- 02 ZOOM OUT
A reflection on society and its role in the phenomenon, the role of justice and security, and the culture that shapes this country and the region
- 03 ZOOM IN
We looked inside SIGO, its strengths, structures and purpose and portrayed its actors and dynamics.

- 04 IMAGINE FUTURES
Result of the collective process with experts
- 05 POTENTIAL INTERVENTIO
The collective potential to think of intervention points for the future of the theme



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Faculty of Fine Arts

INTRODUÇÃO

PRELIMINARY MAP OF THE PORTUGUESE CONTEXT IN DOMESTIC VIOLENCE

Between 2022 and 2023, was drawn up da systemic causal map of violence issues in Portugal. The map was constructed based on interviews with experts in the fields of sociology, anthropology, psychology, security and justice. Its main themes were cultural issues regarding domestic violence, support structures, the role of security and justice and bystanders or spectators.

The map is interactive and allows you to navigate through the various themes, containing information and comments from the interviewees

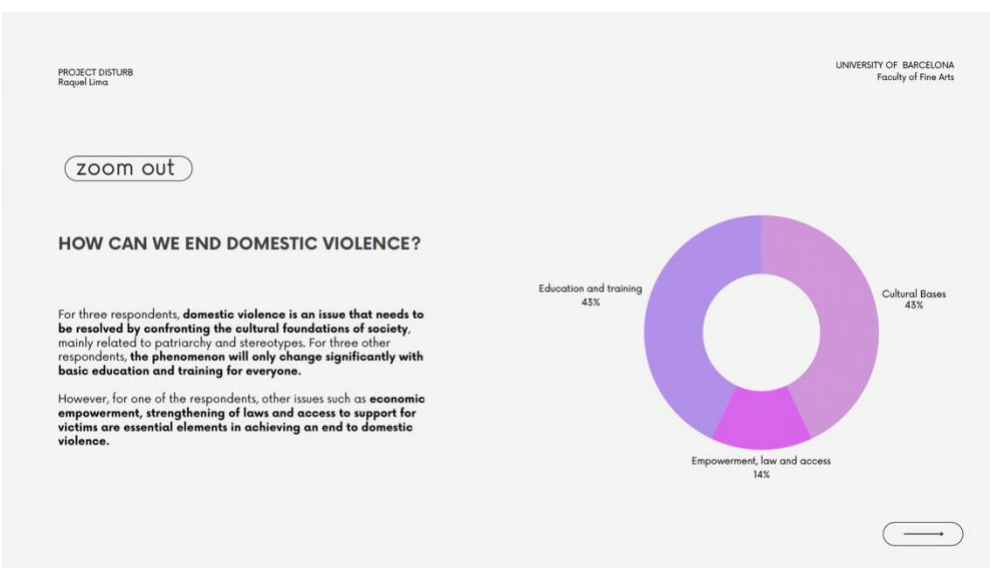
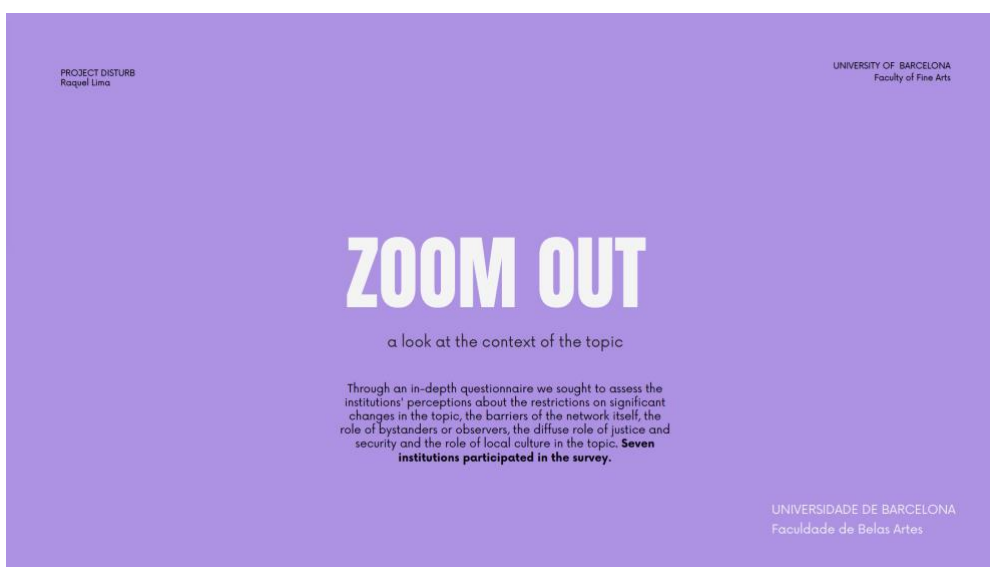
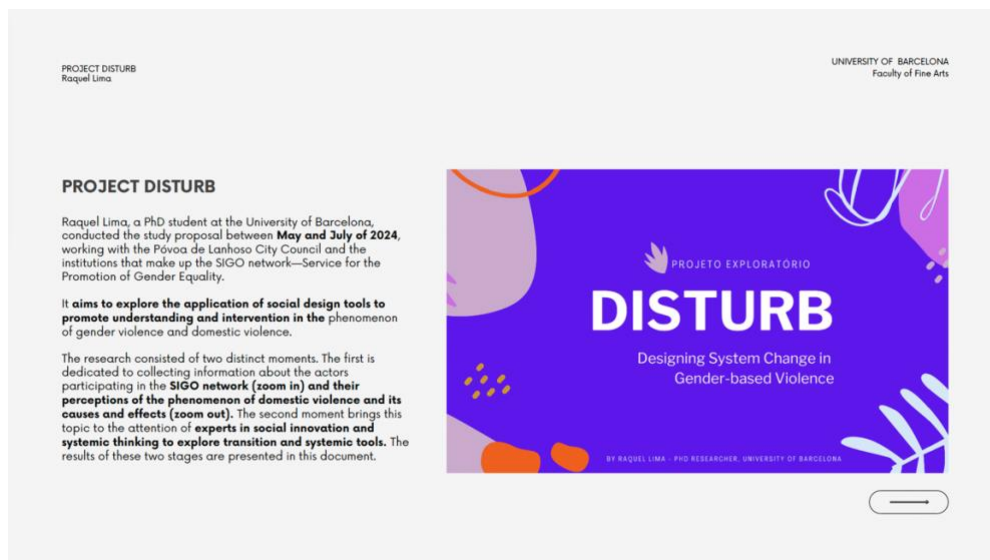
Access [Domestic Violence Causal Map](#)

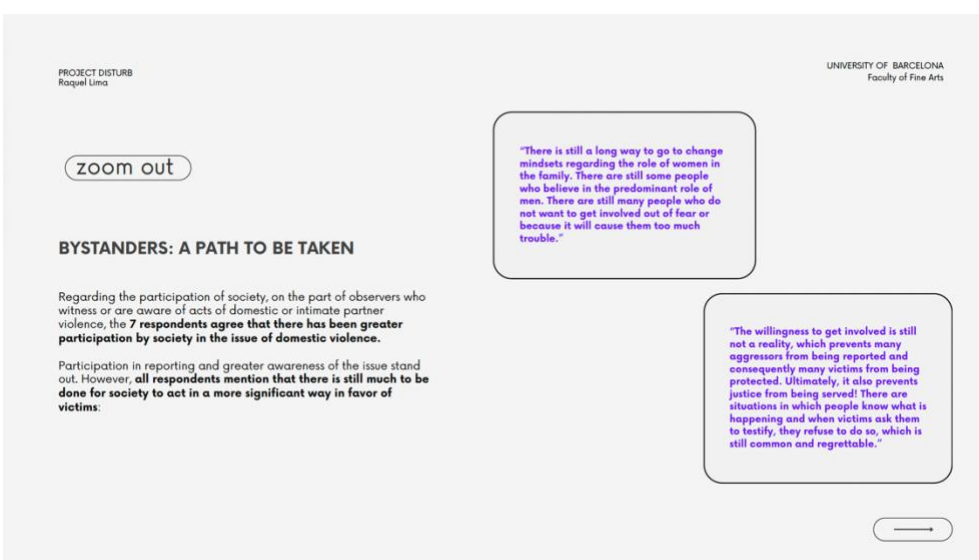
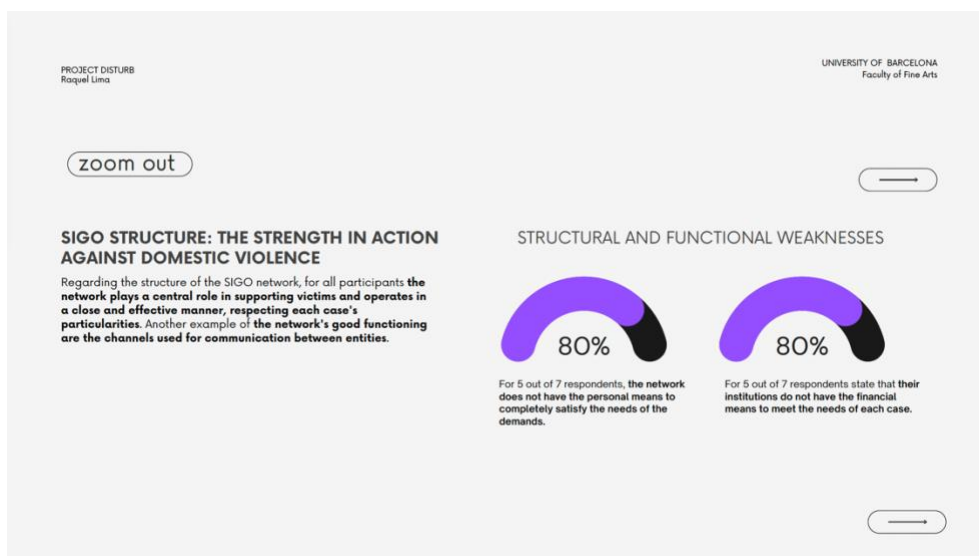
Domestic Violence Causal Map

Exploring the context of domestic violence in Portugal

START PRESENTATION







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zoom out

WHAT PREVENTS BYSTANDERS FROM TAKING MORE ACTIVE ACTION?

Unfortunately, many of the complaints are not made or the withdrawals are persistent due to a series of factors, with no single issue standing out, but rather a set of factors that, when added together, do not constitute a form of incentive for social participation.

FEAR	LACK OF SOLIDARITY AND EMPATHY
SHAME	CULTURAL STIGMA "DON'T INTERFERE BETWEEN HUSBAND AND WIFE"
MINIMIZING VIOLENCE	TO AVOID BUREAUCRACY
LACK OF TRUST IN AUTHORITIES	PROXIMITY TO THE VICTIM OR AGGRESSOR
PREJUDICE	DON'T MISS DAYS OF WORK

→

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zoom out

THE CENTRAL ROLE OF JUSTICE AND SECURITY, BUT WHICH STILL NEEDS TO BE STRENGTHENED

When we enter specific areas of the system, it is natural that other entities that do not work directly with the others do not want to express or cannot express their perceptions, which is why, of the 7 respondents, **only 4 wanted to explain how society perceives the legal and security system.**

For the respondents, **the central but inconsistent role of justice and security entities is noticeable**, which, according to the respondents, is often seen as a slow process.

"they cannot fully guarantee the safety of victims", and are not seen as effective or efficient.

"Society understands that more could always be done, when a case goes wrong it is always the fault of the justice system or the security forces."

→

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zoom out

JUSTICE AND SECURITY INCREASINGLY IN SYNERGY WITH OTHER ENTITIES BUT NEEDING TO REINFORCE SPECIFIC ASPECTS

Six people mentioned the positive role of the synergies created with security and justice agencies, highlighting a positive evolution in the functioning of the network. The following positive factors were mentioned:

- The creation of teams specialized in domestic and gender-based violence crimes
- Training programs for police, military and judicial staff
- Highlighting the performance of DIAPE and Courts

However, according to those surveyed, **the security and justice system has some weaknesses that need to be addressed.**

One respondent mentioned the weakness of the system, which is that it does not guarantee the safety of all those involved, professional secrecy in the referral of victims and more in-depth work on raising awareness about domestic violence.

For another respondent, **the justice and security system needs to be reinforced in terms of human resources to avoid a breakdown in its response capacity.**

Perception of the level of efficiency of research protocols

1 3 5

Perception of the level of Revictimization in the processes

1 4 5

Perception of the presence of gender stereotypes by some security and justice force agents.

1 4 5

→

A CULTURE THAT MARKS THE PATRIARCHAL ROOTS OF THE FAMILY AND CHURCH IN PORTUGAL

The cultural structures that shape issues of gender-based violence and domestic violence are the roots of many of the **structural problems** that permeate our societies. Understanding how these aspects are present at the local level helps us understand the context at its mesoscale.

existence of a patriarchal culture

persistence of gender inequalities

perpetuation of gender stereotypes

culture of silence regarding violence
against women

"The fact that Portugal only gained its freedom 50 years ago and women saw many of their rights guaranteed is a very decisive factor. We still have generations living in that time who still have many deep-rooted prejudices."

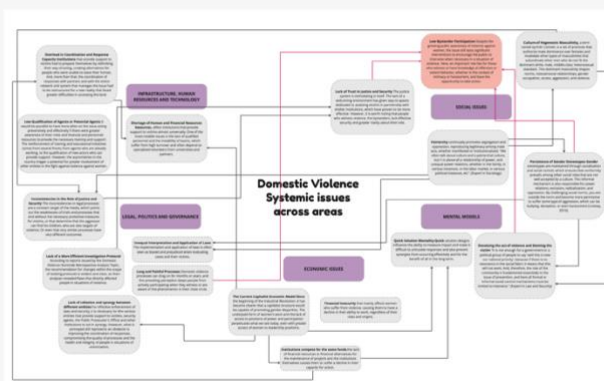
MAP OF THE SYSTEMIC CONTEXT OF DOMESTIC VIOLENCE

ToAll aspects related to culture also intersect with other aspects, be they economic, social or even governance. In an exercise of visualizing how these topics addressed in the interview relate to each other, a systemic map of the context of domestic violence is created.

Visualization allows us to understand the dynamics between multiple aspects and provide a broader view of the phenomenon. From this perspective, we can think of broader and more lasting responses, in addition to finding potential points of change in the system.

Click in thr botton to acces all versions of this map

Mapa



The map allows us to visualize how the themes surrounding the phenomenon act and influence the five pillars of social issues, mental models, economic issues, legal, political and governance issues, and infrastructure, technology and human resources issues.

The map also **prioritizes and highlights social participation in the topic**, as it understands that it is necessary to involve society and provide the means for it to be more active.

This map is the starting point for thinking about interventions and possible areas of action, together with experts in innovation and social impact.

Domestic Violence

Systemic issues across areas

Low Bystander Participation Despite the growing public awareness of violence against women, the issue still lacks significant

Culture of Hegemonic Masculinity, a term coined by R.W. Connell, is a set of practices that authorize male dominance over females and

improve when necessary in a situation of distress. Here, an important role lies for those who witness or have knowledge of offensive or violent behavior, whether in the context of terrorism, an emergency, and so on.

subordinate other men who do not fit the dominant white, male, middle-class, heterosexual standard. This dominant masculinity shapes norms, interpersonal relationships, gender

ability The justice
The lack of a
a way to spend

...to be more
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...ers, lack effective
...but their role.

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Patriarchy continually promotes regressive oppression, reproducing legitimacy among acts, whether manifested or institutionalized.

but it is above all a relationship of power, unequal power relations, whether in the family, in the labor market, in various political instances, etc". (Excerpt in Sacconi

Persistence of Gender Stereotypes Gender stereotypes are maintained through socialization and social control, which ensures that conformity prevails among other social roles that are not

By challenging social norms, you are outside the norms and become more permissive to suffer some form of persecution, which can be

MENTAL MODELS

Quick Solution Mentality Quick solution designs influence the ability to measure impact and make it difficult to articulate responses and also prevent

tolerance and blaming the
 ... for a government or a

...of all in the long term,

Therefore, the role of the spherical essentially is that it will have all forces on



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INTERNAL CANVA

REDE SIGO

The second part of the interview allowed us to outline an internal view of the network and its strengths and purpose for existing.

However, it is important to note that due to low participation (4 respondents), the process requires validation and may lead to future adjustments.

The proposal to summarize in a table contributes to a more assertive visualization of the proposal, with the aim of bringing together mutual understanding and facilitating sharing among members and new members of the network.

Para acessar ao canva clique no botão

[Canva](#)

Rede SIGO Póvoa de Lanhoso			
1. People: Who are we? Service for the Promotion of Gender Equality - SIGO - integrated into the Municipality's Education services, is a service for assistance, monitoring, referral and information for victims of domestic and gender violence.	2. Place: Where we came from? How we organize as a network? SIGO is a response from the Local Authority that is part of the National Support Network for Victims of Domestic and Gender-Based Violence. It began in 2013 and emerged from a proposal to offer active and preventive responses locally to the issue of domestic violence.	3. Purpose: What purpose bring us together? Protection of the most vulnerable and contribution to awareness.	4. Principles: What principles guide our existence and action? Establishing relationships and partnerships with an authentic character of humanity and helping others.
5. Values: What do we do that has the greatest value to people? Humanity, Respect, Privacy	6. Practices: What practices help us connect with each other in meaningful ways? Work meetings, Sharing of results, Activities within the scope of the week for equality.	7. Channels: How and where we communicate? By digital means, telephone and sporadic face-to-face events or meetings.	8. Together Journey: How can new people join and be a part of it? Through contact with the City Council that manages the partnership network, capable of establishing a relationship of mutual assistance between everyone.
9. Roles: What are the different roles that exist in the network? Based on a network of partner entities, this service is able to provide support in the areas of food, clothing and footwear, legal, psychological, psychiatric, medical and nursing, without having to resort to the NHS. This collaboration allows for a response to be tailored to the needs of each case or objective.	10. Resources: How do we secure our resources and existence? SIGO is an autonomous response, which without funding, supported by a network of partner entities, in addition to face-to-face assistance, has a permanent telephone assistance line, which allows it to provide assistance and support in emergency situations at any time and day, something that is the responsibility of the Municipality.	11. Power: How do we make and share our decisions together? Decisions are made jointly at public meetings and sessions. Some decisions are made jointly, others are made by the leadership team.	12. Harmonizations: What needs to be improved/finet/adjusted? Occasionally some testing/information actions or exchange of experiences. Continuous training for all network partners.

[Community Meeting Canvas](#) inspired by www.community-canvas.org

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ACTORS MAP

Other relevant tool that the study allowed us to design was to make the network of actors, their roles and main dynamics within the system visible.

We understand that visualization mechanisms help us to better understand the phenomena and all those who are part of it. In this way, this map that visualizes the actors can contribute to better external communication about the network, as well as help its actors to perceive themselves in their dynamics and roles.

To access the map click on the link

[Mapa](#)

→

A purple background with white text. The text is arranged as follows: In the top left corner, 'PROJETO DISTURB' is followed by 'Raquel Lima' and 'roliveli8@doct.ub.edu' on two lines. In the top right corner, 'SETEMBRO' is followed by '2024' on two lines. In the center, 'IMAGINE FUTURES' is written in a large, bold, sans-serif font. Below it, the phrase 'allow other areas to join forces on the issue of domestic violence' is written in a smaller, lowercase sans-serif font. In the bottom right corner, 'UNIVERSIDADE DE BARCELONA' is followed by 'Faculdade de Belas Artes' on two lines.

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IMAGINE FUTURES

Using the social design approach, **we invited 7 experts in social innovation and systemic thinking to contribute** with a vision of the future on the topic. This outsider's perspective **helps us to expand horizons of action and partnerships to address the phenomenon of gender violence and domestic violence.**

MOMENT 01
Align the visions and contexts of the present, with their interrelations, stimulating critical thinking from a global view of the problem

MOMENT 02
Encourage the search for information and contexts from the past that helped shape the present. And imagine possible futures considering the multiplicity of the problem

MOMENTO 03
Design possible paths to reach the points we aspire to in the future.

