GRAPHIC DESIGNER AS CURATOR:
FROM A PROBLEM-SOLVER TO A PROBLEMATISER

TANG TZE YIN JUNIE
SCHOOL OF ART, DESIGN AND MEDIA
2022

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School of Art, Design And Media

A thesis submitted to the Nanyang Technological University
in partial fulfilment of the requirement for the degree of Doctor of Philosophy

2022

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ACKNOWLEDGEMENT

To my supervisor, Associate Professor Danne Ojeda Hernandez, and co-supervisor, Associate Professor Sim Boon Yee Jasmine, thank you for your guidance and support throughout the preparation of this thesis. I would also like to thank the Thesis Advisory Committee members, Assistant Professor Michelle Lim and Assistant Professor Marc Gloede, for their advice and suggestions. Last but not least, to Ms Chia Hsiao Ching, who has supported all the administrative processes to this submission possible.

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Abstract

Problems brought on by climate change, ageing populations, and pestilences like COVID-19 are causing the world to become more troubled than it ever was, and notably, a small city-state like Singapore is not spared from these calamities. As more government and social agencies are seeking creative solutions to tackle these problems and improve people's quality of life through design, this study asks: How can Singapore's graphic designers interrogate their conventional role as problem-solvers and go beyond the use of Design Thinking, which is a problem-solving approach, to address challenging social problems that are deemed as "wicked"? In seeking an answer to this central questions through the lenses of theory and praxis, this research responds to the call of an interdisciplinary approach by the Ministry of Education (Singapore) and explores the concept of transdisciplinary advocated by the West to fulfil its aim of outlining an alternative role for local graphic designers, which would allow them to approach seemingly boundless socio-political challenges in a more sustainable manner.

In theory, this study is guided by a research framework that first traces the genealogy of design as a problem-solving activity, then explains how societal problems are "wicked" and why Design Thinking might not be sufficient for graphic designers to address them. Next, with more Singaporean institutions and organisations expressing a strong interest in an interdisciplinary approach in learning and practice, this study then turns to a different field – curatorial practice – in search of an alternative role. Paulo Freire's and Michel Foucault's theories on problematisation are explored, to shed light on a feasible transdisciplinary approach that graphic designers could adopt to effect positive social change. Acknowledging that the concept of "graphic designers as curators" is not new, this study investigates how it has been applied by various graphic designers to connect art and the public, establish the concept of "meta design-authorship", and expand graphic design practice. Through Christopher Alexander's theory of an unselfconscious and self-adjusting process, Critical Design emerges as a form of problematisation that allows graphic designers to keep cycling back to complex design problems critically and relentlessly via the medium of exhibitions. In

practice, the examination of three case studies – Metahaven, Supernormal and Atelier HOKO, outlines the characteristics of a new generation of graphic designer-curators based overseas, and more importantly, in Singapore.

All things considered, the findings of this study produce new knowledge that contributes to the field of graphic design by putting forward a revitalised notion of graphic designers as curators who are also problematisers in theory, offering a feasible transdisciplinary approach that allows local graphic designers to positively impacts to their communities in a sustainable manner.

Keywords: Graphic Designer, Problem Solver, Critical Design, Curator, Curatorial Project, Problematiser and Problematisation.

1. INTRODUCTION

Background: The Search for a New Role and Approach

After working as commercial graphic designer, an educator, and subsequently crossing over to the art industry in my role as an arts administrator, which involved organising art exhibitions and programmes at a Voluntary Welfare Organisation (VWO), one question has continually emerged: How can graphic designers confront their conventional role of generating solutions through standard design processes within the client-graphic designer framework, in order to contribute to society more meaningfully? This question is timely given the challenges that the world is now facing: ageing populations, pestilences, as well as climate change. As a small and young city-state, Singapore is not spared. While societies in this day and age struggle to overcome the challenges brought about by such complex problems, can graphic designers perform their social responsibilities and find fulfilment in their work through the conventional role of "problem-solvers" for their clients in a consumer capitalist environment? If not, what additional roles can they take on to address these complex social problems and improve people's lives sustainably?

Admittedly, this is not an entirely new question, as graphic design practitioners have been asking such self-reflexive questions for some time. In fact, the role of a graphic designer has been discussed extensively since the early 1990s in discourses that primarily aimed to shift away from the dated notion that graphic designers are nothing more than a mere service provider. One of the more prominent propositions was "The Designer As Author" by Michael Rock (1996), the founding partner and executive creative director of 2x4. Using the auteur theory as the basis of what makes a designer an author, the three main criteria discussed are namely that a graphic designer: 1) possesses technical proficiency; 2) develops a signature style; and 3) has a consistent vision and "interior meaning" (Rock 1996). Expanding the concept of design authorship beyond the framework of auteur theory, Rock believes that this definition can also include those who adopt the models of producing artists' books, writing and publishing texts on design, and working on projects of substantial scale and generating "self-referential statements ad comparisons" through the medium of graphic design (Rock

1996). To Rock, this notion of the "designer as author" would be helpful for designers as they re-evaluate their processes, expand their methods and conceptualise the details of a historical frame that can embrace all sorts of graphic discourse.

Rock's article has sparked many debates about the future role of graphic designers. One response to the article was by Ellen Lupton, an American writer, curator and graphic designer, who finds authorship "a provocative model" because it hangs on the sentimental longing of the writer (or artist) as "a singular point of origin" (Lupton 1998). Therefore, Lupton proposed the alternative notion of "Designer as Producer". With the turn of the new millennium, the role and responsibility of a graphic designer continued to evolve; this has been noted by Rick Poynor (2004), an acclaimed writer and critic on design, who argues that graphic design is at the heart of our visual culture in the 21st century, and that the invisible hand of the graphic designer is touching and moulding every part of our lives. In addition, believing that good design adds value to society, Steven Heller, a prolific author on graphic design, compiled different perspectives on the practice and responsibility that a graphic designer has socially, professionally and artistically both to oneself and society, and eventually coined the term "Citizen Designer". According to Heller (2018), one needs more than talent to be a citizen designer; he or she needs to be "professionally, culturally, and socially responsible for the impact of his or her design on the citizenry".

The next key development came when Tim Brown, a designer and Executive Chair of IDEO, started advocating "Design Thinking" to corporate leaders, urging them to think like designers as he believes doing so can transform the way they design processes, create products, develop services, and even strategies to grow businesses (Brown 2008, 1). Calling it a "creative human-cantered discovery process" that focuses on generating, testing and refining prototypes, Brown (2008, 1) describes Design Thinking as "a system of spaces" that is instrumental in differentiating the various types of related activities that form the continuity of innovation. When implementing Design Thinking, design projects will typically undergo the phases of "inspiration, ideation, and implementation", where "inspiration" refers to the circumstances that demand a solution, "ideation" calls for the generation, development and

testing of ideas, and "implementation" involves outlining the steps to market the solution (Brown 2008, 1). As ideas become refined and new directions are taken, projects are expected to loop back through all three spaces repeatedly, but more commonly the first two. By 2009, not only did Brown launch his book titled *Change by Design*, a book that advocates Design Thinking as an approach to solve business problems, he also turned to designers, compelling them to "think big" in a talk he delivered at a TED conference in the same year (Brown 2009). In his presentation, Brown argues that designers have a bigger role to play in society, and thus urges for a shift in adopting Design Thinking as a problem-solving methodology for them to tackle world problems and fulfil human needs more effectively. In contemporary thinking, Brown's argument seems to have concretised the role of graphic designers as problem-solvers.

Today, an updated definition of Design Thinking is available on IDEO's website: A creative problem-solving process that is human-centred, and helps re-orient organisations' focus on people, which will in turn improve services, products and operational processes (IDEO n.d.). Employing Design Thinking as a methodology involves understanding what is sought after from the user's perspective, and considering what is viable technologically as well as economically (IDEO n.d.). Since the process is fundamentally about accepting simple mindset shifts and solving problems by adopting a new point of view, it is an approach that all can use, including non-designers. The six phases of Design Thinking include: 1) framing a question; 2) gathering inspiration; 3) generating ideas; 4) making ideas tangible; 5) testing to learn; and 6) sharing the story (IDEO n.d.). The website's author emphasises that even though this updated methodology is described as linear steps, the process is not necessarily always as straightforward; when required, some of the steps can be repeated or one could jump from one step to another, but either way, Design Thinking is intended to "take you from a blank slate to a new, innovative solution" (IDEO n.d.).

Interestingly, back in 2005, American design critic Julie Lasky (2005, 145) had already argued that using the terms "problem" and "solution" as metaphors to describe the design process was outdated. Lasky explains that these terms are regarded as "legacies" from the

time when graphic designers felt that there was a need to convince clients that their works required highly specialised skills, or were even scientific in nature (Lasky 2005, 145). Also, another advantage of defining design as a matter of problem-solving was that it would appeal to clients who focused mainly on outcomes, and suggest that design can generate tangible results (Lasky 2005, 145). Another reason why the notion of "graphic designer as a problem solver" is popular is that it is an "analytical language" that educators can use in training students to solve problems when outside of a classroom (Lasky 2005, 145). To echo Lasky, if every problem has only one fixed solution, then this would suggest that graphic designers can also to solve all of the problems in the real world.

Lasky (2005, 145) also highlighted an important point: Anyone can be a problem solver. Be it a waiter trying to balance a stack of trays as he walks, or a biologist attempting to figure out why a cancer cell is capable of splitting beyond control, these professions require individuals to solve problems on a daily basis, so why should designers be alone in professing it as their specialty? With reference to the article "The Problem of Problem-solving", Lasky (2005, 147) suggests that it might be more appropriate to regard design as working with an "indeterminate state that needs resolving" instead of "a negative state that needs solving". This idea of an "indeterminate state" appears to fit the class of political and planning problems that cannot be resolved completely, and only "settlements" are attainable (Turnbull and Hoppe 2019, 321).

This "unresolvable" trait of societal problems has been formalised by design theorists, Horst W. J. Rittel and Melvin M. Webber (1973, 161) through the term "wicked problems", which they coined to acknowledge the fundamental problem where, in order to solve a complex problem, a problem solver first needs to understand the problem by gathering comprehensive information about it. However, without any criteria or framework to define or understand societal problems, particularly those that are ill-structured, Rittel and Webber (1973, 162) believe that the classical step-by-step problem-solving methodology, which employs phases such as to "understand the problems or mission", to "gather information", to "work out solutions", and to "synthesize information and wait for the creative leap", would

not be as helpful or applicable anymore. In complex situations, there is often a clump of interconnected problems that can only be untangled by implementing interdependent solutions; and thus, adopting a "problem-solving" approach would lead to a continuous and complex process with no conclusive answer found at the end of it (Braybrooke and Lindblom 1963, 54–55). Unlike mathematical or chess problems, the type of problems that designers need to address are often less straightforward, especially when the designed outcomes are expected to have a positive impact on people's lives.

Hence, the findings of a survey conducted by Icograda (2002) are not surprising: when asked if graphic designers were making a real impact in social issues, respondents opined that graphic designers are "successful in solving the needs of commercial clients, but fail in the sphere of social causes" (Lange 2006). In response to these findings, one of the most celebrated graphic designers in the United States, Milton Glaser (2006), suggested that the key reason might be that graphic designers do not understand the root causes of the social problems they seek to address. Sharing Glaser's point of view, Sharon Poggenpohl (2006), a graphic designer, educator and author, believes that many graphic designers see themselves as aesthetic or technical specialists and thus fail to respectfully attend to the audiences that they are communicating with. She also observes that many pro-bono works are created for "self-serving aesthetic and promotional reasons – whether [they] work or not is not a serious issue" (Long, 2006). While many of the survey's respondents acknowledged that graphic design cannot solve major social problems, they also seem to believe that graphic designers can still be successful at making a more sustainable impact in the world if they were to intensify their contributions to projects about social issues and by collaborating with others.

In the context of Singapore, there has been no lack of initiatives such as *Design for Good*, which champions the idea that good design can improve the quality of people's lives. A project initiated by the social enterprise and integrated creative agency, Make The Change*,* *Design for Good* aims to bring people together to collaborate and co-create ideas using the tools and opportunities provided by the initiative (Design for Good, n.d). Branded as "a marketplace that empowers communities", the products sold under *Design for Good* are

produced through inclusive collaboration and co-creation (Design for Good, n.d). This idea of creating design for social good is also aligned with the objectives of Singapore's Design Masterplan committee.

In May 2015, the committee was tasked by the then-Minister for Communications and Information (MCI), Dr Yaacob Ibrahim, to devise strategies that would help Singapore advance in becoming a design-centric city, where design can propel innovation and growth, and also improve people's lives (MCI 2016, 19). Envisioning Singapore as "an innovation-driven economy, and a loveable city", a total of five strategic thrusts with fifteen recommendations were compiled in MCI's report (MCI 2016, 14). With the future of Singapore's economy in mind, the first strategic thrust calls for an infusion of design into the national skillset, which involves introducing a series of design courses for students ranging from pre-school to secondary levels (MCI 2016, 28-29). The programme would require students to learn and use Design Thinking as a problem-solving approach to deal with projects that reflect real-world problems. To expand the role of design within the government sector, the committee also recommended that training in Design Thinking be provided to public servants along with related design courses, to foster human-centred design in policy-making and problem-solving (MCI 2016, 31-32). Clearly, problem-solving and Design Thinking are both vital aspects of the committee's recommendations to enhance Singapore's national skillset and improve the delivery of public services.

Notably, the report's fourth strategic thrust focuses on bringing design into the community to make Singapore a "lovable city" and an "endearing home" where people-centric services are available to local communities (MCI 2016, 37). To achieve this, some of the report's recommendations call for the local design community to promote design appreciation through outreach activities executed within communities, to encourage co-creation with citizens to improve living experiences through design, and to empower them with the necessary skills and knowledge (MCI 2016, 38). The task of providing easy access to design activities, public talks and exhibitions would require design practitioners "to curate and bring design experiences" to people as well as to facilitate the co-creation process among

residents, community and grassroot leaders when dealing with more challenging social issues such as creating inclusive and safer communities, as well as promoting active ageing (MCI 2016, 38).

These recommendations were likely in response to Singapore's rapid ageing population, which has resulted from our small city-state's higher life expectancies and lower fertility rates (Hirschmann, 2022). Some of the challenges this brings include slower economic growth because of a shrinking workforce, as well as an increase in social as well as healthcare expenses (Hirschmann, 2022). Hence, it has become a top priority for the local government to look into improving the lives of the elderly. On top of an ageing population, the physical and psychological well-being of many Singaporeans have also been affected by climate change, which has impacted areas such as public health, food security, water resources and more (NCCS, n.d.). While in recent years, digital and smart technologies may have offered some viable solutions to help manage these problems through better design, they still cannot completely address the needs of all citizens. For example, even though Singapore is ranked as one of the top digital societies in the world, with most its citizens agreeing that their basic and societal needs are being fulfilled, studies have found that many Singaporeans still feel that their psychological needs are not being adequately addressed (Baharudin, 2019). While acknowledging the convenience that these digital services bring, Singaporeans are also well aware of the negative impact that technology can have on their well-being (Baharudin, 2019).

When faced with such complex and inter-related problems, where the execution of one solution may potentially create another problem, the conventional role of a designer as problem-solver, where the designer would generate temporary creative solutions, seems insufficient. To address these problems sustainably, designers would also need to go beyond the role of the conventional "problem-solver" to carry out the recommendations made by the committee, which would include facilitating outreach activities, co-creation workshops and training programmes within the community. As mentioned earlier, as a creative problem-solving process, Design Thinking would be a useful methodology if graphic designers are

tackling clients' problems that are easily definable; however, Design Thinking might be inadequate when graphic designers are attempting to sustainably address complex problems, since these problems are "wicked" and have "no stopping rule", as described by Rittel and Webber (1973, 162). In light of these complex problems, the Design Masterplan committee's objective of improving the quality of life in Singapore by 2025, and possible release of a new Masterplan in 2026, the task of finding an alternative role and approach to help local graphic designers play their part and to make an impact in social appears to be a critical and urgent one.

In putting together this new role and approach, one could take reference from the updated concept of a "citizen designer". Heller and Vienna (2018, Introduction) share that the new citizen designer is one who will work for environmental activism and social justice; who is interested in problems that are not obvious and cannot be dealt with alone, and is willing to collaborate and contribute to collective efforts. His responsibilities are to "instigate, investigate and ingratiate", which involves researching and presenting facts in ways that are "accessible, enticing, and believable", to help others understand the issues at hand and make the necessary changes (Heller and Vienna 2018, Introduction). Besides having the ability to gather collaborators with the necessary skills and talents, the citizen designer also has to know how to invigorate others. While the "old citizen designer" has a tendency to come up with predictable solutions, the "new citizen designer" would choose unconventional options and be actively engaged with education (Heller and Vienna 2018, Introduction).

Coincidentally, the traits of a reformed citizen designer that Heller and Vienna describe match the description of a new generation of curators who emerged in the 1990s, as noted by the Irish curator-writer, Paul O'Neill (2012, 128). O'Neill observes that curators have started working closely with artists on projects and activities in ways that are conventionally associated with their own approaches, but within the fields of inquiry that they are personally concerned about. These curators see the potential in exhibitions to generate discursive processes, which can create "dialogical spaces of negotiation" among artists, curators and various publics (O'Neill 2012, 128). Such exhibitions are meant to be "durational" as they

are no longer designed as one-off events to display art. Instead, the priority is to allow the exhibitions to evolve gradually through accumulative processes of "engagement, interruption, and possibility" (O'Neill 2012, 128). Besides artists, the involvement of untrained art practitioners and people from different cultural backgrounds makes these exhibitions highly collaborative, and such exhibitions are not only produced to be discursive and dialogical, but also pedagogical (O'Neill 2012, 129).

In addition, this phenomenon happened to coincide with art historian and critic Claire Bishop's observation in 2006 that there had been "a social turn" in artistic interest, in the production of works collectively as well as collaboratively, where the social constituencies discussed or addressed in the art are also involved directly in its production. Such artistic practice is generally associated with labels such as "socially engaged art", "dialogic art", "community-based art", "collaborative art", "research-based art", and "littoral art", and involves "participatory intervention" by engaging with "experimental communities" (Bishop 2006). Bishop adds that this curatorial framework can be more compelling as socially engaged art projects can be both "open-ended" and "unframed", as well as a direct response to a curatorial premise (Birchall 2012). In such cases, the role of the curator has transformed from being a "carer of collections" to being a "carer of communities" (Birchall 2012). By placing the community at the forefront of the curatorial framework, the works produced are made socially relevant to their audiences.

The "social turn" in art and exhibition-making, as described above, has continued to expand since the 1990s, has certainly not been limited to the West. One notable example is the collective, ruangrupa, a Jakarta-based collective founded in 2000 by a group of artist-curators who match this description of being "carers" of their community. Initiated to address artists' needs for a space where they can focus on the process of analysis rather than the process of production, ruangrupa operates as a non-profit entity that presents artistic ideas to the public through exhibitions, workshops, festivals, research, publications and more. As they are known for their critical studies of the city's urban surroundings, the exhibitions and

workshops they organise have attracted many creative practitioners and have led to wide-ranging participation from the community.

While representing the new generation of artists who have emerged after the Reformasi, ruangrupa also strives to retain the representational reasoning of the past. This refers to the social conscience developed under the struggle against the Dutch's rule that formed the foundation of Indonesia's national aesthetics, in which narratives primarily revolve around the ideas of nationhood and people. When trying to profile ruangrupa, critic and curator David Teh (2016, 173) expresses that it was like describing an event that is "time-based, immediate and loosely structured; with a sense of purpose, yet more celebratory than agonistic". By producing and disseminating knowledge instead of objects, the collective continues to thrive in reaching out to global audiences by embodying both the roles of artist and curator. At this point, it is important not to be distracted by the "contemporaneity" of the collective; the collective should be seen as one in which artists make art and curators curate, where doing both is possible. While Teh (2016, 177) refers ruangrupa as "a spirit of curatorship" that would safeguard the artists' autonomy, he also believes that it is the audience, and not the artworks themselves, have become the fundamental object of ruangrupa's "curatorial care". Ruangrupa's merging of creative practices to advance artistic ideas and to care for people sets a good example, particularly for graphic designers who wish to take on the additional role of curators to become carers of their communities, by initiating curatorial projects to address complex social problems through design.

Another point of reference helpful in developing a new approach for graphic designers is Poynor's (2010, 116) discussion of two developments that have contributed to how design is re-evaluated in the design industry and education. The first development is Design Thinking, which has been popularised as a methodology that goes against traditional and widely-accepted notions in the design industry. Even though Design Thinking is claimed to be entirely human-centric, being intended to be instrumental in a more focused way, Poynor suggests that this only applies when a clients' business interests are concerned. Thus, he highlights a second development, Critical Design: an attitude that has emerged from the design practice intrinsically,

but yet has not been talked about as much as it should be (Poynor 2010, 116). In Poynor's view, Critical Design makes the idea of using "design as a form of speculative practice" more inviting than Design Thinking, which tends to get the better of designers and leads them to lose control of the design process, and instead focus on glorifying social causes in often questionable ways (Poynor 2010, 116).

Additionally, since this alternative role and approach have to gel with Singapore's local socio-political context, this research finds it necessary to consider the fact that the local authority has been pushing educational institutions like Singapore University of Technology and Design (SUTD) to make "Singapore a better nation by design" through interdisciplinary studies mainly because they can turn both national and international challenges into opportunities (Baharudin 2019). Notably, when Singapore was still struggling to manage the Covid-19 pandemic in 2020, the Ministry of Education (MOE) proposed preparing our students for the volatile environment by focusing on interdisciplinary learning (Ang 2020). Besides SUTD, the National University of Singapore (NUS) has also responded to the government's call by adopting an interdisciplinary learning approach in its curriculums, even if it means a major revamp (Ong 2020).

But as Singapore is embracing interdisciplinarity as an approach for its people to become better prepared for the post-Covid-19 environment, North American and Canadian scholars seems to believe transdisciplinary training is more relevant amid all the problems brought upon by the pandemic, climate change and ageing population.[1] To clarify the differences between the two approaches, interdisciplinarity primarily promotes "bidirectional interactions" between

[1] American educators and researchers argue that the pandemic has made clear that mono-disciplinary approaches to instructional communication are seriously flawed and thus propose the idea of learning that is based in the "transcendence of disciplinary boundaries" to address a shared concern. See: Miles C. Coleman, Susana C. Santos, Joy M. Cypher, Claude Krummenacher and Robert Fleming, "Lessons from the Pandemic: Engaging Wicked Problems With Transdisciplinary Deliberation," *Journal of Communication Pedagogy* no. 5 (2021); 164–171. In the same year, another group of Canadian researchers also suggest the deployment of a transdisciplinary approach in addressing wicked problems such as social injustice, climate crisis and more specifically, ageing population. See: Euson Yeung, Leslie Carlin, Samatha Sandassie and Susan Jaglal, "Transdisciplinary training: What Does It Take To Address Today's 'Wicked Problems'?", *Innovation and Education* no. 3 (2021): Article 4.

disciplines, while transdisciplinarity aims to fuse perspectives and knowledge from multiple disciplines to create a more holistic understanding of the problem, focuses on communication and relationship-building to revise, redefine and expand methods, ideas and theories, and promoting co-creation to modify and execute new and viable solutions (Yeung et al. 2021). According to researcher and educator Rodrick J. Lawrence (2010, 127), even though interdisciplinarity and transdisciplinarity do not have shared definitions, they are not mutually exclusive, and could even complement each other. Acknowledging that there have been a shift from mono-disciplinary to both interdisciplinary and transdisciplinary methods and concepts to address new complex problems recently, this research aligns with the government's directive, which stresses interdisciplinarity. Turning to Western theories, this research expands on the role of interdisciplinarity by proposing a new approach that draws on transdisciplinarity

To summarise, the new role and approach that this study aims to formulate – in which Singapore graphic designers become carers of their communities, move beyond client-centric processes and problem-solving methodologies to initiated projects that effect positive and sustainable social change – could draw from both the ideas of interdisciplinarity and transdisciplinarity.

1.2 Problem Statement, Research Questions, Aims and Objectives

The world is more troubled today than ever due to challenges brought about by complex problems such as ageing populations, climate change, and pestilences. From young climate activists taking to the streets demanding for swift action on climate change to world policymakers making national plans to prepare for an ageing population, and to global organisations stepping up to respond to the COVID-19 pandemic, people are evidently aware that they can play a role (whether individually or collectively) in making a difference in various capacities. Correspondingly, the level of social consciousness has grown in Singapore in recent decades, leading to higher awareness of social needs and a greater sense of urgency to find creative means to keep up with such changing needs (Wee 2009, 10). As a result, more local social agencies are turning to design to improve their services, and notably, the

DesignSingapore Council has also launched the Good Design Research (GDR) initiative in recent years to support designers and design entities to develop work that aims at tackling complex global and societal problems (DesignSingapore Council 2019).

As design has been traditionally focused on achieving clients' goals in practical ways, many graphic designers struggle to find satisfaction through this conventional role in a consumer capitalist environment, especially as they develop a deeper consciousness for the social and cultural role of design in society and are yearning to become more self-aware in their graphic design practice (Poynor 2010, 115). Also, Design Thinking has undoubtedly worked well as a design methodology that graphic designers adopt when responding to commissioned assignments within the designer-client framework, but as a step-by-step problem-solving approach, it might not be sufficient if graphic designers choose to develop self-initiated projects aimed at fulfilling their role and responsibilities as a citizen-designers, as this would involve tackling wicked problems that have no stopping points. Hence, it is timely to study how graphic design practitioners in Singapore could fit into the ten-year Design Masterplan's objective of sustainably creating social good for the local community, by confronting their conventional roles as service providers, who work purely for financial incentives, and overcoming the uncritical reliance of Design Thinking. This would involve discussing and formulating an alternative role and approach that a graphic designer can adopt, where they facilitate dialogues, co-creation and educational programmes that aim to address complicated social problems sustainably.

While many local graphic designers remain comfortable with their traditional role as problem-solvers and continue to rely on Design Thinking to generate short-term solutions, some creative practitioners (from both overseas and Singapore) have developed interdisciplinary and critical creative practices to problematise complex socio-political problems sustainably. This is the driving force behind this thesis, which seeks a more feasible role and approach that would allow local graphic designers to effect positive change in their communities sustainably. With that, this research aims to answer the central question: How can Singapore's graphic designers interrogate their conventional role as problem-solvers and

go beyond the use of Design Thinking, which is a problem-solving approach, to address challenging social problems that are deemed as "wicked"? Responding to this question involves breaking it down into the following sub-questions:

1) How are social problems "wicked", and why is the conventional role of a problem-solver and the adoption of Design Thinking inadequate in addressing them?
2) How have some curators acted as problematisers and used curatorial projects to problematise social problems sustainably?
3) What has the notion of "graphic designers as curators" meant in the past?
4) How can a new generation of graphic designer-curators act as problematisers and adopt Critical Design as an alternative approach to gain new and deeper perspectives on complex design problems?
5) What would be the characteristics of a new generation of graphic designer-curators, and how do they use Critical Design to develop self-initiated curatorial projects that sustainably problematise challenging social problems, such as an ageing population and climate change?

To answer these sub-questions in order, this thesis will first trace the genealogy of design as a problem-solving activity, to understand why the conventional role of graphic designers as problem-solvers, and the use of Design Thinking as an approach to address such problems, might no longer be adequate. Through relevant theories, this research then seeks to clarify why social problems are deemed as "wicked", before presenting some examples to explain why the use of creative proposals (as temporary solutions) to address such problems is not a sustainable approach. Next, it will discuss the evolving role of a curator (in both Western and Southeast Asian cultures) before studying the archival materials from exhibitions by some curators who have conceptualised and utilised curatorial projects as a means to problematise social problems sustainably. After which, this research will examine how the notion of "graphic designers as curators" has been explored in the past and to fulfill what purposes; to investigate how the notion of "graphic designers as curators" can be reinvigorated when applied to curatorial projects as a form of Critical Design to problematise

challenging social problems. Last but not least, this research will then study three case studies by analysing empirical data collected from a combination of primary and secondary sources, to identify the traits of a graphic designer-curator and summarise how some exemplary graphic designers have taken on the additional role of curators and developed self-initiated curatorial projects to address some of the more intricate human problems we face today, thereby practising Critical Design. Through the process of asking these sub-questions in order, this thesis reveals that local graphic designers can no longer stay comfortable with their traditional roles as a problem-solvers and rely on Design Thinking to solve new and more complex societal problems today. Following which, the study sheds light on an alternative role and approach based on the concepts of interdisciplinarity (relevant in Singapore's socio-political context) and transdisciplinarity (embraced by the West).

Accordingly, the findings gathered to answer the five sub questions will address the central question and in turn, fulfil the aim of this thesis, that is to demonstrate that Singapore's graphic designers can indeed contribute to the local community beyond their conventional roles as service providers in consumer capitalism when they take on different roles, like a curator's, and when they adopt an alternative approaches like Critical Design to critically and sustainably make continuous inquiries into some of the pressing complex problems Singaporeans face today.[2]

1.3 Research Significance and Limitations

With the proliferation of complex information and technology today, it is more critical than ever for design practices to keep up with these fast-moving changes and to possibly take on a more research-based direction as graphic design grows into a much-diverse and ever-evolving discipline (Marks 2015, Chapter 1). By researching on and proposing an alternative

[2] It is vital to note that it is not the purpose of this research to dismiss Design Thinking as an approach for graphic designers to solve problems, or to glorify the role of a curator in the social realm. Rather, this research aims to explore the feasibility of an alternative role and approach to address complex social problems beyond the client-designer framework.

role and approach that graphic designers could adopt, this research aims to shed light on new ways that graphic designers can tackle "wicked" social problems in the 21st century.

However, due to the outbreak of the coronavirus disease (COVID-19) in Wuhan, China in December 2019 that led to a worldwide pandemic situation at the beginning of 2020, the field research aspect of this project faced many challenges, particularly those posed by the necessary circuit breaker period that was enforced between April 7 to June 1 in the same year,[3] and the subsequent measures that were implemented to prevent the further spread of the virus in Singapore. With libraries and art institutions closed and many art and design events cancelled to fight the pandemic[4], the empirical data collected in this research's local case studies from 2020 to 2021 have been limited. Some field observations could not be carried out as planned since various events were not possible under the safe-distancing measures, such as in-person workshops involving public participation and events centred on enhancing audience experience. Therefore, compromises needed to be made with this research project, and flexibility exercised to adapt to the volatile COVID-19 situation.

The pandemic may have taken a toll on people's lives and livelihoods, but at the same time, it has also exposed weaknesses in global supply chains, directed our focus to mental health issues, made flexible working arrangements possible, and allowed digital connections to flourish (Tai 2020). From the lessons learnt, Singaporeans are recalibrating the way they live, work and play, and the local government, non-profits, businesses and the intellectuals can no longer monopolise public opinions and unilaterally impose their solutions to address these complex problems; an "all of us" approach needs to be devised (Ong 2022). Interestingly, while the city-state was in a standstill, a survey was conducted to gauge public

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[3] From April 7 to June 1, 2020, the Singapore Government implemented the circuit breaker measure to prevent the further spread of COVID-19 within the local community. Shops, schools, and workplaces were closed, and people were not allowed to interact with others outside of the same household. See Clara Chong's article, "Panic Buying, Circuit Breaker and Reopening: A Timeline of Singapore's COVID-19 Fight", published in *The Straits Times* on January 23, 2021: https://www.straitstimes.com/singapore/panic-buying-circuit-breaker-and-reopening-a-timeline-of-spores-covid-19-fight.

[4] With the implementation of the circuit breaker, arts institutions and libraries across the city-state closed their doors and art events like exhibitions were either cancelled or shifted online. See "Singapore's Cultural Sector Shuts Down, Braces for Surge of COVID-19 Cases", published in *Artforum* on April 7, 2020: https://www.artforum.com/news/singapore-s-cultural-sector-shuts-down-braces-for-surge-of-covid-19-cases-82694.

perceptions on which were the most essential jobs in keeping Singapore going, and "artist" was placed among the top most non-essential jobs by 1,000 respondents[5]. Even though the category "artist" was not clearly defined in the report, many graphic designers who attached themselves to the same field of work as creative practitioners were upset by the survey results.

With an "essential worker" being defined as one whose work is vital to meet the fundamental needs of human well-being and survival (Tai 2020), it is not a surprise that most people perceive that creative workers are non-essential. In such times of crisis, as the local design community grappled with challenges posed by the cancellation of contracts and falling demand for design work, it became apparent that the old way of practising design was in need of a review. However, problems can also provide opportunities for positive changes, and this research aims to be a timely response to help graphic designers reflect on their place in the world and to explore how their work can contribute to society more meaningfully and sustainably.

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[5] Commissioned by *The Sunday Times*, the survey was conducted to shed light on the role of workers who are deemed as "essential", and to reveal the discrepancies between their earnings and their value in society. See Janice Tai's article, "8 in 10 Singaporeans Willing to Pay More for Essential Services: Survey", published in *The Straits Times* on June 14, 2020: https://www.straitstimes.com/singapore/manpower/8-in-10-singaporeans-willing-to-pay-more-for-essential-services.

2. LITERATURE REVIEW

For this research, it is vital to review both conceptual and empirical literature. On one hand, theoretical knowledge is critical for creating a framework to understand how graphic designers have become widely associated as problem-solvers, and subsequently, to explore how graphic designers can become problematisers when playing the additional role of curators. In addition, conceptual literature can provide a lens that can be used to analyse and discuss primary data that has been collected via interviews and field observations. On the other hand, practical knowledge is vital in presenting a clear view of what has already been done in this area of research, which would not only help to identify gaps and position the argument of this research, but also serve as a reference for research strategies and methods.

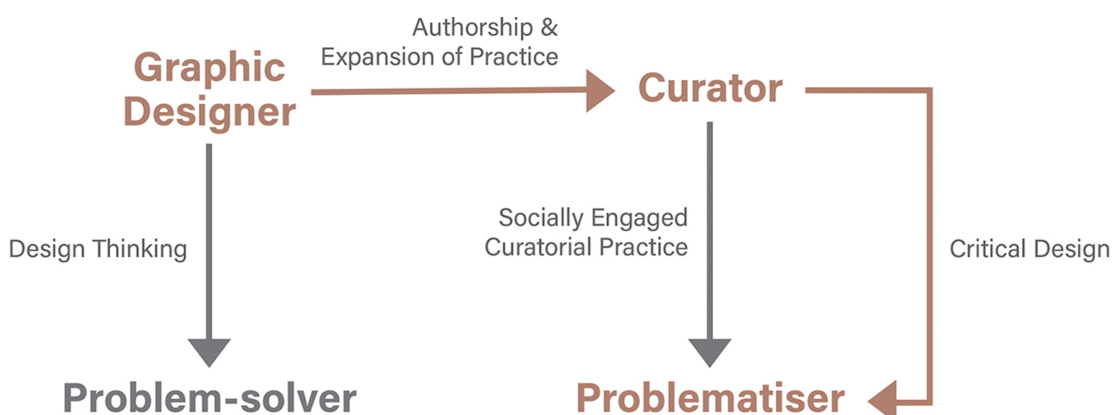

Fig. 1. Research Framework – Graphic Designer as Curator: From a Problem-Solver to a Problematiser, by Junie Tang.

To facilitate the research process, a research framework is developed (Figure 1) to investigate and find answers to the sub-questions that address the central question of "How can Singapore's graphic designers interrogate their conventional role as problem-solvers and go beyond the use of Design Thinking, which is a problem-solving approach, to address challenging social problems that are deemed as wicked?". The same framework is also used to identify and review the existing literature under the following five categories: 1) Graphic Designer as Problem-Solver: exploring the definition of "problem-solver" through a survey of various theories about problem-solving and how it is related to Design Thinking; 2) Curator as Problematiser: unfolding the evolving role of a curator and explaining how the

method of problematisation is connected to the “social turn” in curatorial practice; 3) Graphic Designer as Curator: using theories and existing research to discuss the role of graphic designers as curators; 4) Graphic Designer as Problematiser: elucidating the definition of “problematisation” through critical theories and how problematisation can be connected to Critical Design as a design methodology.

As mentioned earlier, this research finds it beneficial to consider the concept of transdisciplinarity favoured by the West in the development of a new-system approach without compromising its alignment with the government’s overarching direction of interdisciplinarity. For that reason, though many of the theories discussed under the four categories stem from a Western context, they are helpful in developing a transdisciplinary approach to address wicked problems that tend to have no boundaries.

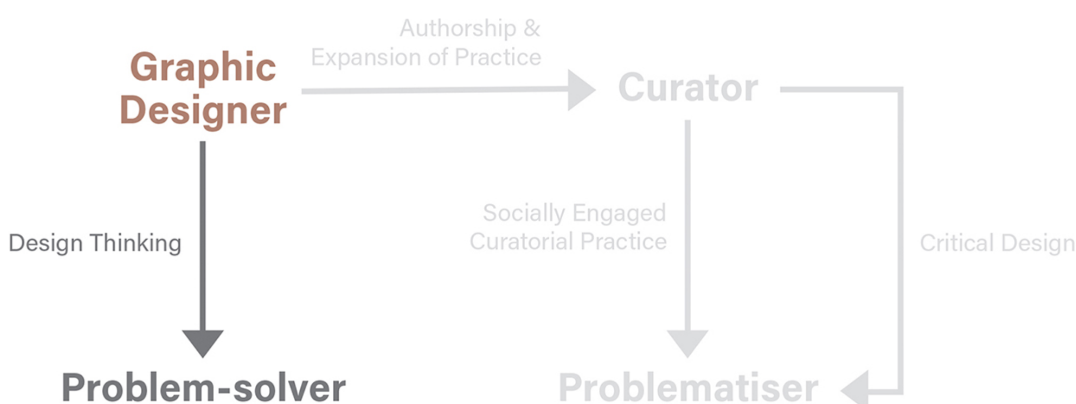

Fig. 2. Research Framework – Graphic Designer as Problem-Solver, by Junie Tang.

2.1 Graphic Designer as Problem-Solver

As the first sub-question asks, “How are social problems wicked, and why is the conventional role of a problem-solver and the adoption of Design Thinking inadequate to address them?”, the texts reviewed here will include theories that clarify the definition of a problem-solver, connect the idea of problem-solving with Design Thinking, and discourse on why the graphic designer’s traditional roles and methods are no longer adequate in addressing “wicked problems” today. With the Design 2025 report emphasising the importance of Design Thinking among local institutions and organisations seeking to solve some of the most

pressing problems today, the literature reviewed under this category is critical in examining the feasibility of Design Thinking in helping local graphic designers to develop social-related projects beyond the client-designer framework.

When trying to understand what a problem is, who is a problem-solver, and how to problem-solve, theories from "On Problem-Solving" by Karl Duncker (1945, i-113), *The Complete Problem Solver* by John R. Hayes (1981) and "Problem-solving" (1996) by Richard E. Mayer and Merlin C. Wittrock (2006, 287-303) are very helpful from a psychological perspective. Published in the *Psychological Monographs* in 1945, "On Problem-Solving" discusses the dynamics and structure of problem-solving processes, which involve productive thinking, by asking the following questions: "How does the solution arise from the problem situation?" and "In what ways is the solution of a problem attained?" (Duncker 1945, 1). In a simplified manner, Hayes' theory offers a way to understand the concept and practice of problem-solving via a process of representing and searching for solutions. Hayes relates problem-solving to the acts of creativity, and highlights that problem-solving is dependent on how well our cognitive processes work together through the process of representation, search[ing], [activating one's] memory and decision-making (Hayes 1981, 199). His idea of using cognitive processes as the basis of creative acts aligns with the definition of problem-solving given by Mayer and Wittrock, who explain that "problem-solving is cognitive processing" for the purpose of reaching a goal when there is no direct solution available to the problem-solver (Mayer and Wittrock 2006, 287).

With the definitions of problem and problem-solving now clarified through the lens of psychologists, it is critical to understand how the process of problem-solving is related to the practice of design. Some of the earliest works that refer to design as a form of creative problem-solving include Louis H. Sullivan's article "The Tall Office Building Artistically Considered" (1896, 403-409) published in *Lippincott's Magazine*, John E. Arnold's *Creative Engineering* (1959) and Herbert A. Simon's classic, *The Sciences of the Artificial* (1969). Known for coining the phrase "form follows function", Sullivan draws from his experiences as an architect and notes that functional form can be a solution to design problems (Sullivan

1896, 406-408). When considering the question, "What is creative engineering?", Arnold (1969, 66) sees problems that arise from complex human behaviour and thought as "creative problems" that cannot be easily solved through the application and manipulation of equations. Hence, he urges engineers to become "creative problem-solvers" by expanding their skills and knowledge beyond the scope of "draftsmanship, physics, and manufacturing" (Clancey 2017, 9). Simon (1969, 111) makes the connection between "the science of design" and problem-solving when he defines a designer as one who plans and takes action to change problematic situations into favourable ones; in addition, Simon also describes design solutions as a series of "sufficient" (rather than "necessary") actions that "lead to possible worlds satisfying specified constraints" (Simon 1969, 124).

To understand how and why Design Thinking has become such a popular design methodology, being adopted both by designers as well as non-designers to solve ill-defined problems, it is necessary to trace its history to when the new "Design Methods Movement" first started. In the 1960s and 70s, this movement started via a series of conferences, the most significant being known as "This Workshop" (Cross 1993, 16). Held in London in 1962, it is also known as the very event that introduced design methodology as a field of study. However, by the 1970s, design methodology was dismissed by some of the field's early pioneers due to "a lack of success in the application of scientific methods to design" (Cross 1993, 16). One of the fundamental pitfalls was raised by design theorists and university professors, Horst Rittel and Webber (1973, 160), when they referred to planning problems as "wicked problems" as they believed that such problems do not respond well to the techniques of engineering and science, which can only tackle "tame" problems.

Rittel and Webber (1973, 155-169) formally introduced the idea of "wicked problems" in a paper titled, "Dilemmas in a General Theory of Planning". According to C. West Churchman (1967, B141), by using the adjective "wicked", Rittel has highlighted the evil nature of a specific class of social system problems; problems that are ill-structured. In addition, Rittel states that such problems arise "where information is confusing, where there are many clients and decision-makers with conflicting values, and where the ramifications in

the whole system are thoroughly confusing" (1967, B141). Hence, any recommended solutions implemented could likely worsen the symptoms of the societal problem in question.

However, Rittel and Webber's idea of calling complex policy-related problems "wicked" has been rejected in recent times by public policy scholars, Nick Turnbull and Robert Hoppe (2019, 318). Turnbull and Hoppe argue that to make such a distinction between "wicked" and "tame" problems would be drawing from an outdated and unjustified notion from natural and social sciences that has merely been revived in the field of planning and policymaking via the paper "Problematising 'Wickedness': A Critique of the Wicked Problems Concept, from Philosophy to Practice" (Turnbull and Hoppe 2019). That said, they acknowledge that Rittel and Webber's article has led to critical reflection among a group of rationalistic planning scholars with regard to their planning model (Turnbull and Hoppe 2019, 318). Despite criticism, this classic text is still valued as an example of "political intervention in scholarship" that has prompted researchers to reflect on their models for planning critically and also helped to re-engage policy scientists with the work of scholars who question "the primacy of goal-setting and the solutions focused of systems planning" (Turnbull and Hoppe 2019, 318).

Richard Buchanan (1992, 15), an educator and the editor of *Design Issue*, finds Rittel and Webber's definition of wicked problems strikingly similar to what designers face in unknown situations. In his essay, "Wicked Problems in Design Thinking", Buchanan points out that the underlying issue in design practice is the "relationship between determinacy and indeterminacy in design thinking" (Buchanan 1992, 15). The step-by-step model of Design Thinking suggests that the kind of problems designers deal with are determinate and have conditions that are well-defined, and as long as the designer can identify those conditions accurately, a calculated solution can be obtained (Buchanan 1992, 15). However, design problems can also be "indeterminate" and "wicked" since design does not have a specific "subject matter of its own apart from what a designer conceives it to be" (Buchanan 1992, 16). Based on Buchanan's observation back in the 1990s, design was growing "from a trade activity to a segmented profession to a field for technical research and to what now should be

recognised as a new liberal art of technological culture", and designers were driven to integrate knowledge by combining design practice with theory to fulfil new commercialised purposes. Thus, Buchanan highlighted that it was vital to "turn to design thinking for insight into the new liberal arts of technological culture" (Buchanan 1992, 5-6).

In 2008, Design Thinking was formally introduced to businesses, educational institutions as well as society at large by Tim Brown with the essay "Design Thinking", published in *Harvard Business Review* (2008*)*, followed by his book *Change by Design* (2009). In the book, Brown writes that Design Thinking was based on the skills that designers have acquired over decades through their work, which has aimed to fulfil human needs with the technical resources available and while working within the pragmatic constraints of businesses (Brown 2009, 18).

Almost a decade after businesses and society learned about Design Thinking, Jeanne Liedtka, an American strategist and professor of Business Administration at the University of Virginia's Darden School of Business, co-authored the book *Design Thinking for The Greater Good* (2017). Liedtka also expressed her views through her article, "Why Design Thinking Works" (2018). A strong advocate for Design Thinking, the aim of her book is to provide a set of tools that are "better suited to the complexity and messiness of the challenges that social sector innovators face" (Liedtka, Salzman and Azer 2017, 4). In her article in *Harvard Business Review*, Liedtka also frames her argument by discussing several "human tendencies" that could hinder the growth of innovation and explains how the tools and steps outlined in Design Thinking methodology can help overcome these tendencies (Liedtka 2018). In contrary to Brown and Liedtka's confidence in Design Thinking, the article "The Divisiveness of Design Thinking" (2018) by John Kolko, a partner at Modernist Studio and founder of Austin Center for Design, proves that not everyone shares the same positive views about Design Thinking in recent times.

In the context of graphic design, Poynor (2010, 116) believes that while Design Thinking was devised to confront design's traditional practices and ideas, this has primarily been to fulfil clients' commercial interests. Furthermore, while Design Thinking appears to

empower users and inspire more functional design solutions, it does so without revealing the real motives of these solutions. In light of this, Poynor's notion that the role of a problem-solver and the use of Design Thinking as a problem-solving methodology are inadequate in addressing wicked social problems needs to be addressed; an alternative role and approach for graphic designers shall be discussed in the following section.

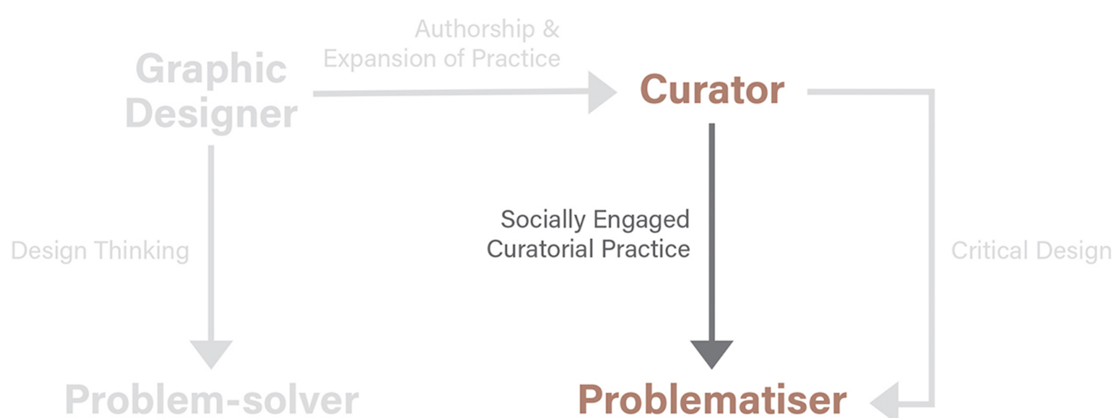

Fig. 3. Research Framework – Curator as Problematiser, by Junie Tang.

2.2 Curator as Problematiser

Responding to the governmental calls for an interdisciplinary approach in solving complex problems, this thesis studies the role of a curator and asks the second sub-question: "How have some curators acted as problematisers and used curatorial projects to problematise social problems sustainably?" To answer that, it is necessary to trace the history of the term, "curator". According to Adrian George (2015, 2) the Deputy Director and Senior Curator of the United Kingdom Government Art Collection in London, the word "curator" had initially referred to caregivers of lunatics or minors. Eventually, the meaning of the word "curator" evolved to mean a "keeper" of antiquities, art and objects that were connected to the "development of collecting as a pastime of the rich" when the wealthy began to create rooms within their living spaces to flaunt and store their collections (George 2015, 2).

As the definition of a curator continues to change in recent decades, Jessica Morgan studies and discusses this evolution in her article, "What is a Curator?" (2013). Paul O'Neill does the same in his essay, "The Emergence of Curatorial Discourse From the Late 1960s to the

Present" in the book *The Culture of Curating and The Curating of Cultures* (2012, 9-49), as well as his essay, "The Curatorial Turn: From Practice to Discourse" (2007, 13-28). While these authors provide a holistic discussion on the concepts of "curator as author" in the late 1960s to early 1970s, the concept of "curator as global author" which emerged in 1989, and the concept of "curator as artists" from the 1990s, they have left out discussing the role of a curator in the social realm.

Therefore, to explore how the role of a curator can also include being an agent of social change, essays such as "The Social Turn: Collaboration and Its Discontents" by Claire Bishop (2006, 178-183), and "Socially Engaged Art in the 1990s and Beyond" by Michael G. Birchall (2012) would be helpful. Bishop (2011, 217) wrote about her observations on the social turn in contemporary art when artists began to create collective projects through dialogues and collaborations to effect constructive social change between the mid-1990s to early 2000s. Birchall (2012) emphasises that it was curators who made these practices known to the art world, and not only did they do it via the means of exhibition-making, but also through their writings. Some of the curators identified as the ambassadors of socially engaged art and "responsible for the canonisation of the discourse" are Maria Lind and Mary Jane Jacob (Birchall 2012).

The shift of curatorial practice into the social realm is further discussed in the essay "Shifting the Exhibitionary Complex", where art historian and critic Terry Smith (2012, 868-869) discusses three trends in contemporary art that have made profound impacts on the field of curatorial practice. One of these trends is characterised by the conscious shift away from museums and biennials as the chosen disseminative method. Naming them "prosumers", the essay explains how independent curators choose to work with alternative settings and first-hand interactivity that are ever-changing and experimental to create social change. (Terry 2012, 868-869). Additionally, the role that a curator plays in the social realm was also discussed among renowned curators, namely Nicolas Bourriaud, Enrico Lunghi, Paul O'Neill and Beatrix Ruf, in a symposium titled, "Rotterdam Dialogues: The Critics, The Curators, The Artists". By asking the question, "Is the curator per definition a political animal?", Ruf (2010, 91) expresses that the role of a curator is one that creates "freedom for things to

happen" within "a societal context", where not only the artists' needs are attended to, but the audience's as well.

Acknowledging that the rise of socially engaged art and critical exhibitions is not exclusive to the West, this research also examines local art historian and curator Seng Yu Jin's essay, "Cultural Wars in Southeast Asia: The Birth of the Critical Exhibition in the 1970s" (2017) to understand how the influence of social realism and the New Left in student movements have impacted the production of critical exhibitions and redefined exhibitions as "vehicles of resistance and change for common people" (Seng 2017, 230).

Before diving into theories on problematisation to understand how some curators have, albeit unknowingly, taken on the role of problematisers to effect social change through their self-initiated curatorial projects, it is vital to understand what is a problem from the philosophical perspective to highlight the value of using problematisation as an approach to deal with problems. As mentioned in Section 2.1, societal problems are described as "wicked" by Rittel and Webber because they are ill-structured, but since various scholars in the fields of philosophy and the social sciences have criticised the concept of "wickedness" as flawed and incoherent, Turnbull and Hoppe (2019, 362) have proposed to replace it with "an index of degrees of problematicity". Hence, to address more complex problems, the first step would be to develop a process to structure them, and notably, it is this act of structuring that calls for political mediation to establish an interim arrangement as a "partial answer" to address the problems (Turnbull and Hoppe 2019, 329–330). By problematising familiar or unfamiliar problem frames, Turnbull and Hoppe (2019, 330) believe that unstructured problems could gain a provisional structure through a multitude of "repressing" answers to the problematic situation, and this provisional structure can create opportunities for further inquisitive probing and even political articulation. So, instead of deeming complex societal problems as "wicked" and unsolvable, it is perhaps helpful to refer to the criteria proposed by David Dery (1984, 21-27) to define "good" problems as pragmatic opportunities to effect positive changes in existing problematic situations, bearing in mind the requirements or feelings of a larger group of stakeholders.

Since each stakeholder perceives the same problem differently, "powering" and

"participation" are necessary to negotiate the "relational distances" between each party and the problem (Turnbull and Hoppe 2019, 323). Such distances may shift when negotiated directly or indirectly via the positions the stakeholders take in relation to the problem, as well as their actions (Turnbull and Hoppe 2019, 323). Even though this "relational logic" is discussed in the context of policymaking, the ideas of "powering" and "participation" in planning could also explain why some curators are able to create positive social change in specific communities through their durational curatorial efforts.

This need to establish a process to structure complex societal problem points to the notion of problematisation, often found in the writings of Paulo Freire, a Brazilian educator and philosopher who was known for advocating critical pedagogy. In Freire's book, *Pedagogy of the Oppressed* (1970), he writes that humans, as conscious beings, are gifted with creative minds that allow us to do something when caught in a "human situation", which refers to a situation that is neither a condition challenged by inescapable facts nor a circumstance that is material (Crotty 1998, 149). Moreover, Freire argues that it is only by confronting themselves in an unpleasant situation, and making the best out of it, that human beings can truly experience freedom (Crotty 1998, 149). In his opinion, the only viable approach in such a situation is to adopt the method of "critical and liberating dialogue" when interacting with those who are mistreated, and which can be carried out at any stage of their fight for deliverance (Freire 1970, 65). In Freire's words, the notion of problematisation (also referred to as "demystification") can be understood as a "pedagogical process that presents the concrete, existential situation of those involved in the dialogue as a set of problems" (Crotty 1998, 155). Therefore, to problematise (as opposed to problem-solving) requires one to connect an entire community to the work of organising real and existential situations into symbols, to help them gain critical consciousness and motivate them to change the way they deal with social forces (Freire 1965, ix). Lastly, Freire (1970, 92) highlighted that it is impossible for dialogue to occur until the dialoguers undertake "critical thinking", which he refers to as thinking that recognises that there is an inseparable unity between people and the world, while acknowledging that dichotomy will always exist. Essentially, it is also a kind of thinking

that corresponds to action, while also being constantly concerned about the risks involved.

French philosopher Michel Foucault also analysed and developed the notion of problematisation, and it is not difficult to see how he has applied it as a methodology in his later writings, namely *Fearless Speech* (1983) and *The Uses of Pleasure* (1986). In *Fearless Speech*, Foucault (1983, 171) explained that his use of the word "problematisation" is to analyse and question "how and why certain things (behaviour, phenomena, process[es]) became a problem". In the book *Use of Pleasure*, Foucault was positioning the idea of problematisation in a larger theme of tracing a "history of truth" (Foucault 1986, 11). Foucault argues that the process of problematisation can lead to rejuvenation, and that through problematisation one could condition the relationship with himself, and from it, gain insights into the way he worked "by means of different or successive fragments" to pursue this history of truth (Foucault 1986, 11). So, problematisation is neither about understanding notions or behaviours, nor about dissecting societies and their beliefs; instead, it is about analysing the processes of "problematisation through which a being offers itself to be, necessarily, thought – and the practices on the basis of which these problematisations are formed" (Foucault 1986, 11). Thus, problematisation can be used to address some real and specific situations in the world (Foucault and Pearson 1983, 173). Additionally, Foucault's notion of problematisation comprises a process that is capable of turning a given situation into a question, and transform a set of challenges into problems so that many responses can be generated (Foucault 1984, 389). In essence, the process of problematisation becomes the response that addresses the problematic situation in itself (Foucault and Pearson 1983, 172).

Both Western and local texts are considered here in discussing how the role of curators (regardless of whether they are based in the West or in Singapore) can evolve when their responsibilities shift from being primarily carers of institutional art collections to being carers of communities, particularly when curators begin to problematise social problems through curatorial projects focusing on socially engaged art projects. If curators can play an essential role in developing curatorial projects to create conditions that allow people to gain a clearer view of their challenging situations, and to also take action to overcome them, then it is plausible to build an

argument that graphic designers can take on the additional role of a curator and contribute to society meaningfully beyond the traditional role of problem-solver.

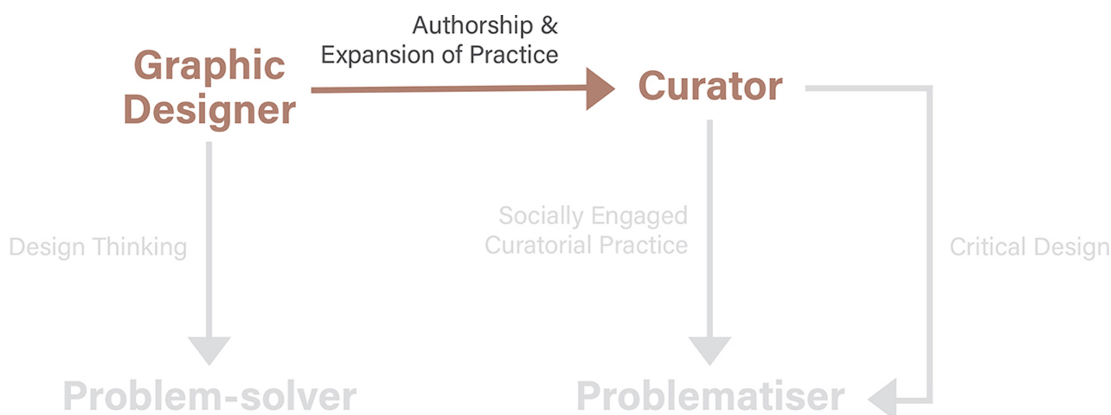

Fig. 4. Research Framework – Graphic Designer as Curator, by Junie Tang.

2.3 Graphic Designer as Curator

Since many graphic designers have already taken on the additional role of curators in the past, the third sub-question asks: What has the notion of "graphic designers as curators" meant in the past? One text relevant in answering this question is Norman Potter's classic, *What is a Designer: Things, Places, Messages* (1969), which defines the functional roles of a designer by asking "What is a designer?" Potter further clarifies this definition in the article, "Is a Designer an Artist?" (Potter 1969, 15-20). Potter (1969, 20) believes that even though many designers recognise that there are many commonalities between graphic design and the fields of philosophy, science, medicine, and fine arts, and are ready to display some levels of artistry in their work, perhaps one should not attempt to unite the differing standards that co-exist in any specific profession. However, with regard to graphic designers, Rick Poynor argues that those who are critical with their practice would believe that the role of design (in society) "should be broader and more inquiring than simply serving the processes of manufacturing, promotion and consumption" (Poynor 2010, 120). Even though a critical viewpoint is the foundation of any intelligent design process, Poynor noted that there are always some graphic designers who would take a step further. For example, since the 1990s, some graphic design theorists sought a more substantial degree of autonomy for graphic designers by proposing varying types of roles that they could play beyond the service provider framework. Some important texts that discussed such

possibilities include Michael Rock's "Designer as Author" (1996) as well as Ellen Lupton's "Designer as Producer" (2004).

First published in *Eye* magazine in 1996, Rock wrote in his article about "graphic authorship" and its implications when the term was gaining popularity within the graphic design community (Rock 1996). To Rock, studying this notion was essential for designers to reflect upon their work processes and to expand their design methods, to develop "a historical frame to incorporate all forms of graphic discourse" (Rock 1996). A couple of years later, Lupton introduced the notion of "Designer as Producer" (2004) as an alternative to "Designer as Author". Using Walter Benjamin's 1934 paper, "The Author as Producer", as a basis for her argument, Lupton believes that designers do not have to be authors when taking charge of "the content and social function of their work"; instead they could become producers who "bring together a broad range of skills – writing, directing, acting, cinematography, editing, and so on – in a work whose authorship is shared" (Lupton 2004). With a similar objective of reforming graphic design practice, the term "Citizen Designer" was then coined by Steven Heller and Véronique Vienna when their book *Citizen Designer: Perspective on Design Responsibility* was published in 2003. In the updated edition, Heller felt it was safe to argue that designers "have become more engaged as citizens and more conscious of the roles they play in culture, politics, and society, both serving and creating" (Heller and Vienna 2013, Introduction). In 2006, designer-artist and educator Katherine Moline, produced a paper in response to the calls for a return to design authorship, which was supported by art theories, specifically relational aesthetics. The paper highlights the omission of experimental design in discourses concerning the role of "designer-as-author" versus "designer-as-service-provider", and proposes that design has to "first reflect on its own products and practices" (Moline, 2006, 57-66). Even though Moline's disapproval of Critical Design contradicts my proposal for using it as an alternative approach to problematise complex problems, her work provides an opportunity to weigh up criticisms and discuss how to overcome them.

As the role of a graphic designer continues to expand, this research focuses on the notion of "Graphic Designer as Curator" and acknowledges that since the idea is not entirely new, empirical literature that covers similar grounds should also be analysed. Between 2011 to 2014, a research

project known as *Graphic Design, Exhibition Context and Curatorial Practices* was initiated and carried out by the Faculty of Design and Art of Free University of Bozen-Bolzano. The author, Giorgio Camuffo, and appointed researcher, Maddalena Dalla Mura, studied and recorded their findings (in the format of a blog) about the trend of graphic designers' involvement with galleries; which included not only participation in art exhibitions, but also in "shows that are centred on graphic design – as object, subject and language of exhibiting – as well as exhibitions promoted and curated by graphic designers" (Camuffo, n.d.).

In June 2012, the Graphic Design, Exhibiting, Curating (GEC) conference was organised as part of the research project and the proceedings from the conference were compiled and published as a book that bears the same title (Camuffo and Mura 2012). The objective of the conference was to gather graphic designers and curators who were actively engaged in exhibition-making and exhibitions to share and compare their perspectives (Camuffo and Mura 2012, 32). Through presentations and panel discussions, the assembled speakers exchanged views on various questions: How can exhibitions be used as a medium to produce and disseminate content, and who does the content address? How does exhibiting and curating relate to the conventional practice of graphic design? And finally, what kind of critical discourse of and on graphic design is constructed around and through exhibitions? The conference confirmed that there was a growing interest among graphic designers in curatorial practice, the exploration of space and the potentiality of exhibitions, and that the phenomenon was "highly stimulating and certainly to be welcomed" (Camuffo and Mura 2012, 34). However, Camuffo and Mura (2014, 34) also acknowledged that some of the papers presented "still seem open to questions", and the definition of how curation can be regarded and practised as graphic design is still up in the air. Even though the parallels drawn between curation and graphic design were generally broad, the achievements of the participating designers were certainly noteworthy (Camuffo and Mura 2012, 34).

In the book *The Designer as...: Author, Producer, Activist, Entrepreneur, Curator, and Collaborator: New Models for Communicating* (2013), the author Steven McCarthy discusses how graphic designers could expand their roles as curators with the purpose of establishing an authorship. McCarthy views authorship as an attitude or approach that is not limited to any

particular medium and that curatorship is simply one of many modes of communication. McCarthy (2013, 48-56) noticed that the theories of creating authorship in graphic design surfaced as early as the mid-1990s alongside several important projects that justified the idea. In the journal article "Curating as Meta Design-authorship" (2006), McCarthy proposes the idea of a "curated exhibition as an act of meta-authorship", where "the concept and organising principles of the exhibit itself is a work of design-authorship through the meta act of curating". The definition of the term "meta-authorship" is further examined in McCarthy's book published in 2013, where a total of eight exhibition case studies are brought together to discuss the binary role of graphic designer-curators as meta-authors (McCarthy 2013, 203). McCarthy writes that the designer-curators' curatorial work in art and design exhibitions can be regarded as authorial because of their desire for intellectual ownership and their ability to establish relationship between the work and the audience. Recognising that the exhibits of graphic design authorship are new and few (then), McCarthy believes they bring both opportunities and challenges (McCarthy 2013, 203).

Some years later, in the twenty-fourth edition of *Graphisme en France*, Yves Robert, the Director of the Central des Arts Plastiques, wrote in the introduction that the texts gathered in the book aimed to address the many questions that emerged since graphic design was introduced into the context of galleries and museums in the 1990s (Brosseau and Mura 2018, 3). Specifically, in the essay "The Relationship of Graphic Designers with Exhibiting and Curating", Mura (2018, 30) observed that after having to be involved in self-initiated editorial projects between the 2000s and 2010s, graphic designers had begun participating in and making exhibitions, which eventually became a new platform for their expansive practices. Mura's essay suggests that the turning point in the relationship between galleries and graphic designers came in 2006 when Slovak graphic designer Peter Bil'ak curated an exhibition known as *Graphic Design in the White Cube* at the Moravian Gallery in Brno.

In the essay accompanying the exhibition, Bil'ak (2006) began by highlighting that placing works of graphic design within the white cube space is a problem, as it effectively detaches them from real life. Contrasting curatorial work with the tradition of graphic designers simply acting as service providers for paying clients, Bil'ak invited designers who have executed self-initiated

projects as part of their practice and specifically those who have no problems moving between the realms of design, art, writing, music and theatre to participate in this exhibition (Bil'ak 2006). So, instead of placing work created for the real world into the exhibition space, Bil'ak proposed to make "the gallery conditions the context for the work" (Bil'ak 2006). As a result, a total of nineteen graphic designers (including collectives) were commissioned to create posters that announced the exhibition, and then copies were made and hung around the city to promote the event. When the audience visited the gallery, what they found was the original project brief as well as documentation of the design processes for those posters (Bil'ak 2006). Even though the exhibition was criticised as "far from engaging", the value of Bil'ak's project lies "in the discourse he produced around and about it" (Mura 2018, 30).

The trend of graphic designers engaging in exhibitions seems to have grown in the 2010s, but these graphic designers have not necessary aimed to establish authorship. This new generation of graphic designers (from Europe in particular) were pushing the boundaries of their practice via the concept of "criticality" or "critical practice", and the exhibition "Forms of Inquiry: The Architecture of Critical Graphic Design" is known to have opened the way to circulate this practice within their field (Mura 2018, 30). The exhibition became a platform to discuss concepts that are loosely linked to "criticality", some of which include design as research, design as inquiry and investigation, speculative design, and relational design (Mura 2018, 30). Not only did the exhibition grow as it reached different European venues, it also became part of an extensive programme that included conferences, publications and a reading room that created physical as well as discursive spaces for participating graphic designers to reflect and have dialogues with other practitioners from neighbouring fields like architecture and art (Mura 2018, 30). It is within such a framework that the organisation of exhibitions "came to be discussed as itself a form of critical practice" (Mura 2018, 30). Similar views about using exhibitions as alternative means to practise design came from Ramia Mazé in the article "Critical of What?" (2009, 378-397), where she writes that the formula of "exhibition plus book plus event" could also be regarded as a form of critical design practice. However, Mazé notes that the precise concepts of critical practice and criticality have neither been carried out consistently within the graphic design

community, nor did they "evolve into a cohesive mode of practice or methodology" (Mura 2018, 34). Notably, Poynor (2008) has noticed that those who embrace the ideas of criticality are the ones who want to separate themselves from the authorship argument, as they would rather emphasise their roles as collaborators and participants as well as the value of process over outcomes, and re-evaluate the methods of distribution.

With the shifting from exhibiting design to exhibiting and curating as design, the engagement of critical graphic designers with exhibitions as a medium of communication is believed to be promising (Mura 2018, 40). However, it has been noted that focusing on the conceptual features of curatorial work, and the growing preference for an art exhibitions model, could also lead to the risk of graphic designers limiting their "understanding and exploration of the potential of the exhibition [medium]" (Mura 2018, 41). Moving forward, as suggested by Mura (2018, 40), it is possible for graphic designers to consider the exhibition "as a specific and encompassing medium of communication, beyond the presentation of artworks and beyond the conventional white cube". To argue for the feasibility of an approach that graphic designers can adopt to address complex problems in a social context, it would be interesting to explore how social needs can be addressed through the reversal of positions between curators and design thinkers. This has been proposed by design educator and curator, Diane Mikhael in her thesis titled "Curating for Empathy: Design Thinking for Social Engagement" (2018), and echoed by museum studies researchers Suzanne MacLeod, Jocelyn Dodd and Tom Duncan (2015, 314-341), who advocate "harnessing the potential of design and 'design thinking' in museums".

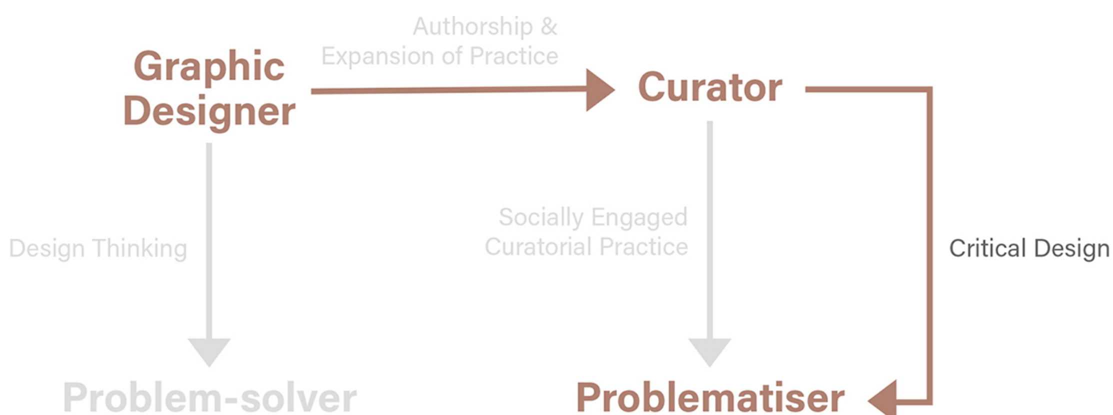

Fig. 5. Research Framework – Graphic Designer as Problematiser, by Junie Tang.

2.4 Graphic Designer as Problematiser

To answer the fourth sub-question: "How can a new generation of graphic designer-curators act as problematisers and adopt Critical Design as an alternative approach to gain new and deeper perspectives on complex design problems?", it is vital to justify why an alternative system-based method is necessary to deal with complex societal problems, and examine theories instrumental in the development of a new system-approach.

Understanding the term "wicked problems" highlights the necessity of a new system-approach. Coined by Rittel and Webber (1973, 160), "wicked problems" are broadly categorised as societal issues that are very complex, arbitrary, and hard to define. When dealing with a tame problem, a comprehensive formulation of the problem could provide all the information needed to understand and solve the problem, but this approach is not feasible with wicked problems (Rittel and Webber 1973, 161). For one to describe a problem accurately, it would require him to have a complete list of possible solutions beforehand, since each question that is asked to gather more information would require him to have sufficient understanding of the problem as well as its resolution. In short, one's ability to anticipate these questions will rely on his knowledge of all possible solutions in advance (Rittel and Webber 1973, 161). But when dealing with a "wicked" problem, finding the problem is equivalent to finding the solution; in other words, the problem cannot be fully comprehended until the solution is found (Rittel and Webber 1973, 161). Clearly, this argument challenges the common understanding of a problem-solving process that expects the problem-solver to first find and represent the problem before he can develop and execute a plan that produces the solution, which makes much sense given the interconnected nature of complex social problems.

If Rittel and Webber are right in their claim that a "wicked problem" is the problem in itself, and that the first-generation "systems-approach" is no longer effective, then their call for a second generation approach that is based on "a model of planning as an argumentative

process in the course of which an image of the problem and of the solution emerges gradually among the participants, as a product of incessant judgment, subjected to critical argument" (Rittel and Webber 1973, 160) would be an urgent one as current problems become more wicked than ever.

With that in mind, Christopher Alexander's thoughts on the process of design are relevant in conceptualising this new "systems-approach". In his book *Notes on Synthesis of Form*, Alexander (1964, 43) refers to the ultimate result of design as "form" and explains the process of form-making as the action taken by a set of subsystems that are interconnected, yet free enough to make subtle adjustments independently when given a reasonable amount of time to do so. Alexander (1964, 1) also recognises the fact that a designer tends to rely on traditional order that is chosen randomly when a problem becomes too complicated for him to find the order that is truly needed. Thus, to understand the complex internal structure of a dynamic process that works, Alexander suggests that the best clue is the way the process reacts to change (Alexander 1964, 44). To create forms that fit the contexts in which they are designed for, it is essential to develop a system that is "unselfconscious", "self-adjusting" and capable of finding "its own equilibrium" (Alexander 1964, 58).

Diving deeper into what "form" means in the context of aesthetics studies, it is essential to look into Władysław Tatarkiewicz's *A History of Six Ideas* (1980, 220-221), where he defines form as something that: 1) comprises "an arrangement of parts"; 2) is "concrete" and "directly given to the senses"; 3) refers to the "boundary or contour" of an object; 4) means the "conceptual essence" of an item; and 5) is the "contribution of the mind" to the perceived item. In the social context, cultural critic Umberto Eco (1989, 142) believes that an artistic form needs to break free of all conventional systems in order to comment on society. As an aesthetic principle, Eco suggests that art can only meaningfully discuss man and the world that he lives in not by using art to make public declarations, but by arranging its forms in a specific way; and for this reason, form "must be a way of thinking" (Eco 1989, 142).

To understand why exhibitions are possibly an effective platform for graphic designers

to communicate ideas, some valuable insights can be gleaned from O'Neill's essay "Curating as a Medium of Artistic Practice: The Convergence of Art and Curatorial Practice Since the 1990s" (2012). As explained by O'Neill (2012, 90), the core of any exhibition is "communication", and as a cultural product, it is the most appropriate mediator through which knowledge and ideas about the exhibited works can be generated and distributed. The idea of exhibition as form is also discussed in the essay "When Exhibitions Become Form: On the History of the Artist as Curator" by art historian Elena Filipovic (2014, 50), who thinks exhibitions curated by artists are in fact "an articulation of form" when they are used as an artistic medium to reject conventional definitions. In a similar way, exhibitions can also be a form that graphic designers put together to challenge accepted notions in society, albeit on different grounds. However, Filipovic does not discuss the idea of "exhibition-as-form" in such a way as to shed light on the notion of curator as author, but rather on its cooperative approach where the curator does not pursue curatorial endeavours solely out of personal interest (O' Neil 2012, 95). As this research is interested in finding a new systems-approach that places a stronger emphasis on a design project's process rather than its final form, at this point, it is important to turn towards literatures that suggest an alternative approach for graphic designers.

Even though the discussion on Freire's and Foucault's theories on problematisation (under the second category) shed light on a process that is dialogical and conscientising, this research acknowledges that there is still a need to relate it to design. In the development of this new systems-approach that links both problematisation and graphic design, the notion of Critical Design is considered because it involves a similar process by which both the problem and solution come into view gradually, and are subject to relentless critical assessment. Additionally, Poynor (2012, 117) believes that Critical Design can open new doors for design "as a form of speculative practice". The term Critical Design was coined by Fiona Raby and Anthony Dunne (1997) when they were working as researchers at the Royal College of Art's Computer Related Design Research Studio. The initial idea for it came from their concerns about the uncritical push for

technological advancement in society and the assumption that technology would be effective in solving any problem (Raby and Dunne 2013, 34).

Raby and Dunne's earlier definition of Critical Design was that it "uses speculative design proposals to challenge narrow assumptions, preconceptions, and givens about the role the products play in everyday life" (Raby and Dunne 2013, 34). As clarified by design researcher, Dr Matt Malpass (2017, 100), speculative design is about projecting social-technical development as well as creating settings to present unexplored use contexts for products, and since speculative design is characterised by making inquiries into technology and science, it is also inevitably associated with scenario building, technoscientific research, and notably, our future. In recent years, Dunne and Raby have noticed that the term Critical Design has resurfaced "as a part of growing discourse" in the realm of exhibitions, design research, as well as writings published in mainstream media (Malpass 2017, 100). To them, Critical Design is about neither critical theory nor criticism, but rather, it is essentially about thinking critically and "not taking things for granted, being sceptical, and always questioning what is given" (Malpass 2017, 35).

In alignment with Foucault's (1983, 171) definition of problematisation, which involves analysing and making critical inquiries into why and how certain behaviours, phenomena, and processes can be turned into problems, Critical Design also involves questioning not just some of the rooted assumptions in design but also, on another level, in the area of technological advancement and its market-driven shortcomings, as well as politics, social theory and even ideology (Raby and Dunne 2013, 35). Another connection between Foucault's notion of problematisation and Critical Design is suggested by Isabelle Stengers (2019, 89) who put problematisation "to the test of our present" reality; referring to the devasting outlook of the social-ecological destruction caused by climate change. In the article "Putting Problematization to the Test of our Present", Stengers suggests embracing Foucault's problematisation "as a philosophical ethos", which involves "putting itself to the test of reality, of contemporary reality, both to grasp the points where change is possible and desirable, and to determine the precise form this change should take" (Foucault 1984a, 46).

Since Freire's process of problematisation involves people coming together to critically

analyse their problematic realities (Freire 1968, 128), Critical Design would involve creating space for such dialogues (Raby and Dunne 2013, 35). In addition, given that Critical Design provides the opportunity to explore new possibilities and alternatives that can reveal shortcomings in existing situations, graphic designers could then adopt it as an approach to problematise complex social problems such as ageing population, climate change and more.

Conclusive Notes

To summarise, this research has reviewed various relevant texts and theories in order to trace the genealogy of Design Thinking as a problem-solving design methodology, which would be essential in helping graphic designers confront their conventional roles as problem- solvers and the use of Design Thinking as a default methodology. If playing the role of a problem-solver is not sufficient for graphic designers to address ill-structured social problems, it is vital to study texts that discuss how the role of a curator has evolved from being a caretaker to becoming an agent of social change, and how exhibitions or curatorial projects can be used as a "form" to problematise social problems.

Next, this chapter has also discussed various literatures that have been instrumental in the investigation of how graphic designers can then take on the additional role of a curator to create sustainable social change through self-initiated curatorial projects. To investigate how the notion of "graphic designers as curators" has been explored previously, empirical studies and theories that have covered similar grounds have been examined to identify the gaps for further research, and to set this research apart from them.

Finally, when graphic designers take on the additional role of a curator, the theory of Critical Design provides a feasible alternative approach for graphic designers to create self-initiated curatorial projects as a medium to communicate ideas and as a new systems-approach to create space for dialogues and collaborations for the purpose of problematising social problems sustainably.

All in all, literature are gathered and reviewed under four categories in a research framework uniquely developed to demonstrate that Singapore's graphic designers can indeed

contribute to the local community beyond their conventional roles as service providers in consumer capitalism. When they take on different roles, like that of a curator, and adopt alternative approaches like Critical Design, graphic designers can critically and sustainably make continuous inquiries into the pressing, complex problems Singaporeans face today.

3. RESEARCH METHODOLOGY

To address the sub-questions that seek to clarify the characteristics of a new generation of graphic designer-curators, and to reveal how they use Critical Design to develop self-initiated curatorial projects that sustainably problematise challenging social problems, this research conducts a critical analysis of graphic design and curatorial practices in both Western and local contexts, adopting Qualitative Research with a phenomenological approach as the basis of its methodology. The data collection methods include: 1) studying of exhibitions and curatorial projects through archival materials; and 2) case studies with semi-structured interviews, field observations and other secondary sources.

3.1 Qualitative Research – A Phenomenology Approach

According to the latest definition of Qualitative Research found in the SAGE Handbook of Qualitative Research, it is a method that places the observer in a world that is made visible by a series of interpretive as well as material practices. It is through these practices that the world becomes a set of representations, namely, through interviews, field notes, photographs, recordings, dialogues, and reflexive memos. Also, because qualitative researchers understand or interpret phenomena in their natural environment with reference to the meanings that people ascribe to them, qualitative research is also known as an "an interpretive, naturalistic approach" that can transform the world (Deniz and Lincoln 2000, 3).

Therefore, this research finds a qualitative methodology and an interpretive framework appropriate to inform the inquiry of its research problem. To recap, this research problem is to explore how a change can be effected in the current situation such that graphic designers can contribute to society beyond their traditional roles as problem-solvers in consumer capitalism, and also to suggest how graphic designers can, through Critical Design, take on the additional role of curators to become carers of communities, who problematise challenging social issues brought about by climate change, ageing populations and even technologies (Creswell and Poth 2018, 7). With a research framework uniquely developed, the researcher becomes a key instrument in the collection of data through multiple sources and means such as examining documents and audio-

visual information, interviewing participants (creative practitioners) and making observations in natural settings (Creswell and Creswell 2020, 257).

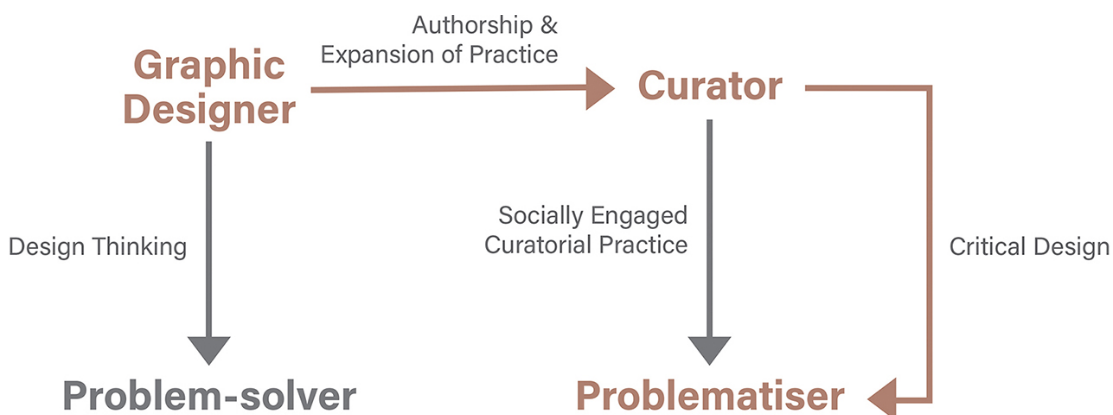

Fig. 1. Research Framework – Graphic Designer as Curator: From a Problem-Solver to a Problematiser, by Junie Tang.

As shown in the figure above, the research framework illustrates a holistic account of the inquiry being studied, and the process involves considering and reporting multiple positions, identifying factors that implicate each position, as well as allowing "the larger picture" to emerge (Creswell and Creswell 2020, 258). Also, as a characteristic of qualitative design, the proposed framework shows that the approach is not always "a linear model of cause and effect", but more often "a model of multiple factors interacting in different ways" (Creswell and Creswell 2020, 258). With an emergent nature, the designed plan anticipates that changes will occur as soon as data collection on the ground begins, signalling there has been a deeper understanding of the phenomenon as the investigation work progresses (Creswell and Creswell 2020, 258).

Considering the fact that this research seeks to study a collection of information, and eventually arrive at a proposal for a new approach to practising graphic design in the social realm, the qualitative research process will focus on the various challenges experienced by graphic designers, and seek to understand the participating creative practitioners' multiple perspectives (Creswell and Creswell 2020, 258). Accordingly, it involves situating the research within the participants' respective contexts, namely the sites of events as well as studio spaces; and this is crucial as these specific settings will inform the research and provide a deeper understanding of how various actions, events and meanings are influenced by the unique conditions in which they take place (Creswell and Poth 2018, 44).

Another feature of qualitative research that is evident in this research is that the themes, categories, and patterns are constructed via a bottom-up approach, which means that the investigation involves tracing the origin of problem, before collecting and organising data (both conceptual and empirical) into progressively abstract subdivisions of information (Creswell and Creswell 2020, 205). This inductive process involves working back and forth between different pieces of information so that a more complete set of themes can be put in place (Creswell and Creswell 2020, 205). In addition, deductive reasoning is also critical as the analysis progresses, in evaluating if more data needs to be gathered as evidence to support each theme (Creswell and Creswell 2020, 257).

To design a well-informed plan of methods and procedures, it is also necessary to determine this research's approach in its qualitative inquiry. Thus, to understand how graphic designers, as curators, could fulfil their longing to create positive social change for the betterment of society, adopting a phenomenological approach would help as it entails identifying how this can be achieved by observing the lived experiences of various creative practitioners, namely, graphic designers, curators, and artists. By and large, phenomenology refers to "the study of structures of consciousness as experienced from the first-person point of view" and the core of such an experience is "its intentionality" directed towards an "object" of human experience, a phenomenon (Smith 2013).

Even though the Narrative Research approach also takes an interest in experiences related by individuals as lived and told stories, it focuses on studying merely one or two individuals, collecting data (stories) in a chronological manner, e.g., life course stages, to make sense of those experiences (Creswell and Poth 2018, 67). While narrative research focuses on stories of participants collected and studied chronologically, Grounded Theory attempts to generate a theory of a process, an action, and an interaction framed by views of a significant quantity of participants (Creswell and Poth 2018, 82). Hence, though there are some overlapping qualities among the qualitative research methods, phenomenological research is the most appropriate, because it draws the "common meaning" out of lived experiences of some selected individuals based on a phenomenon or concept (Creswell and Poth 2018, 75).

Phenomenological research involves the following steps: 1) determine and describe the phenomenon to be studied (problem statement, research questions, aims and objectives); 2) identify and draw up an overview of the philosophical assumptions for the phenomenon (literature review); 3) gather data from and about creative practitioners who have relevant experiences related to the phenomenon (via appropriate research methods); 4) analyse data to generate themes and develop a structural interpretation (research framework); and finally, 5) write a report detailing the study's understanding of "the essence of the experience"[6] in the following order: introduction (chapter 1), literature review (chapter 2), research methodology (chapter 3), report on how the phenomenon was experienced (chapter 4 and 5), and conclusion (chapter 6) with "a composite description" of the findings (Creswell and Poth 2018, 78-80).

In phenomenological research, data is primarily collected through multiple in-depth interviews with individuals using open-ended questions. In this study, however, other sources of data, such as on-site observations, documents, journals, and other forms of art, have also proven to be instrumental in drawing out the essence of the research problem being studied, especially when the researcher has no direct access to some of the creative practitioners based overseas, and when the collection of primary data is extremely challenging amid the COVID-19 pandemic. These "other sources" are selected based on whether they are purposeful in clarifying the role of curators as carers for the communities problematisers, and whether they help define the new characteristics on a new generation of graphic designers-curators. For example, in understanding how Lucy Lippard has become a carer of her community via the role of a curator, besides reviewing conversations Lippard had with others, this research also finds it helpful to study documents such as hand-written notes and press releases related to the exhibition *c. 7500*. The collection methods of these materials are further elaborated on in Sections 3.2 and 3.3.

3.2 Analysis of Exhibitions and Curatorial Projects Through Archival Materials

By adopting both interdisciplinarity and transdisciplinarity as the basis of investigating and

[6] The word "essence" is defined as the "essential invariant structure" by Creswell and Poth (2018, 79), or in other words, the common experience identified based on the underlying structure found in all the experiences of those participated in the research.

proposing an alternative role and a feasible method for local graphic designers to problematise complex societal problems sustainably, this research first looks into a different discipline—curatorial practice—to identify and study curators and graphic designer-curators who have used transdisciplinary approaches to problematise complex social problems. Curators selected for this study must demonstrate they have become the carers of their communities and problematise social problems sustainably via their curatorial projects or practices.

To understand the common meaning of selected creative practitioners' lived experiences in effecting positive social change in their communities, it is critical to study the exhibitions and curatorial projects that they have executed. This can be accomplished by examining related archival materials such as press releases, photographs and catalogues available via online digital libraries by, for instance, the Smithsonian Archives of American Art, and Printed Matter, Inc; as well as other forms of written records such as journal reviews, books, magazines and newspapers articles. This research will study two exemplary precedents that clarify the notions of "curators as problematisers" and "curatorial projects as problematisation"; namely, the exhibitions *c.7,500* and *Culture in Action*.

Curated by Lucy Lippard, *c.7,500* took place in 1973 in Valencia, California, and aimed to problematise the situation where female artists were being oppressed in the contemporary art world. Lippard and her work have been selected for this study for two reasons. Firstly, Lippard is known as one of the most important American curators who have acted as agents mediating between art and the public, and an examination of her curatorial practice, writing and even public presence – through which she has advanced the feminist agenda – will reveal how one can emerge from, reflect upon and intervene in problematic situations. Secondly, the conception of *c7,500* in 1972 is regarded as the defining moment where Lippard advanced her feminist work and established her bold curatorial style. The project is also recognised in Conceptual Art history as the first attempt at constructing and presenting a narrative of "a feminist conceptual language" (Butler 2012, 60).

Culture in Action was an exhibition-event curated by Mary Jane Jacob in Chicago, the United States of America (USA) as a form of social intervention in 1993. Through a total of

eight projects, the people of Chicago, who had until then not been normally engaged by the museums, were given the opportunity to participate in artwork creation (Olson 1996, 13). Acting as a conduit, the projects connected specific communities to a larger, more diverse audience that was the general public, and the ripple effects created by each project allowed the ideas generated through the art-making process to ooze into the city's culture at large (Olson 1996, 13). According to researcher-writers David Morris and Paul O'Neill, if *Culture in Action* was meant to connect the public to art, then the entire programme had also had the effect of problematising the definition of "public" (Morris and O'Neill 2014, 13). In light of the large volume of dialogues and discourse generated throughout the programme, *Culture in Action* can be viewed as an attempt to extend the definition of "audience" or "public" rather than to limit it, and to raise questions rather than to provide answers around the issues of public art-making (Olson 1996, 13).

Culture in Action may not have been the first to introduce extended engagements with different publics at specific sites, but it is known to have succeeded in making such practices visible on a larger scale (Morris and Paul 2014, 9). Essentially, it has presented exhibition-making as a category that needs to be reassessed continuously; one that can grow, adjust and transform to act in accordance with the artists or to even empower them further. Amid the open-ended yet exasperating discussions of and around curatorial practices, some favour the idea of having curation function as "a constellation of activities" that have no intention of revealing themselves completely. By gathering social ideas and items together with subject relations, *Culture in Action* represents this very idea of a "curatorial constellation" that seeks to expose structural flaws and falsehoods that are deeply rooted in "hermetic" exhibitions, which makes it an appropriate example to study in this research.

To better understand how graphic designers have taken on the role of curator in the past, the late Willem Sandberg's biography will be discussed, with particular attention given to the exhibitions that were curated by him as well as those organised to showcase his work. Best known as the curator and director of Amsterdam's Stedelijk Museum from 1928 to 1962, his contributions to the museum came largely from his abilities as a graphic designer and typographer

during the early years of his career (Garfield 2016). Some of Sandberg's radical curatorial choices will be examined in Section 4.3.1, and they include *De Vitaliteit in de Kunst* (1959-1960) and *Van Natuur tot Kunst* (1960), which are known as the thematic exhibitions that "aimed to explore a subject through a critical approach to it" (Cagol 2015). In 2016, a retrospective exhibition titled, "Willem Sandberg from Type to Image" was put together to showcase some of the best posters and catalogues he had created for exhibitions that he had curated (Garfield 2016). According to the *New York Times*, the show had presented him as "an unusually resourceful and expressive graphic designer who applied design to advance his vision of culture as a progressive force in society" (Rawsthorn 2016).

The notion of "graphic designer as curator" continued to evolve after Sandberg's work, as seen in the show, *Designer as Author: Voices and Visions* (*DA:VV*) – an exhibition recognised as the first to have directly undertaken the next level of design-authorship, where a curated exhibition is regarded "as an act of meta-authorship" (McCarthy 2006, 48-56). Curated by Steven McCarthy and Cristina de Almeida, the exhibition made a call for entries of self-originated works by graphic designers as well as writers/editors to address the theme of design-authorship. As mentioned in their open call, their goals were to seek out existing approaches to self-initiated authorship in graphic design, and also to evaluate how this practice could take place when running parallel to commercialised assignments (McCarthy 2013, 204). To ensure that the entries were exemplary works of design authorship, the organisers expected the participating designers to be involved in the development of the literal content directly, to pose problems critically, use graphic design as a means to investigate it, and also be skilled in using words in literal as well as typographic expressions (McCarthy 2013, 204). But according to McCarthy (2013, 215), the act of curation as a form of meta-design authorship is not about the exhibits, but about exploring the idea of design authorship as an expandable notion; one that breaks boundaries and explores new concepts and approaches.

Moving forward, the exhibitions titled *Stadtstaat: A Scenario for Merging Cities* (2009) and *Facestate* (2011), both curated by Metahaven, will be examined to reveal a revitalised and contemporary notion of "graphic designers as curators". As a graphic design collective,

Metahaven has been identified as one of the few collectives that practice Critical Design and understand how exhibitions can be used as a medium to conduct "open-ended investigation and exchange" (Mura 2018, 36). Initiated as a research project, *Facestate* involved a more strategic thinking method typically used for commercialised corporate identity projects. Metahaven used this method to create a discourse on the implications of blurring the lines between citizenship and consumer experience, especially since many governmental bodies favour the use of social software as a means to interact with the public and demonstrate transparency (Dunne and Raby 2013, 15). The goals of the exhibition were to make people think deeper about the implications of having such extensive online social networks controlled by a central power (Hyde 2011). Beyond the format of an exhibition, Metahaven also produced a book (of the same title) as a latter instalment of a "bigger research" project, and as a form of graphic design, the collective believes that the book is "a means to stage these more long-term inquires" if given enough time and resources (Hyde 2011). Therefore, other film and book projects by Metahaven, namely *Black Transparency* (2015), *The Sprawl* (2016)*, Information Skies* (2016)*, Hometown* (2018)*, and PSYOP* (2018) need to be examined as well to gain better insights into the collective's critical practice as a whole.

If graphic designers were to take on the additional role of curators, it would be of interest to find out how print (a medium graphic designers are familiar with) has been utilised as an alternative format to exhibitions. The idea of a printed exhibition is often associated with the American art dealer-curator Seth Siegelaub, who ran a gallery in New York in the 1960s. This gallery ceased operations in 1965 because Siegelaub could not cope with the pressure of curating eight to ten shows a year, and while working alongside conceptual artists as a private art dealer, he started changing the structures of exhibitions to reflect the essence of their work (Obrist 2015, 52). In 1968, Siegelaub produced the first group exhibition in the format of a book titled the "Xerox Book" project, and in 1970, he curated another group exhibition in print for the Journal Studio International (Obrist 2015, 53). The information gathered on this particular curatorial format will also be useful in the later sections of this thesis, which will discuss the book projects

developed by the design collective, Atelier HOKO, and the zines produced by local artist-curators, Ju-lyn Lee and No Ceiling Paper Wall.

Acknowledging that most of the curators and graphic designer-curators, namely Lucy Lippard, Mary Jan Jacob, Willem Sandberg and Metahaven, selected for this study are from the West, and that their curatorial projects are developed and framed in Western contexts, this research finds it beneficial to study them based on the fact that Singapore has branded itself as a Renaissance City for the arts and design, and has always looked to Western theories (Chang 2000, 820) and benchmarked its cultural development against Western Cities (MITA 2000, 24–27). Since Singapore strives to be a global and at the same time local city for the arts and design, it is necessary to fuse the global goals of the arts and design with local objectives (Chang 2000, 820). With that in mind, this research heeds the direction of "going global" and "staying local" (Chang 2000, 820) by studying both foreign and local artist-curators and graphic designers to elucidate and even benchmark the progress of the phenomenon under study.

3.3 Case Studies with Empirical Data Collected via Semi-structured Interviews, Field Observations and Other Secondary Sources

In searching for a new generation of graphic designer-curators as case studies to define the characteristics of a new generation of graphic designer-curators, and clarify how self-initiated curatorial projects that sustainably problematise challenging social problems can be developed via the means of Critical Design, this research identifies Metahaven, Atelier HOKO and Supernormal based on the following criteria. Firstly, they are graphic designers with interdisciplinary practices; secondly, they have adopted Critical Design as a method and/or developed critical practices to problematise contemporary socio-political problems through curatorial projects. Notably, this research consciously stays away from creatives practitioners promoted or projects initiated by DesignSingapore or Design 2025 for the reasons that their approaches are primarily guided by the notion of problem-solving and Design Thinking. Atelier HOKO and Supernormal are invited to participate in this research because they are independent graphic designers who have created self-initiated speculative proposals and durational curatorial

projects as Critical Design to problematise issues that they are concerned about.

The first case study, on the Dutch research and design collective Metahaven, founded by Daniel van der Velden and Vinca Kruk in 2007, will lay the ground for how Critical Design can be used an approach to problematise political and social issues. Spanning identity design, publications, exhibitions and films, the collective's work seeks to investigate and expose the transparency of established institutions, the concepts of post-truth, and more (Oralkan, n.d.) Known to have played the multiple roles of graphic designers, writers, critics, and essentially, curators, their unique approach has led to exhibitions being installed at the Cooper-Hewitt National Design Museum (New York), the Museum of Modern Art (New York) and the Walker Art Centre (Minneapolis) (Chae 2013). As the collective is based in the Netherlands, information about the collective is mainly collected from secondary resources such as books, interviews, and online articles and reviews.

As most of the literature and curatorial projects that discuss the notion of "Graphic Designer as Curators" and the concept of Critical Design are mainly from Europe and America, reviewing local case studies from a phenomenological perspective will be necessary to find out if the notion of "graphic design as curators" and the use of exhibitions as a form of critical design to problematise social and political issues have emerged here in Singapore. Besides studying selected exhibitions, semi-structured interviews were conducted with the local designer-curators, either in-person or through videoconferencing (due to social distancing measures), to learn about their lived experiences of critical curating and designing for the betterment of their local communities. The objective of these conversations was to enable individuals to freely share information about themselves and to minimise the constraints of depending only on the researcher's personal observations and experiences for data (Ackroyd and Hughes 1981, 102).

Adopting the phenomenological approach to gather empirical data that helps define the characteristics of a new generation of graphic-designer-curators and clarifies how they use Critical Design to develop self-initiated curatorial projects which problematise complex societal problems sustainably in Singapore's context, the interview questions are designed to

draw out the participants' "common experiences in term of the phenomenon under study, and the situations or contexts that have influenced or affected their experiences with the phenomenon" (Creswell and Poth 2018, 79). By asking open-ended questions concerning their views on the notion of "graphic designers as problem solver", their dual roles as graphic designers and curators, and specific curatorial projects that possess the features of Critical Design, the focus is on gathering data on their intentions, work processes and future plans, which will lead to structural and textual accounts of their experiences, and essentially, provide insight into the participants' common experiences (Creswell and Poth 2018, 79). These common experiences not only provide insight into the traits of a new generation of graphic designers-curators who have "emerged", "reflected" and "intervened" as problematisers, but also demonstrate how durational critical projects and practices can lead to an alternative approach that is feasible for graphic designers to problematise socio-political problems sustainably in a local context. Although the interview questions (see Appendices A, B, C, D, E and F) were prepared in advance, the discussions were "casual, free-flowing, and unencumbered by extensive preconceptions" of the topics discussed (Jorgensen 1989, 88), which granted the qualitative researcher the freedom of probing when necessary (Ackroyd and Hughes 1981, 104). The interviews were mainly documented by handwritten notes and video or audio recordings, which were then transcribed for phenomenological analysis and interpretation.[7]

The second case study identified for this qualitative research is Atelier HOKO*,* a Singapore-based independent research lab founded by Alvin Ho and Clara Koh. With a focus on "the study of the growing disengagement between people, things and space", HOKO wants "to cultivate in people, an openness and ability to unknow, bringing about a heightened curiosity towards all phenomena by taking a fresh look at reality" (Ho and Koh, n.d.). As their projects are developed contextually, the types of work created extend across different disciplines and include jewellery, clothing, publications, installations, performances,

[7] The interviews are conducted according (but not restricted to) a standard set of questions found in Appendices A, B, C, D, E and F.

experiences, curation and exhibitions (Ho and Koh, n.d.). In order to understand how HOKO has used exhibitions as a medium to fulfil their vision, it is necessary to examine some of their past and ongoing curatorial projects. One of these projects is based on the theme of "arranging", and includes the works *On Arrangement* (2009), *Arranging* (2009) as well as *Re-arrange* (2011). Another creative project, a series of ongoing research publications titled *Science of the Secondary*, required a closer examination as they are often launched or presented in conjunction with exhibitions or other participatory activities (Ho and Koh 2019). In particular, this study will examine how these publications were packed and distributed into boxed sets of ten issues each (volume 1 to 10), and explore how this can be regarded as a dematerialised exhibition conceptualised by HOKO to reach more audiences (Ho and Koh 2019). The conversations conducted via interview with the collective have been essential in gaining an in-depth understanding of their process of planning, researching, and executing these projects.

Next on the list of case studies is Supernormal, an independent curatorial project and art space first started by the new media design studio known as Modular Unit (no longer in operation). Formally led by Ong Kian Peng and Ivan Lee, the art space was set up to synthesise design, art and technology to bring about immersive and sensorial environments, as well as to invent new modes of visual communication (Ong and Lee, n.d.). By adopting such an interdisciplinary approach, the creative studio works across different platforms, namely websites, installations, experimental structures, and exhibition design. Driven by this interest in spaces, Supernormal is a self-initiated project and alternative art space that strives to present works or projects that are categorised as experimental or eccentric, which can be created by artists, designers as well as those who identify themselves as the "in-betweens" (Ong and Lim, n.d.). Since July 2017, Supernormal has organised and facilitated many art and design exhibitions, talks and workshops that have featured "artists and/or designers whose works do not fit into conventional categories of art or design", and "whose work exists in the undefinable in-betweens" (Seet 2018). Some of these exhibitions and activities include *Poetic Motions* (2017), *Open Call #02: Technology in Art* (2018), *Adaptations* (2019) and *The Open Workshop*

(2020), which this research will examine to determine if Supernormal uses exhibitions as a medium to problematise art and technology.

Besides looking into some of Supernormal's past programmes, several field observations were made during the set-up, opening event, live performances, artist talks and workshops of *Networked Bodies* (2021) – an art event organised and curated for the Singapore Art Week in 2021. Multiple conversations with the co-founder of Supernormal, Ong Kian Peng, have proven to be vital in identifying his values as well as the challenges he faces in his multiple roles as a graphic designer, media artist and curator. Furthermore, understanding the motivation and principles behind Supernormal's operations provides insights into the development of Critical Design in the context of Singapore. The questions drafted for the abovementioned interviews revolved around the recurring subject of using technology in design and art-making, as well as the social implications that come with it. The field observations made throughout the execution of *Networked Bodies* have been recorded via still photography and handwritten field notes.

The above local case studies were selected for the reasons that they are graphic/media designers who have a critical attitude towards their own creative practice and have also carried out self-initiated research work as a form of investigation to understand certain social phenomena and their implications. In addition, they have also each taken up the role of curator to create publications, exhibitions, talks as well as workshops that involve collaborations and co-creation among creative practitioners and/or audiences. For example, *The Open Workshop*, which took the form of an exhibition, was an open invitation to the public to complete the exhibited works by participating in workshops led by the artists. The intention was to address "the gap between art and technology, where audiences often fail to see the conceptual relevance between art and technology and the social implications surrounding it" (Ong 2020). As for the exhibitions, workshop and activities that were organised in conjunction with Atelier HOKO's *Science of the Secondary* research project, HOKO welcomed audience participation while sharing their unique methods and personal encounters with the objects they were studying through speculative design (Ho and Koh, n.d.). HOKO fits researcher and

educator Tamina Mazé's (2009) idea of critical graphic designers, who do not only place design into a gallery to talk about design, but also "intentionally occupy another context in order to generate another kind of discussion, to expose design to another set of ideas, perceptions, and critiques" (Mura 2018, 33).

To differentiate the role and intention of an artist-curator from that of a graphic design-curator, local artist-curator Lee Ju-lyn and curatorial collective No Ceilings ø Wall were also invited to share their thoughts on the notion of "artists as curators." For an impartial comparison, the interview questions crafted for Lee and members of No Ceiling ø Wall are similar to that of local graphic-designers; they allow them to talk about their intentions, work processes and future plans as artist-curators executing self-initiated curatorial projects to address issues they are concerned with. Before becoming an author, artist and curator, Lee studied Psychology and served in the public service for several years. After acquiring a diploma in Fine Art from the Nanyang Academy of Fine Arts (NAFA) and a master's degree in Museum Studies and Curatorial Practices from Nanyang Technological University's (NTU) School of Art, Design and Media (ADM), the scope of her creative practice continues to expand. Ranging from painting, writing, installations as well as "the performative", her works revolve around the idea of "time and transience, choice and freedom, interrelatedness, self and cultural identity, self-improvement/cultivation, studying, literati aspirations, existential concerns, art and life" (Lee 2020). In recent years, she has initiated and developed unconventional curatorial projects, namely *Notions,* a series of indie collective art-zines, and *Better Late Than Never*, an online exhibition that was put together collaboratively.

Formed in 2018, the members of No Ceilings ø Wall include Cally Tan, Farizi Noorfauzi, Hanae Gomez and Marcus Cheong. These four young creatives were invited to share their views on how zine and social media platforms can be used to explore new modes of artwork presentation and to reinterpret the meaning of alternative art spaces (No Ceiling Paper Wall 2018). As stated in their online manifesto, the collective "questions the way artists and creatives choose to represent their works in spaces in Singapore" (Tan 2018). In their first published issue of the zine, *Time and Space*, the collective explored the use of two-

dimensional spaces, which were the pages of their publication, to create an alternative space for exhibiting art (Tan 2018). What Lee and No Ceilings ø Wall have in common with regard to their curatorial practices is the use of zines and online platforms to create alternative spaces for exhibiting art, and such forms are also familiar to graphic designers. Their inputs are valuable to this study, as they shed on light on how these artist-curators use their graphic design skills to create publications and websites, so that their curatorial intentions can reach more audiences.

All interviews with the named creative practitioners were recorded either with an audio recording device (mobile phone) or a videoconferencing application (computer) accompanied with handwritten note-taking, and the transcripts of the conversations are included as appendices in this thesis. To be sensitive to the needs of the participating creative practitioners in the data collection process, ethics issues were considered before the study commenced. The steps involved getting an approval from the NTU Institutional Review Board (IRB) with regard to the procedures, number of participants, the participants' rights, risks and benefits, and how data would be collected and securely stored for the study. Once approved, the selected creative practitioners were invited to participate in the research formally via emails, which included the attachment of a Study Information Sheet containing the necessary information as well as a box to check and sign upon their agreement to participate. Prior to the interviews, all participants were informed about the purpose of the study, and their permissions to record the conversations were always sought beforehand. In the case where field observations were conducted on-site, a separate consent form was sent, signed and collected before the event. While making field observations, the site of study was well-respected and minimum disruptions were to be made to maintain the authenticity of the participants' works. All of the participants were well-aware that their participation was completely voluntary and would not be compensated, and that they reserved the rights to refuse or withdraw at any point of the study without any penalty. Finally, the participants' declaration of ownership and the permissions they granted for the use of photographs and

graphics included in this thesis have also been obtained, through additional consent forms with the relevant thumbnails included.

A Reflexive Commentary

As the researcher of this qualitative research, it is vital to acknowledge that years of formal training and working experience acquired in the field of graphic design, as well as experiences in arts and cultural management, can influence the way in which this research study is conducted. After formal training and almost a decade of practice as a graphic designer, followed by a cross over to the realm of art in the context of a Voluntary Welfare Organisation (VWO) upon graduating with a MA in Arts and Cultural Management, a bout of critical self-reflection has led to the question of whether these two creative practices can be bridged for the purpose of the greater social good. Since learning that many graphic designers also possess the desire to contribute to society meaningfully through self-initiated projects, but often fall back on traditional roles and relatively superficial methods when attempting to generate creative proposals to deal with perplexing social problems, this research now strives to offer an alternative.

Additionally, how the case studies' local participants were selected, and how the conversations with them were carried out, were the result of personal and working relationships developed over the years in the creative industry. One of the challenges in conducting qualitative research via a phenomenological approach is the need to bracket out personal experiences since data interpretations will inevitably include assumptions made by the researcher (Creswell and Poth 2018, 80). Hence, having sufficient self-awareness to uphold research integrity is necessary in ensuring that: 1) the conversations with participants do not go beyond the purpose of understanding the phenomenon under study from their respective perspectives; 2) the participants are not led into fulfilling a predetermined purpose; and 3) multiple methods are considered before any category or theme that cuts across various types of data sources can be formed.

4. GRAPHIC DESIGNER AS CURATOR: FROM A PROBLEM-SOLVER TO A PROBLEMATISER

In 1968, when the world's sociopolitical landscape was experiencing tremors, the English cabinetmaker, designer and author Norman Potter saw the need to ask the question, "What is a Designer?" Potter wrote about this question, but before suggesting an answer, Potter urged his readers to first consider the following questions: "Should a designer design for a factory in which he could never imagine working as an operative? Is design social-realist art? Is it handy to be in a state of moral grace when designing a knife and fork? Does design work justify its claims to social usefulness, or is it a privileged form of self-expression? Is a profession a general form of self-protection in society with some necessary illusions? Should a designer be a conformist or an agent of change?" (Potter 1969, 14) In retrospect, these questions seem to have outlined the discourse that would eventually revolve around the future role of a graphic designer.

While debates on the role of design in the cultural and social realms have intensified in the last two decades, designers have been relentlessly "soul searching" since the advent of modernism (Poynor 2010, 116). Poynor (2010, 115) asserts that as long as design is devised and implemented in "purely instrumental ways", designers will continue to be "troubled by their role in consumer capitalism". With that said, Poynor then points to two ways in which design can be reassessed as a practice within its field (Poynor 2010, 116). Section 4 of this research will draw from Poynor's insights in "Design Thinking or Critical Design?" as the foundation to explore the potential for graphic designer-curators to adopt the approach of Critical Design to problematise complex problems. This research will conduct a rigorous discussion on this topic, following the subheadings: 1) Graphic Designers as Problem-Solvers and Design Thinking as Design Methodology; 2) Curators as Problematisers and Curatorial Projects as Problematisation; 3) Graphic Designers as Curators and Curating as Authorship and an Expansion of Graphic Design Practice; and finally, 4) Graphic Designers as Problematiser and Critical Design as Problematision.

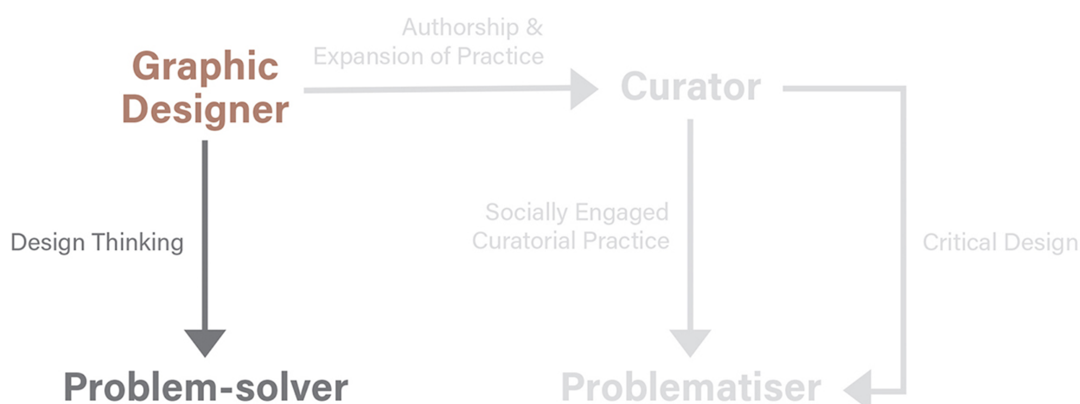

Fig. 2. Research Framework – Graphic Designer as Problem-Solver, by Junie Tang.

4.1 Graphic Designers as Problem-Solvers and Design Thinking as Design Methodology

According to Malcolm Bernard (2005, 10), a senior lecturer in the history and theory of art and design, the term "graphic design/er" does not exist in some English dictionaries, and even when it does, "the definitions are often less than helpful." He attempted to define the term by first breaking it down; the word "graphic" can be traced back to the ancient Greek word "grapheim", which refers to "mark-making" and includes both "written and drawn marks". As for the English word "design", it is derived from the Renaissance French word "dessiner" and the later Italian word "disegno", which has the implied meaning of "drawing, planning, sketching and designing" (Bernard 2005, 10). Interestingly, the origin of the word "design" is attributed to the Latin "signum", which also refers to "a mark". Barnard (2005, 10) noticed the overlapping meanings found in the two words and suggests that these definitions create a very wide range of activities that might be recognised as what we regard as graphic design. This broad definition of graphic design practice is more than helpful in the purview of this research which is fundamentally guided by the concepts of interdisciplinarity and transdisciplinarity.

In defining what a designer does, English designer and educator Norman Potter (1969, 12) describes their functional roles (within the traditional designer-client framework) as "impresarios, culture diffusers, culture generators, assistants, and parasites". "Impresarios" refers to the ones who get the commissions, make arrangements for others to execute the work, and then present the finished outcomes (Potter 1969, 12). "Culture diffusers" are the ones who are capable of working

effectively over an extensive field because of their solid background of diverse interests (Potter 1969, 12). “Culture generators” are the fanatics who work and churn out ideas in the backrooms, making them more serviceable to other designers than the users (Potter 1969, 12). As beginners, “assistants” form the largest group and are more concerned with the draughtsmanship and administrative aspect of work (Potter 1969, 12). Finally, “parasites” refers to those who thrive by skimming off the top of other designers’ work (Potter 1969, 12). These roles are interdependent and yet essential to one another because a designer’s role can shift from one to another while developing a single project or throughout his professional life.

However, in his account in “Is a Designer an Artist?”, Potter (1969, 16) thinks there is a drastic distinction between the role of a designer and that of an artist, since the former “works through and for other people, and is concerned primarily with their problems rather than his own”, while the latter focuses on “the truth of his own vision”. The comparison Potter made suggests that a designer is bound to take care of practical matters related to solving someone else’s problem, whereas an artist is free to pursue goals of his own. Using the analogy of a “medical man”, Potter (1969, 16) sees a designer as one who has a similar responsibility to a doctor, which is first to conduct a diagnosis (problem analysis), then provide an effective prescription (design proposals).

Sharing similar views as Potter, Michael Bierut (2009), the renowned American graphic designer and partner of Pentagram, once said in a presentation for Behance’s 99U Conference 2009 that the reason he became a graphic designer was that he wanted people to go to him with problems he could solve (99U Video 2009). He likened his job as a designer to that of a doctor, and essentially, he cannot practice medicine (design) without having a patient (client) who is sick (99U Video 2009). Bierut then added, “the sicker, the better”, since he does not consider himself a creative person who can express his ideas freely through personal projects (99U Video 2009). Apparently, designers as problem-solvers, and what they do as problem-solvers, is a deep-rooted association, making the task of deconstructing this association a challenging one. Thus, genealogical tracing would be essential to understand how we got here, and starting with the problem itself.

4.1.1 Graphic Designer as Problem Solvers

From a psychological point of view, German psychologist Karl Duncker (1945, 1) states that a problem surfaces when one has a specific goal but does not know how to reach it. In such a situation, if one cannot reach the intended goal by taking action, then he has to resort to thinking (Duncker 1945, 1). Moreover, thinking can involve coming up with a specific action to intervene in the given situation (Duncker 1945, 1). In this instance, "the solution" to a problem will have to meet two requirements: "in the first place, its realisation must bring about the goal situation, and in the second place one must be able to arrive at it from the given situation simply through action" (Duncker 1945, 1).

To share his knowledge on the psychology of problem-solving and help his readers become better problem-solvers, Professor John R. Hayes (1981, xii) simplifies the definition of a problem as "a gap" between where one is currently at and where he wants to be, and that gap becomes a problem when there is no known way to "cross that gap". Thus, the process of finding a way to cross this gap can then be seen as solving a problem (Hayes 1981, xii). According to Hayes, this process comprises two crucial steps, and they include: 1) "Representing the gap – that is, understanding the nature of the problem"; and 2) "Searching for a means to cross it" (Hayes 1981, xii). In essence, failing to grasp the nature of this gap will set one off on the wrong path to find the right solution.

When trying to solve a problem, Haynes (1981, 1) notices that the problem-solver will typically go through the sequence of "finding the problem", "representing the problem", "planning the solution", "carrying out the plan", "evaluating the solution", and "consolidating gains". These steps describe the thought process and actions of the problem-solver, who must first recognise that the problem exists, and a solution is needed to solve it. While representing the problem, he begins to understand the nature of "the gap" and thus proceed to finding a method to cross it. After the plan is executed, he will then ask, "How good is the result?" before consolidating what he has learned from the experience (Hayes 1981, 1).

It appears that when finding the path to a solution, grasping the problem's nature may not be sufficient, as other factors that could pose challenges during the process. So, Hayes

emphasises the importance of "invention" in the process of problem-solving, though he also acknowledges that invention can be easy despite the problem remaining difficult (Hayes 1981, xiv). Zooming into this inventive feature of problem-solving, Hayes dedicates two chapters of his book to explain how cognitive processes, as well as social conditions, can have an impact on our ability to exercise creativity. In Hayes' discussion on cognitive processes, it is written that acts of creativity rely significantly on how well our cognitive processes work together, and the four cognitive processes he focuses on include "problem finding, idea generation, planning, and preparation" (Hayes 1981, 197).

Echoing Duncker and Hayes' definitions, Richard E. Mayer and Merlin C. Wittrock (2006, 287) believe that problem-solving is "cognitive processing directed at achieving a goal" when the problem-solver does not have a clear solution for it. To support this statement, they explain that problem-solving possesses four key characteristics. First and foremost, problem-solving is fundamentally "cognitive" because it takes place within the problem-solver's cognitive system and can be deduced, only and indirectly, through his behaviour (Mayer and Wittrock 2006, 287). Another attribute is that problem-solving is a "process" since it requires a series of representations and manipulation of knowledge stored in the problem-solver's cognitive system (Mayer and Wittrock 2006, 287). Problem-solving is also "directed" because cognitive processing is steered by the goals of the problem-solver, and finally, problem-solving is a personal act because the difficulty or ease of overcoming obstacles to get to a solution is determined by the problem-solver's own unique knowledge and skills (Mayer and Wittrock 2006, 287).

To Mayer and Wittrock, terms like "thinking", "reasoning", "creative thinking", and "critical thinking" are all related and can be used as synonyms to explain what "problem solving" entails. With regard to "thinking" and "reasoning", they rationalise that "thinking", as a broad concept, comprises both directed and undirected cognitive processing, although they are only interested in the former. As for "reasoning", which also points to directed cognitive processing, it is (in a strict sense) applied to a specific class of tasks – that is "reasoning tasks in which there are premises, and the goal is to derive a conclusion using logical rules – and

requiring a certain class of cognitive processes – that is, deduction and induction" (Mayer and Wittrock 2006, 287-288). In addition, problem-solving is also made up of both creative and critical thinking, since the former involves the generation of ideas to solve a problem, and the latter evaluates which ideas could be applied to solve the problem.

Given these theories, it is still unclear how problem-solving is related to the activity of design. Perhaps, in a weaker sense, understanding the definition of the term "design" might help shed some light. As a noun, "design" is described as "a plan or scheme conceived in the mind and intended for subsequent execution; the preliminary conception of an idea that is to be carried into effect by action; a project", and "that which is aimed; an end in view; an ultimate goal or purpose" (Oxford English Dictionary, n.d.). As a verb, it is defined as "to plan in the mind, intend", or "to intend (a thing) to be or do something; to mean to serve some purpose or fulfil some plan". To produce a design would require one "to make plans for the production of (a device, product, etc.) according or functional criteria (sometimes without the implication of aesthetic requirements)" (Oxford English Dictionary, n.d.). The re-occurrence of words like "goal", "idea", "plan", and "action" in these descriptions suggests that there are some connections between the two processes.

A more direct connection between design and problem-solving is made by the American architect Louis H. Sullivan in his essay published in *Lippincott's Magazine* in March 1896. Vexed by the form of "lofty construction" commonly known as the modern office building, which seemed to have fulfilled its purpose serving as a place for business transactions, but lacked aesthetically pleasing qualities, Sullivan saw this as a pressing design problem that needed a solution. Using the examples from nature such as an eagle spreading its wings during flight and the course of clouds drifting over the sun, Sullivan formed the basis of his argument which led him to coining the famous phrase, "form ever follows function". Calling it the divine law of all things, whether organic or inorganic (Sullivan 1896, 408), this phrase has gone on to become the guiding design principle for many architects and designers till this day (Junior 2020).

Then there is John E. Arnold (1959), who reframes the process of design as problem-solving in a series of lectures delivered at Stanford University for a summer seminar named "Creative Engineering". In the seminar, Arnold, an engineer and educator who was formerly trained in the field of psychology, uses the psychology of imagination and creative thinking to scientifically define and examine the quality of inventiveness. Recognising that all fields of human behaviour and thought can induce problems, he recommends dealing with these problems creatively, and thus calls them "creative problems" (Clancey 2016, 7).

To begin with, Arnold classifies these problems into three categories: "analytical, judicial, and synthetic," he then elaborates that these three groups of problems are distinctive based on "the number of concepts involved in their definition and solution and the number of correct answers that can be obtained" (Arnold 1959, 66). In the case of an analytical problem, it can be articulated precisely and takes only a few concepts to produce an accurate answer (or solution) (Arnold 1959, 66). As for the "problems of judgement", Arnold believes that they are complicated as more concepts and expressions are required to describe them, and additionally, it is possible to have more than one fair answer to address them (Arnold 1959, 66). Finally, Arnold argues that the problems of synthesis demand "an almost infinite number of concepts and a complete spectrum of possible solutions", and since they share the same characteristics as "creative problems", the synthesising process thus becomes the heart of every creative activity (Arnold 1959, 66).

Also, Arnold (1959, 66) believes that these three groups of problems are not independent of one another and basically come from the three thinking modes of "analysis, evaluation and synthesis". Specifically for the synthesising mode of thinking, Arnold (1959, 67) thinks that it requires "imagination" to combine two items or concepts to create a new hybrid. Although not all synthesising processes that involve analysis and evaluation can be regarded as "creative activit[ies]" it is necessary to engage with the creative process to integrate or re-integrate prior experiences to create a new "combination, pattern or configuration" when trying to solve people's needs effectively (Arnold 1959, 67). Essentially, the outcome produced by the process has to be tangible; an item which one can "see, feel or react to" (Arnold 1959, 67). Hitherto,

some concepts appear to describe the creative process graphic designers would employ to solve human problems. However, Arnold makes the more obvious connection when he talks about how it is qualifications and restrictions that make a synthesising process creative.

With regard to restrictions, Arnold (1959, 67) states that they are ambiguous and debatable. For example, an intense debate on whether a creative activity should be limited to yield "better" outcomes can be easily triggered. As a result, many outcomes are created to be well-received by a large group of people, but not necessarily beneficial for them individually, meaning they are "not the best that the designer can produce". As for qualifications, Arnold states that there are two types of needs that need to be fulfilled: one is "implied" and the other is "expressed" (Arnold 1959, 67). Implied needs refer to the longing for "beauty, truth, peace, love, belonging, [and] transcendency", which give rise to powerful acts of creativity found in the disciplines of literature, fine art as well as philosophy (Arnold 1959, 67). As for expressed needs, these are demands related to a man's food, shelter, clothing, transportation, communication and environment (Arnold 1959, 67). Those who make attempts to fulfil these expressed human needs are the ones who are qualified with special training and are commonly known as the "engineers" (Arnold 1959, 67). However, Arnold (1959, 68) believes that the "Human Engineer" can arrive at a "better" solution when he considers the implied needs of people while probing the expressed needs. Once he does this, he can then become a "Comprehensive Designer", which is also described as "the emerging synthesis of artist, inventor, mechanic, objective economist and evolutionary strategist" (Arnold 1959, 678). Thus, the motivation behind Creative Engineering is to create better innovative solutions that satisfy people's needs through the union of art, social sciences and physical sciences.

Making similar connections, Herbert A. Simon (1968, 4) uses the terms "artifice" and "synthesis" interchangeably and recognises that they are both related to the field of engineering. Since "synthetic" is generally understood as "designed", objects that are synthetic, or in other words "prospective artificial objects" that possess desired features, are regarded as the central purpose of any engineering skill and activity. The engineer, also known as the designer, "is

concerned with how things ought to be – how they ought to be in order to attain goals, and to function" (Simon 1968, 5).

Concerning problem-solving, Simon (1968, 53) agrees with the description that it is a process of searching through an extensive "maze of possibilities". This maze is a depiction of the environment in which a "thinking person" is trapped, and to solve this problem successfully, the process involves a selective exploration of the maze and the need to simplify it into segments that he can manage (Simon 1968, 53). The behavioural system of this "thinking person" is rather straightforward: the complexity of his behaviour is largely reflected by the complexity of the environment in which he is placed (Simon 1968, 53). As an "adaptive system", his goal determines "the interface" between the "inner and outer environments"; also, his memory plays a part in storing information about the latter, and because he is highly adaptive, his behaviour will greatly reflect traits from the outer environment (as he considers his goal) while still displaying some limiting attributes of the internal environment, "of the physiological machinery" that allows him to think (Simon 1968, 53). According to Simon (1968, 54), other than having these few "intrinsic" limitations that can affect the adaption of his thoughts to the problematic environment, "everything else in thinking and problem-solving behaviour is artificial, is learned, and is subject to improvement through the invention of improved designs and their storage in memory". In the preface for the second edition of his book, Simon states that the prospect of creating "a science or sciences of design" is as critical as the prospect of creating the "science of the artificial", as both are important to engineering, business, medicine, art, architecture and all other fields that are concerned with how they might use design to fulfil functions and goals (Simon 1968, xii).

At this point, it appears that the notion of a designer as problem-solver, and design as a problem-solving activity, stem from the field of "creative engineering" and the "science of the artificial"; or rather, more appropriately in the context of this research, the "science of design". Presently, both Arnold and Simon are often identified as the pioneers who created the fundamental frameworks of Design Thinking by reframing the design process as problem-solving, and because they have identified that designers need creativity and various tools to

think differently. However, to William J. Clancey (2016, 52), the Chief Scientist of Human-Centered Computing in the Intelligent Systems Division at the National Aeronautics and Space Administration (NASA), attempts to assign an inventor or to determine the time of invention to a "polymorphous" methodology would be futile, since such a methodology is "a woven cord with many overlapping threads", and has been "named and interpreted from different perspectives by people in different fields having different interests, roles, purposes, and methodological frameworks". Therefore, perhaps it is more pragmatic to focus on understanding how Design Thinking became such a popular problem-solving methodology in the design world and beyond, and also to evaluate if it is still instrumental for graphic designers who seek to deal with complicated social problems such as those caused by climate change, ageing populations as well as use of technologies today.

4.1.2 Design Thinking as Design Methodology

When Sullivan spoke about the problematic "lofty construction" of modern office buildings in his 1896 article, he believed that the core of every problem also holds and puts forward its own solution. In order to seek out a solution, a process that is "analogous to its own evolution" and involves "proceeding step by step from general to special aspects, from coarser to finer considerations" is necessary. Before Sullivan could derive a formula that served as the solution to the design problem in question, he tried to first study it in several stages of inquiry, then considered it through "calm" philosophic observation (Sullivan 1896, 405-406). Sullivan's thinking process, which involved defining the problem, analysing it with theories, and finally proposing a solution, had perhaps set the stage for a step-by-step methodology that architects and designers could use to tackle design problems.

A more formal record of the history of design methodology is compiled by design researcher Nigel Cross (1993, 16), who wrote that it was in the 1950s and 1960s when new design methods began to emerge because there was a pressing need to apply "scientific" methods that were also "creative" to tackle novel problems brought forth by World War II. Then, from the 1960s to the 1970s, the new "Design Methods Movement" arose from various

conferences, and books on design methodology or methods became prolific (Cross 1993, 16). This Workshop*,* the conference that took place in 1962 in London, is particularly known as the event that gave birth to modern design methodology as "a subject or field of enquiry", which was significant because, for the first time, design methodology had gained real recognition among the academics (Cross 1993, 16).

However, by the 1970s, the application of design methodology fell out of favour when its founding fathers, such as Christopher Alexander, began to dissociate themselves from it, and Christopher Jones claimed that he was tired of the endless attempts of fixing one's entire life into "a logical framework" (Cross 1993, 16). This repulsion likely arose due to the rise of new liberal humanism, which dismissed the former values of the late 1960s, and more importantly, because many acknowledged that they were failing to produce desired outcomes through the implementation of such "scientific methods" in design (Cross 1993, 16). On top of all this, fundamental issues in the initial design methodology were also raised by Rittel and Webber (1973) when they defined planning and design problems as being "wicked".

The American philosopher and systems scientist, C. West Churchman, first heard of the term "wicked problems" in 1967 when it was used in a seminar by Horst Rittel, Professor of the Science of Design at the University of California. Rittel used the term to describe a class of social system problems "which are ill-formulated", where the information available is perplexing, the clients and decision makers have clashing values, and the development of the entire system is utterly confusing (Churchman 1967, B141). Then in 1973, together with Webber, a Professor of City Planning at University of California, Rittel used the term again to make the claim that any attempt to use a scientific basis to confront wicked problems is sure to fail as this method had been developed to tackle only "tame" problems.

As written in Rittel and Webber's paper, the initial idea of social planning was heavily driven by efficiency, which was the same concept that guided the fields of civil engineering, current operations research, scientific management movements and more during the industrial age, and thus, the act of planning was also regarded as "a process of designing problem-solutions" that could be implemented and managed with little cost and time (Rittel and Webber

19733, 158). Thus, it became a task that could be assigned to an "efficiency expert" who could identify a problem, solve it, and at the same time, minimise the resources required for the process (Rittel and Webber 19733, 158). However, the early system analysts who once saw themselves as universal problem-solvers, and felt confident in diagnosing, exposing and removing the hidden causes of any perceived problem, began to realise how problematic their model was when they found themselves trapped by the same "diagnostic difficulties" that perturbed their clients (Rittel and Webber 19733, 158).

According to Rittel and Webber (1973, 159), an ideal planning system would function as "an on-going, cybernetic process of governance, incorporating systematic procedures for continuously searching out goals; identifying problems; forecasting uncontrollable contextual changes; inventing alternative strategies, tactics, and plausible action sets and their consequences; evaluating alternatively forecasted outcomes; statistically monitoring those conditions of the publics and of systems that are judged to be germane; [and] feeding back information to the simultaneously functioning governing process". However, it was a system impossible to perfect because there was no theory that could be used to perform appropriate forecasting; the intelligence needed for the tasks was limited, and the attainment of unitary goals was not feasible due to the differing objectives held on to by the "pluralities of politics" (Rittel and Webber 19733, 159). Under such circumstances, the professions in the social sciences were often attacked by the public for their incompetency in solving problems the way they claimed they could. Rittel and Webber (1973, 159) write that this happened because the planners were misled into thinking that they could address "wicked" social problems in the same ways that applied scientists solved their natural science problems.

Apparently, the kinds of problems that engineers and scientists deal with are mainly "tame" or "benign" since they can be defined, separated and dealt with using solutions that are derivable (Rittel and Webber 19733, 159). The examples of such tame problems include solving a mathematics equation, analysing the composition of an unknown chemical compound, and winning a chess game with a few moves, where each of these tasks has a clear mission, regardless of they are solved or not. In contrast, planners are confronted by societal

problems that are essentially "wicked" because they include all sorts of issues related to public policy and possess no explicit traits. Such problems include determining a site for an expressway, adjusting the tax rate, and tackling crimes (Rittel and Webber 19733, 159). In this instance, defining these problems as "wicked" is appropriate not because the properties of planning-related problems are ethically intolerable, but because they are, as described by Rittel and Webber (1973, 160), "malignant", "vicious", "tricky", or "aggressive".

However, in the context of policy and planning, this attempt to define scientific problems as "tame" and societal problems as "wicked" has also been criticised as being merely a revival of an old and untrue distinction between the natural and social sciences (Turnbull and Hoppe 2019, 318). The notion of a "wicked problem" has been criticised for lacking any basis in current policy science scholarship, and though Rittel and Webber's article was never meant as a methodical research programme to provide particular classifications of problems, its value is still acknowledged particularly for its contribution to a broader confrontation of the systems approach (Turnbull and Hoppe 2019, 320). While no alternative framework was offered by Rittel and Webber, their article played a part in leading policy scientists to reconsider the ideas put forth by scholars who have also questioned system planning methodologies that focus on goal-setting and the generation of solutions (Turnbull and Hoppe 2019, 320).

The concepts of "wicked" problems, Design Thinking, and graphic design were first connected by Richard Buchanan in 1992 when he observed that design seemed to be expanding, both in terms of what it meant and what it was connected to, and unanticipated dimensions in design practice were becoming more apparent. As observed by Buchanan (1992, 5), the trend of Design Thinking in the 20th century was moving parallel to the evolution of design, and that it was growing from a commercialised pursuit to a divided profession to a discipline for technical research. Buchanan then called for a new mode of Design Thinking because design practice had evolved and needed to be "recognised as a new liberal art of technological culture". His idea of liberal art refers to "a discipline of thinking" that can somewhat be shared by both men and women in their everyday lives, and as a result, be

mastered by some who “practise the discipline” with unique perceptions and occasionally push it into new territories of innovative application (Buchanan 1992, 5).

Despite the rapid changes that were taking place in design then, Buchanan (1992, 5) realised that there were many who still advocated for the traditional linear models of Design Thinking, as they believed that the design process had only two specific phases: “problem definition” and “problem solution”. In this context, “problem definition” can be seen as “an analytics sequence in which the designer determines all of the elements of the problem and specifies all of the requirements that a successful design solution must have”, while “problem solution” refers to “a synthetic sequence in which the various requirements are combined and balanced against each other, yielding a final plan to be carried into production” (Buchanan 1992, 5).

Some critics identified two problems that come with the adoption of such a model: first, the string of actions in Design Thinking and decision-making is never a straightforward and linear progression; and second, the problems that designers were tackling did not back down to any of the linear formula that had been proposed thus far (Buchanan 1992, 5). Nevertheless, many business professionals, scientists, and even some designers continue to welcome the linear model because it offers a “logical” perspective on the process, which is not available anywhere else (Buchanan 1992, 15). To Buchanan (1992, 15) the application of the traditional model of Design Thinking by designers is problematic, as this suggests that the problems they are dealing with are determinable and have conditions that are definable.

Buchanan (1992,17) argued that in practice, a designer often begins with a “quasi-subject matter”, which is “an indeterminate subject” that is vaguely found within “the problems and issues of specific circumstances”. Then, out of the “specific possibilities of a concrete situation”, the designer is expected to come up with a design that results in a particular product (Buchanan 1992, 17). To explain this process further, Buchanan (1992, 17) points to the example of a client’s project brief that fails to provide a clear explanation of the subject matter of a specified design application, and merely describes the problem that needs to be examined and solved. In cases where a brief does provide concrete details of the intended product’s

features, this often means that the commissioning corporate executive, owner or manager has already made an attempt to carry out the critical step of turning the problem and its issues into "a working hypothesis", so as to extract the specific features of the product to be designed. In short, the client has tried to remove the "wickedness" from the problem (Buchanan 1992, 17). However, this does not alter the fact that the initial conception of these features, as provided in the brief, is but one possibility and they are likely to change after many rounds of arguments and discussions between designer and client (Buchanan 1992, 20).

It appears that Buchanan's idea of wicked problems in Design Thinking is limited to the context of the conventional designer-client framework. This is evident as he resonates with Rittel's idea of "wickedness" as applied to the kind problems planners deal with, which are described as being "ill-formulated, where information is confusing, where there are many clients and decision-makers with conflicting values and where the ramifications in whole systems are thoroughly confusing". Buchanan finds this description amusingly familiar and recognises this as a common occurrence when graphic designers are confronted with a new project. Thus, as design was growing into "a new liberal art of technological culture", Buchanan (1992, 20) hoped that Design Thinking could overcome the "impossibilit[ies]" caused by inflexible boundaries found between the fields of engineering, industrial design as well as marketing, as well as the "impossibility" of having to depend on either the humanities, the social sciences or the natural sciences to find solutions that deal with the "wicked problems of design thinking". In addition, Buchanan found that calling such problems "impossible" was an excuse that limited imagination and could be easily overcome with "better design thinking" (Buchanan 1992, 21). Even though Buchanan had discussed these issues in the context of client-designer workflows, he clearly hoped that this discipline of thinking would eventually become accessible to everyone, for application in their daily lives. Furthermore, beyond the purpose of creating designed products, Buchanan believed that Design Thinking could change "our culture, not only in its external manifestation but in its internal character" as well (Buchanan 1992, 21).

Carrying a different ambition, Tim Brown, the current chair of IDEO, has won the world over with his vision of what Design Thinking can do for businesses as well as society in the 21st century. Even though it was the co-founder of IDEO, David Kelly, who first coined the term "human-centred" as a discipline of "design thinking" when the design and innovation company was founded in 1991 (Rawsthorn 2009), Brown was the spokesperson who advocated the value of Design Thinking to designers as well business leaders around the world. Leading up to the success of his book *Change by Design* in 2009, Brown had been speaking about the significance of Design Thinking since as early as 2005. Calling Design Thinking "a catalyst for innovation productivity" in the article he wrote for *Fast Company*, Brown's focus has been very much on the growth of businesses (Brown 2005). By 2006, in an interview he did with *Forbes*, Brown had begun to identify a new trend in Design Thinking, which involved applying it to social concerns such as generating clean water for people living in developing countries and creating more effective and efficient ways to hand out vaccines.

However, it was thanks to Roger Martin, Dean of the Rotman School of Management at the University of Toronto, that Design Thinking became associated with businesses and was integrated into education systems. Martin first wrote in 2006 about how design was becoming the "engines" that drove the corporate revenues in companies. For a business to thrive in the world where changes take place continuously and rapidly, Martin writes that business people need to "outimage" their competitors by thinking more like designers (Martin 2006). Developing this idea further, Martin again urges businesses to not just make claims about being "design-oriented" or to just hire famous designers. Instead, if they truly wish to maximise the rewards of design, Martin argues that businesses should do more by getting themselves reorganised as design studios, where life revolves around work and where people welcome "the mystery" of problems open-mindedly (Martin 2006). So, instead of remaining trapped in the dated loops of notions that have failed to train and develop innovative managers, Martin proposes to bring in design principles, or what he calls "business design", into the school's MBA courses (Martin 2006). To him, it does not matter if the goal is to invent new products, develop new services, come up with new ways to market them, or to revamp business models;

as long as one adopts Design Thinking, one can “get bigger ideas, faster and more efficiently” (Martin 2006).

Likely inspired by Martin’s idea of applying design to businesses, Brown contributed an article titled “Design Thinking” to *Harvard Business Review* in 2008. In it, Brown (2008, 2) recognises that the traditional role of a designer is to merely to beautify an idea already conceived, and has no part in the important work of innovation. Undeniably, the approach had worked and contributed to market growth when design made novel products and technologies aesthetically pleasing and more attractive to consumers or when brand perception was strengthened via effective communication and advertising strategies (Brown 2008, 2). However, this tactical role has limited value in creation and thus is not functional in the developed world where economies are driven by service delivery and knowledge work, and where innovation is becoming increasingly valued (Brown 2008, 2). Beyond physical outcomes, the objectives of design also cover human-related activities such as new types of services, processes, IT-run interactions, entertainment, and methods of communications as well as collaborations, which is where Design Thinking can create a pivotal difference (Brown 2008, 2). Defining Design Thinking as “a discipline that uses the designer’s sensibility and methods to match people’s needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity”, it is apparent that Brown believes that Design Thinking has much to give to the business world, and hence, he advocates leaders incorporating it into all phases of the innovation process to create differentiation as well as a competitive advantage (Brown 2008, 5).

Presented and explained with a diagram that resembles a mind map, the three-step cycle of Design Thinking proposed by Brown includes “Inspiration, Ideation and Implementation” (Brown 2008, 5). Brown (2008, 4) prefers to metaphorically describe this process “as a system of spaces” over “a predefined series of orderly steps” and each space represents a different but related activity, and as a coherent whole, innovation takes shape. In the cycle of the three main spaces, “inspiration” refers to “a problem” or “an opportunity”, or both, that drive the pursuit of viable solutions (Brown 2008, 4). “Ideation” is about the process of conceiving, developing and

putting concepts to test, and "implementation" pushes the tested solutions to the market (Brown 2008, 4). However, the process does not end there, as projects will loop back to and through the spaces until the ideas are fine-tuned, and new directions are followed.

Combining his thoughts about what Design Thinking can do for businesses and social causes, Brown published the best-seller *Change by Design* (2009). The first part of the book focuses on its application to business by discussing how some innovative firms have practised it to come up with ground-breaking solutions and sometimes achieved more than what was intended. The second part is an extension of the talk Brown (2009) delivered at a TED conference in the same year that urged designers to "Think Big!". Brown explained that this is done by examining three basic areas of human activity – society, business, and the market – and the aim was to demonstrate how Design Thinking can be adopted in fresh ways to generate ideas, knowing that the process is going to be as challenging as the problems being dealt with (Brown 2009, 25).

Also advocating Design Thinking as a problem-solving methodology, Jeanne Liedtka co-authored the book *Design Thinking for Greater Good* in 2017 and wrote an article about "Why Design Thinking Works" in 2018. Formerly a chief learning officer at United Technologies Corporation and now a faculty member of the Darden School of Business at the University of Virginia, Liedtka's research centred on design-led innovation within the government as well as the social sector. Based on a seven-year study of projects from sectors ranging from business, social services and healthcare, she sees the potential in Design Thinking as a "social technology" to "unleash people's full creative energies, win their commitment, and radically improve processes" (Liedtka 2018). In the 2018 article written for *Harvard Business Review*, Liedtka identifies some of the human behaviours that hinder the advancement of innovation, then explains how the mechanisms and steps of Design Thinking could help address them.

Before getting into the structure of Design Thinking, Liedtka first identifies the three outcomes that determine an innovative process's success and discuss their underlying trade-offs. The three desired outcomes she names are "superior solutions, lower risks and costs of

change, and employee buy-in" (Liedtka 2018). In the search for superior solutions, asking unconventional questions can point teams to ideas that are more original, but there is always the risk of causing indefinite anxiety and delays when trying to understand the problems, and managers who are "action-oriented" may become impatient. Also, solutions are more effective when user-driven standards are considered, and different voices are brought into the process (Liedtka 2018). However, it can be challenging for users to define their expectations for something that has yet to exist, and having opposing perspectives that lead to unproductive debates can be hard to manage (Liedtka 2018).

To lower the risks and costs of an innovative process, innovators are required to prepare options and be prepared to get rid of unviable ideas so that the project's focus is not diverted and resources are not stretched (Liedtka 2018). Still, at times, people prefer to keep the "incremental" ideas over the creative ones because they are not as risky (Liedtka 2018). Finally, no innovation will flourish if the employees do not play their parts in supporting it, and the best way to gain their support is by involving them in the process of idea generation; though, there is the risk of disagreements and confusion when people with differing views want their ideas to be heard (Liedtka 2018). When dealing with these trade-offs, Liedtka (2018) thinks that a "social technology" like Design Thinking can overcome such behavioural hurdles and problematic biases that surface among people who are trying to work towards the same goals.

About the structure of Design Thinking, Liedtka acknowledges that many designers find it too rigid and linear. However, for the same reasons, she thinks that Design Thinking is perfect for those who are managing innovation teams and are not accustomed to conducting one-to-one research with consumers, getting influenced by their viewpoints, creating collaboratively with others, and crafting and executing experiments, since "structure and linearity" are helpful for managers to get into these new practices with ease (Liedtka 2018).

When facilitating the process, from research to execution, Design Thinking is applied in most organisations with seven activities: Customer Discovery – 1) Immersion, 2) Sense-making, and 3) Alignment; Idea Generation – 4) Emergence, 5) Articulation; and the Testing

Experience – 6) Pre-experience, and 7) Learning in Action (Liedtka 2018). Each activity produces an output that is necessary for the next one, and the process continues until an implementable solution or innovation is generated. In short, Liedtka believes that the structure of Design Thinking begins with being immersed in the user experience to create data, which is then converted into insights that help teams see eye to eye on the design criteria needed to conduct brainstorming. The next step would involve examining assumptions that are critical to the feasibility of solutions, and finally, these are tested using prototypes to aid the teams in developing innovations further and to have them ready for real-life experiments (Liedtka 2018).

Essentially, these steps do not only help organisations to overcome the challenges encountered in their attempts to "reach superior solutions, lower costs and risks, and [obtain] employee buy-in"; they also thwart the occurrence of human biases that hinder creativity (Liedtka 2018). Seeing how Design Thinking promotes "engagement, dialogue, and learning" among innovators, users and the stakeholders, Liedtka concludes by calling it "a social technology at work".

About how Design Thinking can help tackle "wicked" problems in the social sector, Liedtka discusses this in her book, *Design Thinking for Greater Good.* In it, Design Thinking is defined as "a problem-solving approach with a unique set of qualities: it is human centred, possibilities driven, option focused, and iterative" (Liedtka, Salzman and Azer 2017, 6). Its "human centred" quality highlights the significance of in-depth investigation into the problems of people who need their lives to improve before solutions are generated, and because it is "possibilities driven", more than one option can be explored (Liedtka, Salzman and Azer 2017, 6). Finally, being "iterative" means that instead of using past data to run analyses, the Design Thinking process will involve conducting a series of "real-world experiments" to fine-tune the ideas (Liedtka, Salzman and Azer 2017, 6). Using a collection of ten stories, the authors explain how Design Thinking has been applied by various organisations such as United Cerebral Palsy, Monash Medical Centre and Community

Transportation Association of America to overcome challenges and work towards the greater good (Liedtka, Salzman and Azer 2017, 6).

In the final part of Liedtke's book, a Design Thinking tool kit is provided and explained to help readers gain proficiency in the methodology. Differing from the seven activities discussed in the article for *Harvard Business Review*, the tool kit focuses on answering four questions: "What is?", "What if?", "What wows?", and "What works?". Then, together with a total of fifteen steps, the tool kit aims to help innovators navigate through the process while trying to find answers (Liedtka, Salzman and Azer 2017, 248). Even though Design Thinking is meant to be applied intuitively, the authors believe that the systematic four-question and fifteen-step approach is more manageable for beginners and can help reassure teams that there is no harm in engaging in different types of conversations (Liedtka, Salzman and Azer 2017, 248). Back in 2012, IDEO had also adopted also a similar linear approach for educational purposes when they worked with Riverdale Country School to launch a tool kit that aimed to equip educators with a design process and methods that collaboratively create solutions for their students, schools as well as community. Unlike Liedtka's version, this particular Design Thinking process (for educators) comprises five phases and twelve steps. As specified in the tool kit itself, IDEO has been using similar tools, processes and methods for years to deal with complex design problems (IDEO, n.d.).

Clearly, Design Thinking has no fixed definition or definite steps in its application. In general, it is a participatory approach that promotes collaboration with people with little or no training in design, which integrates empathy into the process (Kolko 2018). While making such an emotional and yet purposeful connection with users, the process converts them from consumers to co-designers (Kolko 2018). "Problem exploration" is another vital feature of Design Thinking: it requires the designer to think logically (linear thinking) but explore illogically (divergent thinking), and additionally, it calls for the making of prototypes and testing them with real users to find out how useful and desired they are to them (Kolko 2018). According to John Kolko (2018), founder of Austin Center for Design and a partner at Modernist Studio, combining empathy-building, problem exploration as well as prototyping

and testing, Design Thinking is about "intellectual topics and intellectual investigations", and at the same time, it is also about design since it involves creating things. Above all this, Kolko believes design, as a way of problem-solving, helps us to view the world we live in as a series of human problems that can be rectified and a living space to be experienced (Kolko 2018). Based on these thoughts, if creating things is the starting point at which we engage with the world, then design, as a practice, can certainly enable us to contribute to society meaningfully.

In 2019, a decade after *Change By Design* was launched, Design Thinking continues to be embraced by academic institutions, businesses and social organisations internationally, and Brown came up with an updated edition of his bestseller. Looking back at the time when the book was first published, Brown made two points. First, Design Thinking creates a bigger artboard for design to deal with the problems faced by society and businesses, because it is a creative and human-centred problem-solving method that offers new and working solutions. Second, Design Thinking can be practised even by those without the skills of a professionally trained designer and thus, should be made available to anyone interested in it (Brown and Katz 2019). However, in the book's updated edition, Brown is now also asking designers to take on the role of problem-solvers to churn out solutions that can address the world's wicked problems.

Brown (2019) thinks that it is urgent that graphic designers do so as he has noticed that most societal systems have become outdated and are no longer able to fulfil their purposes. Brown suggests that this is so mainly because these societal systems were created to satisfy requirements set during the first machine age, and they have remained the same since the 19th century (Brown and Katz 2019). Hence, being eager to discover what Design Thinking can achieve when applied to these "wicked problems", he uses the projects completed by IDEO over the past decade to identify "a cluster of dilemmas for which design has begun to chart promising solutions, even at this vast and open-ended scale" (Brown and Katz 2019).

Nevertheless, there is no lack of criticism on the use of Design Thinking within the design field itself in recent times. Poynor (2010, 118) proves to be one of those who have

struggled to come to terms with the interest generated about Design Thinking, especially after he watched a short film about it on YouTube. From it, he gathered that Design Thinking develops solutions via prototyping and "conceptual play", seeks out fresh insights on what is already known, visualises things that have not been imagined, and so on (Poynor 2010, 118). To Poynor, if Design Thinking is to be understood by these definitions, then it does not offer anything new as artists and designers have always operated by thinking this way. It appears that because business theorists had have a long-overdue epiphany as to why design matters, they have seen a need to make amends by repackaging and selling it to naïve clients as an "intuitive mode of investigation that [is] always intrinsic to visual thinking" (Poynor 2010, 118). With questionable motivations attached to this new trend of "human-centred" design thinking, Poynor is not surprised that there are reluctant designers who are sceptical about business people's attempts to think and act like them. Above all, Poynor asks: If design has only become human-centred recently, does this imply that design has been "human-opposed" all along? No doubt, there have been some failures in the way that products and services, housing, public spaces and facilities, and forms of visual communication were designed, but designers should not be blamed entirely, since the outcomes of design have always been a shared responsibility with business decision-makers and public policy-makers (Poynor 2010, 118).

John Kolko (2018), the founder of Austin Centre for Design, observes that there are two diverging paths: one taken by those who are knowledgeable and skilled in "making things" and the other one by those who are simply "thinking about things". For the latter, Kolko notices that they tend to practise this popularised methodology without understanding "the psychology of problem solving", or without learning about "the history of union-led interventions in Scandinavia"; they also do not have any "idea of design as a liberal art" (Kolko 2018). Some other critiques that Kolko identifies and discusses in his essay, "The Divisiveness of Design Thinking" (2018), are echoed by Natasha Jen, an award-winning graphic designer and partner at Pentagram; Bruce Nussbaum, a former professor of innovation and design at The New School at Parsons School of Design as well as the assistant

managing editor for *Businessweek*; and Lee Vinsel, the Assistant Professor of Science, Technology and Society at Virginia Tech. In a presentation she made at the ninth Annual 99U Conference in 2017 in New York City, besides calling it a meaningless buzzword, Jen asserted that “design thinking is bullshit”. Jen is plainly perturbed by how the complex and often “messy” design process is being watered down to a “five-step, linear, hexagon-based process” through this Design Thinking methodology (Kolko 2018).

Once an enthusiastic advocate for Design Thinking, Nussbaum began to call it “a failed experiment” when he saw how it had done more harm than good to the design profession and society in general (Nussbaum 2011). He adds that it is the “construction and framing” of Design Thinking that is problematic, in how it is being sold to businesses as a novel process that guarantees to deliver creativity and a methodology that allows designers to maximise their contributions, engagement and value (via sales) within the corporate world. Nussbaum observes that the primary reason why companies embrace Design Thinking is that it is nicely “packaged as a process” (Nussbaum 2011). Unfortunately, there have been far more failures than successes when companies started “turning it into a linear, gated, by-the-book methodology that delivered, at best, incremental change and innovation” (Nussbaum 2011).

As an educator, Vinsel Lee (2017) finds that students tend to have unrealistic expectations of design and how Design Thinking can be used to make a positive impact. Lee opines that it is as good as granting students “power without knowledge” and “creative confidence without actual capabilities” (Lee 2017). As a result, students who graduate from programmes that are “design-thinking centric” have the ability to “think about design” but do not have the ability to actually design things. In his argument, Lee (2017) is more critical of the business aspect of it as he concludes that “design thinking is not about design. It is not about the liberal arts. It is not about innovation in any meaningful sense. It is certainly not about ‘social innovation’ if that means significant social change. It is about commercialization” (Lee 2017).

Alas, there is evidence that supports Lee's claim. In the name of promoting social good, pro-bono design projects created for charitable organisations are often merely marketing stunts to build the reputation of the creative entities. One of such infamous examples is the I Sea app created by Grey for Good, the philanthropic arm of advertising agency Grey Singapore (Hern 2016). Claiming to be use real-time satellite footage, the app was presented as a tool that could locate migrant ships that are lost at sea and to help report the distressed refugees to the Malta-based Migrant Offshore Aid Station (MOAS) (Hern 2016). When first launched in 2016, the project received positive media coverage and was also awarded the Bronze Medal by Cannes Lions (Rogers 2016). However, the app was removed from Apple's App Store, and the award had to be returned after a collective effort by developers worldwide discovered that the app was a fake (Hern 2016). Instead of showing real-time footage from the satellite, it had presented to users a cropped static image and unchanging coordinates (Hern 2016). MOAS then released a statement to cut ties with the design group: "We were dismayed to discover that real-time images were not being used. We have since discontinued our relationship with Grey for Good and spoken candidly about our disappointment to the media" (Hern 2016). Stating that the "Grey Group is one of the most creatively awarded global agencies in the world", the spokesman Owen Dougherty emphasised that "there was no need for scam projects" (Nair 2016).

Undeniably, there were some good intentions behind these initiatives. However, more often than not, the "solutions" offered through these campaigns or designed products are not practical or sustainable to solve persisting social problems. Another example is the case of the Life-Saving Dot (Jeevan Bindi) project (2015), also by Grey for Good, which was a campaign created to help Indian women who suffer from health problems due to iodine deficiencies. By handing out iodine-coated bindis (an Indian beauty accessory) to women who live in rural areas, the design group believed that the "life-saving dots" can provide a daily supply of the essential mineral to users when it is placed on their foreheads (Grey Group AMEA 2015). With the slogan for the campaign boldly claiming that "it is the difference between life and death", the campaign's promotional video was well-received by the media,

but quickly, the effectiveness of this "brilliantly simple" solution was also questioned (Narayanan 2015). When dealing with a health issue like iodine deficiency, it is absolutely necessary to conduct several tests to evaluate if the problem has been addressed by having the women wear the bindis (Narayanan 2015). Observing that no such follow-up actions were embedded into the campaign, Harish Bijoor (2015), a brand domain specialist and management consultant, commented that the true intent of such campaigns created by advertising agencies was usually to create a "soft aura" about themselves. He then called for greater diligence, which should be exercised "very, very keenly by marketers and their advertising agencies before embarking on campaigns which touch people so intrusively, especially when it comes to health" (Narayanan 2015).

Back in 2006, the result of a survey that aimed to find out if graphic designers were successful in addressing problems in society had shown that graphic designers do well in solving the problems of their commercial clients but fail in the realm of social causes. One of the observations made by the established graphic design practitioner, Sadik Kararmustafa (2006), was that many posters created for social causes were mainly motivated by awards and design credits, and they usually do not contribute to any social good. Renowned graphic designer Milton Glaser (2006) pointed out that the primary reason for such failure is "a lack of understanding" of the problems' root causes. Design scholar and educator Sharon Poggenpohl (2006) also writes about witnessing how pro-bono work is created mainly for "self-serving aesthetic and promotional reasons"; as such, these projects are executed as if it does not matter if the solution works or not. Thus, the biggest problem lies with the fact that many designers focus too much on their role as "technical or aesthetic experts" and fail to communicate with the audience to understand their needs "respectfully" in order to address them (Long 2006). But if Design Thinking, as a human-centred approach, is supposed to be the remedy that helps designers address social problems in the 21st century, why do we still see similar inadequacies occurring in recent times?

According to Rittel and Webber's theory on "wicked" problems (1973, 162), problems of such nature cannot be stopped simply because there are no definite criteria for us to

understand these problems adequately, and it is impossible to put an end to the random chains that connect open systems that interact with one another; attempting to solve them is as challenging as attempting to understand them. Under such circumstances, the planner would have to do better by investing more effort to improve his chances of solving them. However, more often than not, the planner would stop working on a wicked problem or would simply believe that he has found the best possible solution when his budget, time or patience runs out (Rittel and Webber 1973, 162). Also, with wicked problems, implementing any so-called solutions will create a series of consequences continuously over an unlimited period of time, and sometimes, the consequences of the found solution may end up causing infelicitous repercussions that outweigh the benefits that it brings (Rittel and Webber 1973, 163).

Problems that are ill-structured and hard to deal with are clearly visible in many parts of the world today, and the small city-state of Singapore is not spared. One of the pressing problems Singaporeans face in recent times is the country's rapidly ageing population, which places much pressure on the contracting workforce to support the increasing cost of healthcare and social services (Hirschmann 2022). A survey result reported that 49% of Singaporeans believed that they would not be able to manage their health and well-being when they become older, and 55% believe that they are not financially ready for old age (Hirschmann 2022).. To address these challenges, the local government launched the Pioneer Generation Package in 2015 and the Merdeka Generation Package in 2019 to help the elderly cope with high medical and living costs (Hirschmann 2022). By raising the re-employment and retirement age to 70 and 65 respectively, and introducing the Senior Worker Early Adopter Grant, engaging more seniors would help improve the situation (Hirschmann 2022). That said, the local government is aware that adjusting employment regulations alone would not be sufficient to support older Singaporeans, and thus, it is necessary to look into improving the quality of their lives via other means.

Due to a lack of natural resources, technology plays a major role in Singapore's search for solutions, in creating opportunities and helping people improve their lives. In the context of healthcare management, an example of such a solution is the design of an app named

TraceTogether and the SafeEntry digital check-in system used to conduct contact tracing, which in turn effectively controlled the spread of COVID-19 (Lee, 2021). However, even though technological solutions have proven to be useful in managing a pandemic, when it comes to engaging Singapore's elderly population, a study conducted by Singapore Eye Research reported that more than half of their elderly respondents were not receptive to digital health services and management (Gunasegaran 2021). Based on the collected data, Professor Josip Car (2021), the director of the Centre for Population Health Sciences at NTU, expressed that it would be haughty "to assume that just because something works for a particular demography, technology or environment, it works for everything and everyone".

In tackling the problem of climate change, Singapore has regarded itself as an "alternative energy disadvantaged country", and thus technologies play a vital role in the country's transition to become a low-carbon nation (NCCS 2021). To fulfil its objectives and commitment to taking climate action, the local authorities seek to collaborate with stakeholders and also seek opportunities to implement technologies in sectors such as aviation, maritime and power supply (NCCS 2021). With such dependence on technological solutions to tackle the pressing problems brought about by the ageing population and climate change, it is no surprise that Singapore is recognised as the top digital society in a study conducted among twenty-four countries (Baharudin 2019).

Interestingly, even though more Singaporeans have built their trust in technology and are enjoying its benefits on a daily basis, the survey result also showed that, compared to the g lobal average, fewer Singaporeans think that their psychological needs were being fulfilled through technology (Baharudin 2019). In general, people in Singapore find that their digital needs are being fulfilled, but at the same time, they are concerned about the negative effects that technology has on their well-being. This chain of cause and effect shows how the implementation of a solution to address one problem can bring about other problems that may then persist over an unpredictable period of time, matching Rittel and Webber's concept of "wicked" problems. Therefore, as long as Design Thinking remains a step-by-step problem-

solving methodology that seeks find creative but short-term solutions, it might remain inadequate for use by local graphic designers to confront wicked problems in a sustainable way.

But while the local government points to an interdisciplinary approach in design training in recent years, the Western world clearly prefers the idea of transdisciplinarity instead. For example, the Parsons School of Design adopts a transdisciplinary approach in its curriculum to address pressing economic, environmental, social and political issues, and make reasons, dialogues, discussion and reflection central to its design process (Parsons n.d.). As such, the search for an alternative role in the subsequent sub-chapters answers local calls for an interdisciplinary approach, turning to the idea of transdisciplinarity as advocated by the Western world. Fusing the two approaches is feasible since local policymakers see the benefits of drawing and sharing knowledge from different paradigms to deal with problems that are increasingly more complex than ever due to globalisation and the advancement of technologies (Ho 2014).

Conclusive Notes

This sub-chapter, Section 4.1, has traced the genealogy of the notion of "graphic designer as problem-solver" by first clarifying what constitutes a problem-solver based on the theories developed by Duncker, Hayes, and Mayer and Wittrock. The connection between design and problem-solving can be traced backed to Sullivan's article, with which he coined the famous axiom "form follows function", but it was Arnold's idea of "Creative Engineering" and Simon's "science of the artificial" that formally framed the design process as a creative problem-solving activity. After which, the reasons why societal problems are deemed as "wicked" was discussed via Rittel and Webber's theory on social planning, and the reasons why the traditional step-by-step approach of Design Thinking may not be sufficient to deal with problems effectively was explained via Cross and Buchanan's discussions on the limitations of the traditional design methodology. To understand contemporary views on the notion of "graphic designer as problem-solver" and the adoption of Design Thinking as a problem-solving methodology within the design community, the perspectives of acclaimed industry

practitioners and educators like Brown, Liedtka, and more have also been reviewed. Through the examples of the I Sea app and Life-Saving Dot projects, this research has also shown how short-term creative solutions might not be feasible to sustainably address wicked social problems. What would then be a more appropriate role and approach that graphic designers can take on, so that they can address some of the more pressing social problems of the 21st century? While local policymakers turn to an interdisciplinary approach in preparing Singaporeans for the fast-changing environment, and the Western world explores the idea of transdisciplinarity in solving wicked problems, this research considers both approaches in search of an alternative role and approach for local graphic designers to contribute to society more meaningfully. With that, the next sub-chapter looks into curatorial practices to study how some curators have successfully become agents of social change by playing the role of a problematiser and by using exhibitions or curatorial projects to problematise problematic social situations or conditions within specific communities.

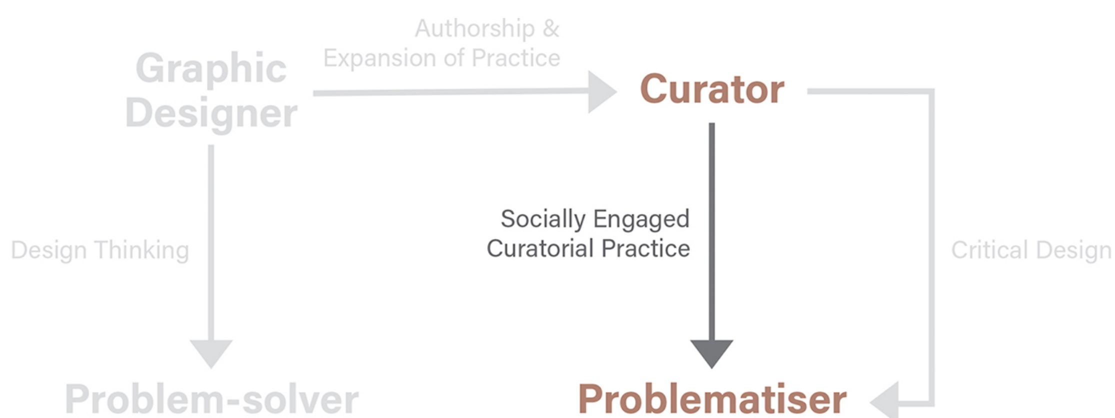

Fig. 3. Research Framework – Curator as Problematiser, by Junie Tang.

4.2 Curators as Problematisers and Curatorial Projects as Problematisation

To find an alternative role and approach for local graphic designers to address complex social problems, such as those brought about by an ageing population and climate change, and to facilitate outreach, co-creation and education programmes within local communities, this sub-chapter explores the idea of interdisciplinarity by turning to a different discipline to examine how some curators, who are also known as agents of social change, have played the role of problematisers. It also considers the concept of transdisciplinarity by studying how

they utilise curatorial projects to create room for collaboration and dialogue. But first, this thesis will discuss how a curator's role and responsibilities have evolved since it emerged centuries ago, and how it has since come to involve making significant changes in society.

The word "curator" was first used in the mid-14th century to describe the job of a guardian, manager or an overseer, and the word originated from the Latin verb "curare", which means "to take care of" (George 2015, 2). Initially, curators were tasked to care for either lunatics or minors, but the role began to change when the rich started to collect objects such as art, decorative items, carvings as well as geological and natural specimens as a pastime in the 17th century (George 2015, 2). These wealthy individuals would allocate rooms, known as "Cabinets of Curiosities", within their homes to keep and exhibit their collections, and the appointed collector or a member from the household staff would be placed in charge of the collection (George 2015, 2). Besides taking care of the items that were already in the collection, the job scope also included the selection of objects to be added as well as the maintenance of a list of the items in the collection (George 2015, 2). The staff who were given such responsibilities then gained the title of "keepers", which is a term still in use in some European museums. At times, a "keeper" also refers to a curatorial role of seniority or with additional responsibilities of connoisseurship, research and writing (George 2015, 4).

The role of the curator was then tied to education in the 19th century when the museums were developed with respect to the strategies of enlightenment and discipline during the post-Industrial Age (Morgan 2013, Chapter 1). When objects and artefacts were displayed or collected based on a selected curatorial approach, the displays were not just about the national histories and or the particular colonies that were being represented; they were also about the dissemination of certain ideals and values (Morgan 2013, Chapter 1). In this manner, the museum visitors were educated through the curated historical narratives and also through the curated experience, which taught them how to behave and view objects within the museum (George 2015, 2).

Well-established curator, writer and educator, Adrian George (2015, 2), finds it

challenging to explain what a curator is in the present day, as the definition of the role has become much broader than ever before. Among some of the definitions available, George believes that the definition most commonly subscribed is: “the selector and interpreter of works of art for an exhibition”. George also writes that the idea of a curator as an “expert with regard to visual culture and taste” likely first came about between the mid- to late 19th century and took shape by the mid-20th century, when the museum was transforming from “a repository for a collection” to “a place of engagement and learning, where artists and curators could work together to experiment with new means of expression and presentation” (George 2015, 4). Because of this development, a fresh breed of curators began making exhibitions that focused on specific historical or artistic themes, making connections between a range of works and bringing together artists of similar practices (George 2015, 5). Some of such curators were Harald Szeeman and Pontus Hultèn, who have created many revolutionary projects and eventually became prominent figures in the art world (George 2015, 5). Their success in making exhibitions that connected art pieces to a central theme did also lead to early criticism of the practice – it was put forward that such a practice could lead to placing too heavy an emphasis on curatorial concepts instead of the art works and their makers (George 2015, 5).

Then came the idea of a “transnational curator”, which the director of Dia Art Foundation, Jessica Morgan (2013) described as the “the most troubling and also exciting development in the curatorial field”. In 1989, the introduction of *Magiciens de la Terre* (at Pompidou) as the very first large-scale art exhibition that brought together artists from around the world has redefined curatorial practice as well as the related postcolonial discourse (Morgan 2013). From there, a new form of curatorial practice emerged for temporary exhibitions of similar scale, held biennially or as thematic one-off events, and led to the establishment of “hyper-mobile” curators like Hans Ulrich Obrist (Morgan 2013). These international group exhibitions have generated opportunities not only for “curatorial experimentation” but also for “defining multifarious ways of engaging with disparate interests”, and thus creating the space in which contemporary art can be “mediated,

experienced and historicised" (O'Neill 2007, 14-15). This development of the practice is described by curator and writer Paul O'Neill (2007, 16) as "the curatorial turn" from "practice to discourse", exhibitions have become "contemporary forms of rhetoric, complex expressions of persuasion, whose strategies aim to produce a prescribed set of values and social relations for their audiences". As a result, the discourse around curatorial practices intensified, and the shift in the role of a curator, where one contributes more actively and creatively in art production, became more apparent (O'Neill 2007, 15).

The idea of curators as artists or "meta-artists" gained momentum in the 1990s when curators began to sell their curatorial concepts as artistic outputs and market themselves as artistic creators (O'Neill 2007, 22). This shift of power appears to be in favour of curators since it provides more opportunities for creative pursuits, where artworks are somewhat employed to mark the presence of their text (O'Neill 2007, 22). In this instance, exhibitions have turned into a medium for "self-presentation" to court audiences' gazes, as their meanings are driven by the relationships between artistic viewpoints (O'Neill 2007, 99). The phenomenon of contemporary art institutions placing their emphasis on the research as well as meditation of non-permanent exhibitions over their collections suggest a growth of specialisation expressed through the viewpoints of the curators (O'Neill 2007, 22). For that reason, a curator's role and responsibilities are no longer confined to the "selection, consignment and installation" of artworks for exhibitions; they have become involved in the broadened administrative task of conceptualising frameworks and collaborating with other specialists (O'Neill 2007, 100). Consequently, curators are assigned the formal status of "authorship" in curatorial presentation and assumed to be the ones responsible for exhibitions as objects of experience and study (O'Neill 2007, 100). The former idea of curators being a mere part of the administrative and coordinative work is gone; they now hold the responsibility of withdrawing art from its original position or conventional distribution, and creating a space for each piece of work to give it new purpose and value, which is made possible by regrouping them according to specific contexts (O'Neill 2007, 100). This turn in curatorial practice had led the act of curating, since the 1990s, to become a discourse where

curators present themselves as the primary "subject and producer" of exhibitions (O'Neill 2007, 26).

In 2006, London-based critic Claire Bishop (2006, 178) wrote an article for *Artforum* about the sudden growth of interest among artists to work collaboratively, collectively and directly with specific social constituencies. Artistic works created through such means are not highly regarded within the commercialised high art world and are often mistaken as merely social events, performances, workshops or publications, yet they can still gather sufficient attention from the public (Bishop 2006, 178). Bishop sees the widespread popularity of biennials as one of the contributing factors to this shift since they serve as a new form of "commissioning agency" that fosters the making of engaged art in the public sphere. Generally categorised as socially engaged art, the focus of this artistic practice, whether carried out in the form of a collaboration with an existing community or creating a personal interdisciplinary system, is more often about the "creative rewards" rather than the "relational aesthetic" of the collaborative activities (Bishop 2006, 179). The intended artistic outcomes of various artists and groups may vary distinctly, but they are basically connected by a common belief, which is that "the empowering creativity of collective action and shared ideas" can create social change (Bishop 2006, 179).

Although the list of projects mentioned in Bishop's essay took place between 1999 and 2002, Bishop believes that socially engaged art practice can be traced back to the early 1990s, when the toppling of Communism led to the end of any remnant of revolutionary efforts that had once connected aesthetics and political radicalism. Extending the modernist's quest to blur the divide between life and art, artists utilise social settings to create projects that are categorised as "dematerialised", "antimarket", and "politically-engaged", and as a result, "the creative energy of participatory practices rehumanises – or at least de-alienates – a society rendered numb and fragmented by the repressive instrumentality of capitalism" (Bishop 2006, 179).

At this point, it is vital to note that this idea of employing socially engaged art as a form of cultural resistance has been discussed not only in the western context. Singaporean

art historian and curator, Seng Yu Jin, studied and wrote about "critical exhibition" as a new exhibitionary approach to confront authoritarian rulership and effect social change in the region of Southeast Asia. According to Seng (2017, 220), the late 1960s and 1970s was a significant period in the birth of these critical exhibitions, and some of the contributing factors include the radical student movement, the rise of dictatorial and military regimes, the threat of the Cold War as the Vietnam War intensified, and finally, the demand for economic growth that marked the development of higher education. Students from universities and fine art academies began to see themselves as the "elite intellectual vanguards", the defenders against corruption as well as the righteous force for social justice of their countries (Seng 2017, 221). For this reason, countries like Burma, Thailand, Indonesia, the Philippines and even Singapore were experiencing waves of student movements in the late 1960s and throughout the 1970s, and this student activism is the key to understanding the development of critical exhibitions (Seng 2017, 221).

Through institutional critique, manifestos (as counter-hegemonic discourse) as well as social engagement, many artist-student activists were looking for a reformation that could bring the relevance and meaning of art back into people's lives (Seng 2017, 220). As discussed by Seng in his essay, it was the formation of art collectives (along with their manifestos), the rise of nationalism, anti-imperialism and the New Left that led to the production of critical exhibitions within the Southeast Asian region (Seng 2017, 221-229). These artist-students were the driving force of critical exhibitions, a new mode that was not only intrinsically conceptual and socially engaging, but also placed art in public spaces, pushed artists to become part of broader movements that dealt with issues like nation building, the economic and social conditions of the people, democracy and more (Seng 2017, 221).

Compelled by a formidable force to reject the Western ways of making and thinking about art, the critical exhibitions produced by artist-students sought to set their approaches apart from the West, and as opposed to Western capitalism that focused on pursuing economic development without paying much attention to poverty issues, socialism and the

New Left were evidently favoured as an alternative in student movements (Seng 2017, 230). In Southeast Asia, it was the birth of critical exhibitions that reframed exhibitions as a medium of resistance and social change for common people, and not just a way of displaying art (Seng 2017, 230).

Clearly, the rise of socially engaged art laid the ground for subsequent discourse about the shift in both sites as well as the formats of exhibitions, and in this regard, art historian Terry Smith (2012) believes that when exhibition forms are going through radical reconditioning, most curators would follow the artists. In the essay “Shifting the Exhibitionary Complex”, Smith identifies and discusses how three prevailing currents in the contemporary art world were conceived within, clung onto, or progressed with the forms of dissemination that best fit their needs (Smith 2012, Location 839). Emerging via the notion of “remodernism”, the first current Smith talks about refers to the contemporising of art within the context of established institutions, namely, art history survey museums, museums of modern art, museums of contemporary art, and private museums of smaller scale. Materialised in the form of a biennale (a recurrent of temporary survey exhibition), the second current is labelled as the “transnational transition” that matches well with Western institutions’ interest to sample art from other regions without the commitment to collect it (Smith 2012). The third current is the belief that museums and biennales are not the ideal disseminative modes for the so-called “under-the-radar” proliferators, or whom Smith would generally label as “independent curators”. This group of curators preferred unconventional spaces, immediate interactivity and temporary set-ups that were characterised by their unpredictable changes and experimental nature. Some of these curators made conscious efforts to engage the public and resolved to add artistic vitality to social change in new contexts (Smith 2012).

As socially engaged art gradually developed into a new radical concept, researchers largely placed their attention on understanding the various socially engaged models (Birchall 2012). However, curator-writer Michael G. Birchall (2012) thinks that there is a need to look into the curatorial practices that are related to site-specific art instead because it has a shared

history with socially engaged art since the 1990s. Some exemplary exhibitions that set the scene for Birchall's examination include *Culture in Action* (in Chicago), *Sonsbeek 93* (in the Netherlands) and *Project Unité* (in France) (Birchall 2012). These exhibitions are identified as the forerunners that have defined what we now know as socially engaged art, and have also set the standards for international exhibitions, art fairs and biennials today, where curators gather various artists to create work based on a specific location (Birchall 2012). Defining the 1990s as the pivotal point when interest and trends in political and socially engaged art were re-established, Birchall quotes and agrees with Bishop (2012, 213) that the curatorial framework of exhibitions produced in the 1990s was "tighter and stronger" than the works created by the artists themselves.

Nevertheless, Bishop highlights that when the audience gets to co-create or participate in a work of art, a change in aesthetic considerations is not the only area of concern; ethical considerations are another aspect that needs to be addressed from the art critique point of view (Birchall 2012). With this "ethical turn in criticism" caused by the "social turn in contemporary art", the focus was directed to the way collaborations were managed (Birchall 2012). Thus, artists were assessed by both their work processes as well as their methods of collaboration, and any sign of exploitation or indication that the participants or co-creators were not fully represented was bound to attract criticism (Birchall 2012). Notably, when the movement was developing during the 1990s, it was the curators who first spotlighted it and drew the art world's attention to these practices, and they did so through exhibition-making as well as their writings (Birchall 2012). For example, curators Mary Jane Jacob and Maria Lind are both known to be the "ambassadors" for socially engaged art and have also played a significant role in canonising the discourse (Birchall 2012).

The growing interest in expanding the role of a curator in the social realm also led to a three-part symposia organised by Witte de With Centre for Contemporary Art, held between the fall of 2008 and the spring of 2009. Titled *Rotterdam Dialogues: The Critics, The Curators, The Artists*, each symposium discussed the positions, expectations and contexts in which each agent of the contemporary art world operates. Revolving their discussion around

the question, “Is the curator per definition a political animal?”, O’Neill defined a political animal as one who is “passionate and human visionary”, who acts as a bridge to close gaps and a negotiator who creates change, however slight, in situations that seem impossible (Bourriaud et al. 2010, 90). In making the connection between a curator and a political animal, Ruf (2010, 91) highlights that the role of a curator is to empower so that things could happen within “a societal context”, and in the process, not only are the needs of the artist addressed, but essentially, the needs of the audience are taken care of as well.

By putting socially relevant work together for the audience and becoming deeply involved in the circumstances in which they work, the role of a curator has evolved from being the carer of museum’s collection to becoming the “carer of communities” (Birchall 2012). With this development, the curatorial can be understood as a field that is gaining momentum in addressing socio-political issues while also, inevitably, having an effect on the curatorial practice in itself. Even though the social turn in curatorial practice can become problematic in various ways, the value it brings to communities should not be overlooked. In Birchall’s essay (2012), there is an emphasis on how the benefits brought about by socially engaged art can be extended when curators have the capacity to generate new interest or transform curatorial projects into long-term projects that are impactful for a group of people over a prolonged period of time.

In order to pave the way for a graphic designer to take on the additional role of a curator to confront complex societal problems, the “caring” quality of a curator and the sustainable nature of durational community projects will be further examined via Lucy Lippard and Mary Jane Jacob’s curatorial practices and projects. Hence, the following sub-chapters will examine the notion of curator as an agent of social change via the analysis of a case study based on Lucy Lippard – a curator cum writer who produced an art exhibition titled *c.7,500* to confront a situation where female artists were (and still are) being oppressed in the contemporary art world. After which, the curatorial project *Culture in Action*, curated by Mary Jane Jacob, will be studied in-depth to understand how a curatorial project can be used as an approach to problematise social issues sustainably.

4.2.1 Curators as Problematisers – *c. 7,500* by Lucy Lippard

In the previous sub-chapter, the definition of “a problem” was explained from a psychological perspective before making the connection to the design activity as a problem-solving process. But to find out how a human problem can be dealt with via a curatorial approach, it is essential to understand what a problem is from a philosophical point of view.

According to Turnbull and Hoppe (2019, 321), all problems become problems for those who are implicated in experiencing and managing them, and since they are perceived from different angles, these perceptions are a result of diverse views, interpretations as well as relationships with other stakeholders. American physicist and author Martin H. Krieger (1981, 39ff) explained that “having a problem is a claim on others, on how they ought to think about our situation and how they ought to act”, and since the problem is posed by one person, it will not become a problem to others until they personally feel or are made to feel it. Connecting this thought to societal problems, it makes sense to think these are definitions formulated by politicians and policymakers, used in the “process of claims-making” to convince others (Turnbull and Hoppe, 2019, 326). Since problems are socially constructed, it may be helpful to apply Dery’s (1984, 21-27) criteria of a “good” problem, where 1) the problem should lead to an attainable solution, 2) it is directed towards an actor’s “intervention perspective”, and 3) it should be viewed as a pragmatic opportunity to effect positive changes in an existing problematic situation according to the requirements or feelings of a larger group of stakeholders. The third criterion is especially helpful in changing the outlook of those dealing with complex problems.

Rejecting the notion of labelling societal problems as “wicked”, Turnbull and Hoppe proposed to replace it with a more analytical and accurate continuum of “unstructured” to “structured”, which they called “an index of degrees of problematicity” (Turnbull and Hoppe 2019, 326) The key to addressing some of the more complex and ill-structured societal problems is the very process that structures them, and this idea of structuring a problem involves public mediation to establish conforming processes as “a partial answer” to the problem in question (Turnbull and Hoppe, 2019, 330). By problematising either existing or

new problem frames, the ill-structured problem will obtain a provisional structure formed by a multitude of repressing answers to the problematic situation at an earlier phase, and thus, making it better structured (Turnbull and Hoppe, 2019, 330). Notably, such processes of problematisation open up opportunities for further probing and even political articulation to address the "factual uncertainties or normative ambivalences" that revolve around the problem (Turnbull and Hoppe, 2019, 330).

When proposing an alternative approach to address societal problems via policymaking, Turnbull and Hoppe (2019, 322) based it on the idea of "questioning", which is a process that allows the elements – namely the problem, solution and process – to retain their "problematic qualities". When one begins to question a problem, he does so from his own perspective, and retains his own interests and position on a personal, work and even institutional level, without having to make reference to a predetermined idea of the problem (Turnbull and Hoppe, 2019, 323). Since each problem has a different meaning to different stakeholders, the process to structure it will emerge eventually by the means of "practical rationality" that may or may not become institutionalised (Turnbull and Hoppe, 2019, 323). As planning analysis is a combination of intellectual contemplation and social interactions at work, it is basically driven by "powering" and "participation", which involve negotiating the "relational distances" between the stakeholders and the problem (Turnbull and Hoppe, 2019, 323). Also, since the distance between the participants and the problem is negotiated implicitly or determined explicitly according to their unique positions in relation to it, any action taken by each party may be intensified or lessened, or remain unchanged accordingly (Turnbull and Hoppe, 2019, 323).

As a problem-posing strategy, problematisation is often linked to the Brazilian educationalist and philosopher, Paulo Freire, who is known for championing the practice of critical pedagogy in the 20th century. With his insights deeply-rooted in the political as well as social realities of people who have descended from the formerly enslaved, Freire dedicated his life, ideas and work to improving the living conditions of such oppressed ones in society (Freire Institute, n.d.). Having witnessed how people can be passive despite the knowledge they possess, he urged them to adopt a "problem-posing" approach to connect their

knowledge to action, and to actively make positive changes to their situations (Freire Institute, n.d.). The key message in Freire's work is that a person can be conscious only to the extent that he or she "problematises the natural, cultural and historical reality" in which he or she is submerged (Freire 1965, ix).

Such a problematising approach can be regarded as an "antithesis" to the problem-solving approach, where an expert distances himself or herself from reality, tries to analyse a problem by its components, comes up with ways to resolve the challenges efficiently, and finally prescribes a policy or strategy without being fully immersed in the process (Freire 1965, ix). To Freire, adopting such a problem-solving approach can cause more harm as it misrepresents the entirety of human experience when the process is reduced to dimensions that are susceptible to treatment as mere obstacles to be overcome. In order to problematise, one has to involve the entire community in the quest of "codifying total reality into symbols" that can bring about "critical consciousness" and enable them to change their relationship with nature as well as the social powers (Freire 1965, ix). In addition, problematisation, as a reflective and collaborative exercise, will only be cut off from the danger of "narcissism and psychologism" when all participants are willing to engage in dialogue with those who are determined to transform their social reality (Freire 1965, ix). Freire (1968, 36) believes that this "awakening of critical consciousness" opens the way for oppressed ones to express any social discontent embedded in their oppressive situations.

In the classic text, *Pedagogy of the Oppressed*, Freire reinvigorates this humanising mission of the intellectual and proposes to use the influence of thought to nullify limits that are widely accepted, so that one can find the path for a better future (Shaul 2005, 32). Freire (1968, 36) does so by employing the fundamental assumption that "man's ontological vocation is to be a Subject[8] who acts upon and transforms his world" and as a result, one reaches the prospect of living a better life as an individual, and also as a part of the rest of the world. According to Richard Shaul, an American theologian who wrote the foreword of

[8] *Subjects* refers to "those who know and act", and *objects* are those "known and acted upon." See Freire, *Pedagogy of the Oppressed*, 36.

Shaul's book, the "world" to which Freire writes about making connections with is not an unchanging one; even though it is of a set reality that must be accepted, it is also one that must be altered. In short, it is "a problem to be worked on and solved" (Freire 1968, 36). Thus, even if a person is completely "ignorant" or has become a victim of the "culture of silence", he or she has what it takes to look at this world critically and have a dialogic exchange with those in it (Freire 1968, 36). When given the right tools to facilitate this exchange, this person would gradually recognise the contradictions embedded in his or her personal and social reality, progressively become more aware of his or her own view of that reality, and then deal with it critically (Freire 1968, 32).

In particular, Freire believes that humans, as beings with consciousness, are gifted with creative minds that allow us to do something when caught in a "human situation" – a situation he refers to as neither a condition challenged by inescapable facts nor a circumstance that is material (Crotty 1998, 149). Freire explains that it is only by confronting themselves in such unpleasant situations, gripping onto the arising points, and making things better in these situations, then can human beings truly have a manifested freedom (Crotty 1998, 149). To Freire, the only viable approach in such a situation is to adopt the method of engaging in "critical and liberating dialogue" with those who are mistreated, which can be carried out at any stage of their fight for deliverance (Freire 1968, 65). In this instance, Freire's notion of "problematisation", which he also refers to as "demystification", can be understood as a "pedagogical process that presents the concrete, existential situation of those involved in the dialogue as a set of problems" (Crotty 1998, 149). Hence, a problematiser can be perceived as someone who regards these problems as challenges that require intervention, which is needed to turn these unpleasant situations around. When applying such a "problem-posing approach", the problematiser would need to first examine his or her situation, perform critical self-reflection upon it, and then take appropriate action to deal with it (Crotty 1998, 149). Any action taken without the phase of conducting "critical reflection" will merely end up as "disastrous activism" (Crotty 1998, 149).

After it was published in 1968 and translated into English in the 1970s, the distribution

of Freire's seminal work, *Pedagogy of the Oppressed*, coincided with the second wave of women's rights movement, which started in the early 1960s and lasted for about two decades. After World War II, women's lives changed drastically due to the growth of service jobs that did not rely on physical abilities (Burkett n.d.). However, as gender inequality in terms of legal precedents and cultural attitudes still persisted despite socioeconomic reform, the women's rights movement sought to fight for better opportunities, and greater freedom and equal rights for women in society (Burkett n.d.). The rise of the movement might not have been a result of Freire's writing, but its aim bears similarities to Freire's idea of a critical pedagogy, which is to confront authoritarian systems with the purpose of building critical consciousness and creating social change (Tanglen 2018, 53). Significantly, the feminist movement is also known to have had a compelling educational effect on education and various disciplines, including art.

In the field of art, while the women's art movement in the 1970s was committed to addressing feminist issues, it had worked as "an educational force" that benefited female artists, art critics, art historians, the art world and even society in general (Sandell 1991, 178). In this regard, to understand how a curator can become a problematiser by making critical inquiries into a problematic situation or condition, Freire's notion of problematisation will be adopted as a framework to discuss how Lucy Lippard, as a feminist curator, played the role of a problematiser when she "emerged from that situation", "reflected upon it", and finally "intervened in it" (Crotty 1998, 149).

Case Study: *c. 7,500* by Lucy Lippard

The Problematic Situation

Women have made art for the past seven hundred years and more, but regrettably, it remains "a mostly male game" in the present days (Corbett 2017). More often than not, many could only name artists who were white, male and European when they were asked who are some of the great Old Masters (Corbett 2017). As reported by Julia Jacobs (2019) in *The New York Times*, the percentage of works in the permanent collections of major art institutions in the

United States (US) that were created by female artists was as low as 11%. This number contradicts with the perception that gender equity has been improving in the art world in the past years, with more women-themed exhibitions staged in museums, more grants given to support female artists, emerging female artists getting their solo shows, and deserving female artists receiving recognition that has been long overdue (Jacobs 2019). At international art fairs, particularly Art Basel fairs in Basel, Miami and Hong Kong, it was reported that less than a quarter of the artists being presented between 2015 to 2019 were women (Halperin and Burns 2019).

Also, according to the 2019 report, *Artist and Other Cultural Workers: A Statistical Portrait* (compiled by the National Endowment for the Arts), the earnings of female artists in the United States are progressively less than their male counterparts' as they age (National Endowment for the Arts, 2019). For female artists aged 18-24, they earn $0.97 for each dollar earned by male artists, but when they reach the age of 35-44, the amount drops to $0.84, and by the time they are 55-64, the amount drops significantly to merely $0.66 (National Endowment for the Arts, 2019). Such frustrating statistics are only the tip of the iceberg when it comes to the scope of gender inequality in the arts. This is a matter of great concern because, for centuries, many of the important ideological and cultural questions rendered via art have been constructed by the privileged ones that form only a portion of the population (Davies 2019). Having diverse and vital viewpoints should be a crucial part of how we construct our perceptions of the world, and thus, gender inequality in the art industry is a situation that needs to be dealt with (Davies 2019).

When dealing with the situation of gender inequality in its totality, it is crucial that we view it as a global problem rather than merely a societal issue. According to Nake M. Kamrany, Professor of Economics at University of Southern California, and Catherine Robinson, a member of Global Income Convergence Group, "total gender equality must be made a global priority as a fundamental step in both human development and economic progress" (Kamrany and Robinson 2012). Gender discrimination can be regarded as a serious hindrance to economic growth, as it can prevent a country from realising its greatest potential

levels of productivity.

Looking beyond economic factors, gender inequality can also lead to serious and detrimental effects both on society and the individual in a country when such crippling stigma brings psychological suffering to women who doubt their own worth, both to themselves as well as society (Kamrany and Robinson 2012). In the same article, Kamrany and Robinson suggest that "the remedy would have to emanate from the cultural tradition of citizenry; accordingly, the collaboration of local communities, institutions, national authorities and international bodies is essential to influencing change and promoting the value of women" (Kamrany and Robinson 2012). This process echoes with Freire's definition of "problematisation", where only through "demystification" can we "conscientise" people, and is "a founded hope for freedom" possible (Kamrany and Robinson 2012).

In an article titled, "Why Women Succeed, and Fail, in the Arts", American economist Tyler Cowen (1996, 109) wrote that in world history, there are many cases of methodical advancements made in periods of unprecedented difficulty, and hence, women's significant contributions in the arts should also be included. Since the first significant step was taken to fight against gender discrimination in the art world in the late 1960s, when the feminist art movement started to surface, with *c.7,500* being one of the most important shows for conceptual art by women in the early 1970s, it would be appropriate use it as a case study to understand the role of Lippard as a "problematiser" from 1968 to 1974.

Emerging from the Situation

Commonly known as Lippard's fourth and final numbered show, *c.7,500* was an international exhibition that showcased works by twenty-six Conceptual female artists between 1973 and 1974 (Butler 2012, 59-60). Naming the shows after the population figures of the city in which they were shown – *557,087* at Seattle, *955,000* at Vancouver, "2,972,453" at Buenos Aires and *c.7,500* at Valencia before it went on tour, Lippard found the neutrality of these numbers appealing, especially in the realm of conceptual art (Hudek and Lippard 2011). Aiming to reach a wider audience with her curatorial projects, Lippard's interest in the idea of

"deterritorialisation" is clear. For her first numbered show, she chose to locate it at Seattle's World Fair Pavilion – a location that is out of the art institutions established on the East Coast and not within museum boundaries (Butler 2012, 28).

Notably, Lippard's initial intention for the numbered show was to present the notion of "dematerialisation" (Hudek and Lippard 2011), which is to propose that art is fundamentally about ideas instead of the materials with which it is made (Morries, Bonin, and Lippard 2012, 11). While doing this, one would also present "the truly extraordinary breadth of creative ambitions that came along with that notion" (Morries, Bonin, and Lippard 2012, 11). As a result, the numbered shows were produced at low cost and could be easily transported from one place to another (Butler 2012, 24). Regardless of her original intention, it is likely that Lippard believed *c.7,500* had served a different but distinct purpose; she later consciously excluded the exhibition in a subsequent curatorial project, *Six Years: The Dematerialisation of Art Object,* from 1966 to 1972.

In an interview with curator and researcher Anthony Hudek for *Flash Art*, Lippard acknowledged that her self-identification had indeed shifted between 1968 and 1973, which was the period when the numbered shows took place – Lippard observed that she had transformed from a conventional critic and curator to a politically involved activist and feminist (Hudek and Lippard 2011). Even though she claimed that she did not see herself as a "socialist feminist" until the late 1970s, her feminine sensibilities had certainly emerged as early as 1969, when she helped establish the Art Worker's Coalition (AWC); a turning point which she later believed to have had shown her the way into the feminist movement. In 1970, she became politicised and reckoned as a feminist officially when she co-founded the Ad Hoc Women Artists Committee, alongside with female artists, namely, Poppy John, Faith Ringgold and Branda Miller (Butler 2012, 50).

In protest against the situation where the Whitney Annual exhibitions were predominantly showing works of white male artists (8 females to 143 males in the previous year), a counterfeit media release was sent out by the committee in the name of Whitney Museum of American Art, to proclaim that half of the participating artists for its sculpture

show would be women and the other half would be "non-white" artists (Glueck 1970). Then, armed with armbands and a huge placard that said "Women Now," members of the committee (including Lippard) used replicated invitations to enter and disrupt the opening event of Whitney's 1979 annual exhibition. First, they infiltrated the museum building to place sanitary products and eggs that bore the message "fifty per cent" along the hallways and staircases. Next, they invaded the gallery spaces to perform a sit-in involving chanting and whistle-blowing (Wallace 2017). Highlighting the fact that a woman had initially founded the museum, the committee members believed that it was more than appropriate to perform these acts to set things straight (Wallace 2017). The strategy described by Lippard as "picketing, public interviewing and harassment" had proven to be effective when the museum administrator Stephen E. Weil expressed that they "have been bending over backwards to not to ignore requests from women" (Wallace 2017). Lippard's devotion to the feminist's movement was conspicuous in her active engagement with the Art Worker's Coalition and Ad Hoc Women Artists Committee between 1969 and 1970, when she gained clarity about the reality of her situation as an oppressed female cultural worker, and subsequently "emerged" from it.

Reflecting upon the Situation

While the third numbered show, *2,972,453* was taking place at Buenos Aires in 1970, Lippard had already become aware of the problem: the oppression of female cultural workers, specifically artists, in the contemporary art world. Despite an attempt to retreat from the art world to write fiction books, Lippard did not allow herself to rest after "emerging from the situation". As she continued to curate an exhibition in Vancouver, protest in New York, and write art criticism and fiction, her interchangeable role as an activist, curator, critic, literary writer as well as a single mother became "a radical discourse of maternity and proposal for the construction of female identity" (Butler 2012, 51). Her "women's time" had turned into one of the characteristics of feminist art, and can be found in Lippard's curatorial work starting with *c.7,500* (Butler 2012, 51).

For this last numbered show, Lippard addressed the cards (which were also the catalogue) to "those who say, 'there are no women making conceptual art'" (Lippard 2009, 6). This could be her response to the essay, "Have There Been No Great Women Artists?" written by Linda Nochlin in 1971 that discussed why female artists could not make a name for themselves because of political, social and cultural reasons (Nochlin 1971, 22-39). Because of this revolutionary piece of writing, feminists became cautious with curators who claimed that they could not produce solo shows for female artists because they were more keen on presenting "quality" work (Morries, Bonin, and Lippard 2012, 85). Coinciding with the timing of Lippard's feminist activism in the early 1970s, the article could have also driven her to critical reflection on her own practice as a curator, since that was when she began to express publicly her deep-seated feelings of hostility towards the reinforcement of "quality" and those who used it an excuse to turn female artists away (Morries, Bonin, and Lippard 2012, 11). Lippard (2012, 11) admitted that she came to identify "the seed of feminism in [her] revolt against Clement Greenberg's patronisation of artists, against the imposition of the taste of one class on everybody" only on a later occasion.

Thereafter, Lippard started to reorient her curatorial practice and take a closer look at an extensive scope of art by women. Even though it was not new for her to feature female artists in her exhibitions, it was only upon that reflection she began to see the urgent need of putting together an all-female show, which led to her most famous feminist art show, *c.7500*, in 1973. Also, by consciously showcasing only work by female artists, especially those who had never shown their work in public, it is apparent that Lippard was trying to make amends for the fact that she had curated mainly Conceptual Art created by male artists in her previous numbered shows (Lippard 2009, 3).

In the conclusion of an essay by Cornelia Butler in *From Conceptualism to Feminism: Lucy Lippard's Numbers Shows, 1969-74*, Butler writes that the consolidation of texts and curatorial projects, produced by Lippard at that time, can be seen as a reflection of her "self-awareness that is necessary for her knowledge and for change" (Butler 2012, 68). This form of self-awareness triggered the urgency in Lippard to use her "personal biography as a

woman" to instigate actions in finding her stand as a curator, a writer and also simply as a person (Butler 2012, 68). Based on Freire's theory on problematisation, those who are oppressed can never be freed if they do not participate reflectively in their act of deliverance. In the case of Lippard, her decision to reorient "her critical practice towards female artists", be it a belated one, was indeed a result of her "reflective participation in the act of liberation" (Crotty 1998, 155).

Intervening in the Situation

"Curatorial interventions can open the eyes of viewers," said Lippard (2018, 11) in the foreword of the book, *Curatorial Activism: Towards an Ethics of Curating*. Lippard must have had this thought in mind in the early 1970s when she decided to present and tour conceptual work by twenty-six female artists through *c.7,500*. As a curatorial intervention, the radical nature of the numbered shows was best represented in *c.7,500*, when it effectively merged feminist issues with the practice of Conceptual art. Through the unique format of her Conceptual show, which was the result of her active communication with the artists concerning the displaying of their work, Lippard strived to justify her claim that women conceptual artists did exist within the contemporary art world (Butler 2012, 65). With its unique card catalogue, Lippard had also created a space that allowed for dialogues consisting of different voices, and the audience could also rearrange the information to construct a personalised narrative (Butler 2012, 67). As Butler observes in her essay, Lippard has rationalised in many writings about the exhibition, that Conceptual art was a particularly good method for emerging female artists to make art; however, the exhibition was also likely to be a strategic move to use one of her numbered shows, which had already gained sufficient attention via the earlier versions, for advocacy and to reach more audiences. Even though Lippard did not include *c.7,500* in her chronological stretch, *Six Years,* she remained committed to the practicality of the earlier model of the numbered shows, which allowed all the work from *c.7,500* to be packed into a case, transported and installed at different venues by different crew (Butler 2012, 67). Having originated in Valencia, California, the show

travelled to seven other venues, with London being its final stop in 1974. *c.7500* may have been the last show from Lippard's numbered series, but it was certainly only the beginning of her efforts in "intervening in the situation" through her curatorial practice and beyond.

In the year 1976, Lippard wrote in her book, *From the Center: Feminist Essays on Women's Art*: "... the overwhelming fact remains that a woman's experience in this society – social and biological – is simply not like that of a man. If art comes from inside, as it must, then the art of men and women must be different too. And if this factor does not show up in women's work, only repression can be to blame." Her bold words show that she has no intention of justifying the difference between men and women in art-making. Instead, her focus was on the writing of "female sensibility" in art (Cloninger 1977, 492). It was an attempt to initiate a "new feminist criticism", and Lippard proposed to do that by expanding the fundamental knowledge of art by females and to make the basic materials available for such growth (Lippard 1976, 339). To her, this formation of criticism will be a process that is ongoing. Although this process would not solve any problem or reach any conclusion, Lippard was hopeful that it would "engender more questions, more dialogue, more discussions, more investigation", particularly on the part of female artists, critics and herself. She also believed that the art that was made at that point of time had borne the "seeds of change, more or less invisible – but growing, growing" (Lippard 1976, 339).

The More Things Change…

Drawing on Freire's process of problematisation, this case study has discussed how Lippard emerged from the situation of gender inequality when she helped form the Art Worker's Coalition and became actively involved as a member of the Ad Hoc Women Artists Committee in 1969-70. This case study has also discussed how Lippard reflected on her curatorial practice and reoriented herself to highlight women's ability to make conceptual art in 1971-72. Finally, this case study discussed how Lippard intervened in the situation by dedicating her last numbered show, *c.7,500*, to showcase works by female artists and to advocate the feminist cause by touring it to seven other venues in 1973-74. Acknowledging

that she cannot pursue the ideal condition of "full humanity" within the art world by herself, Lippard problematised the situation by inviting and facilitating dialogues that could influence people to institute changes. Her role as a problematiser did not end upon the completion of *c.7,500* in 1974; her ability to problematise prevailed as she continued to intervene through critical writings and other curatorial projects, which have created a rippled effect in the art world.

In the article "Feminist Art Practices in 'Women's Images of Men', 'About Time' and 'Issue'", British psychotherapist and art historian, Rozsika Parker, observed that none of the London public galleries would agree to house the exhibition *c.7,500* back in 1974 (Parker, 1981, 16). Yet in 1980, Parker noticed that the Institute of Contemporary Arts (ICA) had hosted three significant feminist exhibitions, screened a season of women's films, held a string of panel discussions and a two-day conference, which invited participating female artists from all its in-house as well as other related shows to contribute their views on the "Question of Women's Art" (Parker, 1981, 16). The changes observed by Parker in the situation of women's oppression in the art world that came after the exhibition, *c.7,500*, were not incidental (Parker, 1981, 16). Parker believes that these changes were the result of the continual efforts of the feminist art workers, through different strategies, in campaigning for equal opportunities in the male-domineered art world since 1974 (Parker, 1981, 16).

Almost three decades after the tour of Lippard's *c.7,500* came to an end, an article titled "Feminist Art Finally Takes Centre Stage" was published in the *New York Times*. The article mentions that Lippard was already in her seventies when she participated as a keynote speaker for the two-day symposium that was organised by the Museum of Modern Art (MoMA) in January 2007 (Cotter 2007). Named "The Feminist Future: Theory and Practice in the Visual Arts", the event served as an "unofficial" opening for a series of exhibitions, namely, "Wack! Art and the Feminist Revolution" at the Museum of Contemporary Art in Los Angeles, "Global Feminisms" at the Brooklyn Museum, and finally the launch of the Elizabeth A. Sackler Center for Feminist Art at the Brooklyn Museum, with a gallery dedicated to showcasing "The Dinner Party" by Judy Chicago (Cotter 2007). The list of

events signified the long-awaited "institutionalisation" of feminist art. Still critical of the art establishments, Lippard commented that the turnout was considerably good, "especially in a museum not notorious for its historical support of women" (Cotter 2007).

It was noted that the response to the symposium at the MoMA was overwhelming, with tickets being sold out weeks before the event. Notably, there were "signs of a raised consciousness" among the younger MoMA audience, which included those who presumably had little knowledge or interest in feminism (Cotter 2007). However, with almost all of the audience members being women, it was clear that the discourse had not yet raised sufficient interest among men, who were still the dominating the art world. Ten years after the symposium at MoMA, Lippard was likely still playing the role of a problematiser, realising that although there had been some successes in increasing the number of female artists (from 4.5% to 22%) in the Whitney's Painting Annual over the years, she observed that the more things changed, the more they stayed the same (Lippard 2019, 8).

Hitherto, this thesis has discussed how a curator can act as a problematiser by becoming an agent of social change for a specific community in the art world and society at large. However, beyond this, the ability of a curator to reflect upon, emerge from and intervene in a problematic situation needs to be intrinsically applied to one's position in the context in which he or she operates. One example of a curator who is also a problematiser, who has critically reviewed the role of a curator in a larger context, is described by Eileen Legaspi-Ramirez, a writer-researcher and former curatorial consultant of Lopez Museum in the Philippines. In her essay "Southeast Asia in a Crawl Space: Tempering Curatorial Hubris", Legaspi-Ramirez (2016, 251) acknowledges how "the curatorium" has actively participated in the act of "world-making" but has done so "with nary a regard of its own hubris and savvy pontifications spewed inwardly and outwardly". Thus, she urges each curator implicated in this problematic position to admit that they are not as invincible as they think, and that they ought to be prepared to answer for how the explorative systems of art-making have resulted in their tainted presence within the layered configuration of critical practice (Legaspi-Ramirez 2016, 251).

4.2.2 Curatorial Project as Problematisation – *Culture in Action* by Mary Jane Jacob

To understand how problematisation can be used as an approach to make critical inquiries, it is essential to study some of Michel Foucault's work that was developed at the later part of his life. With *Fearless Speech*, which was transcribed from a series of six lectures delivered at the University of California at Berkeley in 1983, Foucault expressed that he wanted to investigate the problem of the "truth-teller, or of truth-telling as an activity" (Foucault and Pearson, 1982, 169). To comprehend the role of a truth-teller in a community, Foucault suggests that there are several methods that one could adopt to perform the analysis. Instead of looking into sociological representations of the different roles of truth-tellers in various societies, analysed how the role of a truth-teller is problematised within the realm of Greek philosophy (Foucault and Pearson, 1982, 169). Foucault's intention is to demonstrate how Greek philosophy has presented the "problem of truth" using the standards for truthful speech and sound argument, yet at the same time, it has also brought forth the "question of truth" from the perspective of "truth-telling as an activity" (Foucault and Pearson, 1982, 169).

Although it was often brought up during the seminar, the notion of problematisation as a methodology was only explained by Foucault at the end with his concluding remarks. Because his interest was never on the past behaviour of people and what they represented, he approached analysis through the process of problematisation because he wanted to find out "how and why certain things (behaviours, phenomena, processes) became a problem" (Foucault and Pearson, 1982, 171). For example, when problematising the term "parrhesia", a series of questions were raised, such as: "How can we recognise one as a parrhesiastes? What is the importance of having a parrhesiastes for the city? What is the training of a good parrhesiastes?" (Foucault and Pearson, 1982, 172). Even though the answers (given by Socrates or Plato) to these questions are not the consequence or a representation of a situation, this does not make problematisation a meaningless endeavour, or that it is imaginary or "anti-creation" (Foucault and Pearson, 1982, 172). In contrast, Foucault believes that problematisation is in fact "a kind of creation", and though one may not be certain that the act of problematisation will ensue in a specific situation, one would be able to understand why a certain answer emerges as "a reply to

some concrete and specific aspect of the world" (Foucault and Pearson, 1982, 173). This is the relationship between reality and thought in Foucault's process of problematisation.

This idea of reflection is also discussed by Foucault in *The Use of Pleasure,* where he clarifies that his aim is neither to analyse how these behaviours are depicted through philosophical, scientific, or religious notions, nor is he trying to write about the history of sexual practices and behaviours by tracing how they were formed, evolved, and then disseminated (Foucault 1984, 3). Rather, Foucault is problematising the common idea of "sexuality", where he would "stand detached from it, bracketing its familiarity", so that he can analyse both the practical and theoretical contexts to which it is connected (Foucault 1984, 3).

What motivates Foucault to conduct this analysis is his curiosity, the sort which he believes is "worth acting upon with a degree of obstinacy" and the sort that allows one "to get free of oneself" (Foucault 1984, 8). Essentially, if one wants to keep on searching and reflecting, then problematisation is necessary to approach the question of "knowing if one can think differently than one thinks and perceive differently than one sees" (Foucault 1984, 8). Foucault describes this process as a journey that "rejuvenates things, and ages the relationship with oneself". It had enabled him to gain a clearer view of the way he worked, which was to analyse "the problematisation through which a being offers itself to be, necessarily, thought – and the practices on the basis of which these problematisations are formed" (Foucault 1984, 8). Foucault (1984, 8) connects this idea of "thought" to "freedom" because it frees a person from what he does; he frees himself from the action he has consciously detached from, manifests it as an entity, and then finally reflects upon it "as a problem".

It may appear that Foucault had adopted problematisation as a methodology to understand why certain behaviours, phenomena or processes became a problem by asking a series of questions that would then be instrumental in tracing how these behaviours, phenomena or processes were formed, changed, and came to be accepted. However, as Foucault's focus is very much on freeing oneself rather than others, Freire's process of problematisation needs to be examined again to clarify further what the process entails when one tries to liberate others from their problematic situations.

As opposed to the “donor-recipient approach”, which provides and imposes solutions on those who are being alienated or oppressed, Freire’s proposal is to use problematisation as a pedagogical process that is effective in posing problems, facilitating dialogues, and conscientising (Crotty 1998, 155). This idea of “problem-posing” is about placing the oppressed in a position that allows them to confront their problems consciously and critically. As Freire’s notion of problematisation involves presenting the situation of those engaged in the dialogue as a set of problems, it can also be understood as a process of “knowing”, whereby the “knowledge” gathered from it can drive those engaged in the dialogue to keep searching, inventing and re-inventing (Freire 1965, 93). In this instance, knowledge is not imparted from people who think they have it to others who think they do not have it; instead, this form of knowledge is accumulated from the relations found between people and the world, constructed in the “relations of transformation”, and also keeps refining itself in the “critical problematisation of these relations” (Freire 1965, 99).

With the understanding that problematisation is a process that involves asking questions, facilitating dialogues, and conscientising others to take action and gain liberation, this thesis will now discuss the curatorial project, *Culture in Action* to examine how Mary Jane Jacob developed it to problematise the term “public” and what it might mean, and to also have the project work as a social intervention to create sustainable changes for the good of a specific community.

Case Study: *Culture in Action* by Mary Jane Jacob

A Problem-posing Process

Following the success of her public sculpture project “Places with a Past” in 1991, Mary Jane Jacob was invited to take up the role of a guest curator for *Sculpture Chicago* in 1993, with the expectation that she would change the non-profit organisation’s poor reputation of generating shabby and thoughtless public art in the last ten years of the city’s urban development process (Scanlan 1993). By agreeing to take on the role, Jacob promised to do two things: first, to improve the “sensitivity” of projects produced by *Sculpture Chicago*, and second, to reform its

interaction with its stakeholders, which included the real estate developers, key corporate and foundation underwriters, and most importantly, the city of Chicago itself (Scanlan 1993). Given her prior experience with the local community when she was the Chief Curator of the Chicago's Museum of Contemporary Art from 1980 to 1986, Jacob wanted to produce a platform that could facilitate the generation of art within the communities themselves, and not merely to present a statue or mural within the city (Scanlan 1993). But before Jacob could produce this platform, it was necessary that she identified the problems and understood her position in those problems.

In her reflective essay "Chicago Is Culture in Action" (1993), Jacob first presents the problematic situation where public art had been mainly commissioned via public systems at various levels of government in the United States since the 1980s. The main sources of funding for the construction of new government buildings in the US are the National Endowment for the Arts (NEA), the Department of Veterans Affairs, and the Government Service Administration (GSA) (Jacob 2014, 173). A city like Chicago has its own ordinances to make laws for its percent-for-art programme, and the only alternative to this form of funding would be through commissioning by corporations (Jacob 2014, 173). Based on such an "art-in-architecture" model, it is expected that the outcomes would be permanent since a substantial amount of money is being invested. Furthermore, the concept of "social art practice" was still almost unheard of in the 1980s, so the idea of creating something temporary and with the communities sounded rather impossible (Jacob 2014, 173).

Looking back to the time when she was a museum curator and had been placed on many selection panels, Jacob recalls how the processes had only involved a few (typically three) national experts as quality managers as well as members from the local community who happened to like art; they would look through slides and shortlists of artists to decide which projects should be executed (Jacob 2014, 174). These meetings occurred in a room within a day; the panellists were not invited to view the city or even the site, and more often than not, only a few of these projects were carried through to the end, and even if they were, they barely met expectations (Jacob 2014, 174). Many compromises needed to be made throughout the

process because of the lack of funding, creativity, and collaboration among all the stakeholders. In addition, there were inevitable conflicts between artists and the architects since the art projects were to be integrated into buildings or connected to adjoining spaces (Jacob 2014, 173).

The second problem Jacob (2014, 173) identified was the lack of understanding of what "public" truly meant; the term "public" was superficially used to refer to the location in which the work was being implemented. With the process controlled by national experts who were deeply concerned about the loss of "artistic quality", Jacob (2014, 174) sensed that there was apprehension about letting the real public in or getting the community to be involved. As for the government agencies, they tended to go along with this way of administering public art projects because they were obliged to keep things running under the conditions of having insufficient staff and not knowing how to put creative processes into effect (Jacob 2014, 174). When the members of the communities did get invited to participate in the art-making process, it was carried out independently, and usually, the outcomes were predictably mural paintings or mosaics art found at places like schools, playgrounds, and underpasses (Jacob 2014, 173). As a curator, Jacob reflected critically on her practice and wondered if there could be a better method or process to make quality contemporary art together with the members of the public. Some of the questions raised include, "Who is the public for art? How does art address various publics? What is the role of artists today? Can art contribute to society? What is the place of our art institutions in the broader realm of culture?" (Jacob 1995, 51). To Jacob, asking these questions was essential for art that is made and presented outside of the institutional framework, which in turn can bring about reflections on the art found inside the museums (Jacob 1995, 51).

According to researcher-writer David Morris and curator cum author Paul O'Neill (2014, 12), *Culture in Action* was at the forefront of the shift towards the "discursive and duration-specific approaches", bringing forth the question of "access" by asking: "What happens when the primary outcome of an ongoing project is a more dispersed form of mediation, and when the artwork, the authorial voice and the exhibition site are not easy to locate – in other words, when the project does not result in single autonomous works/exhibitions to be viewed as an

one-off experience?" Notably, the problem was not so much about how the non-artistic people from the community could access art in the formal setting of art establishments, but rather it was about how the middle as well as upper-class museum and galleries visitors could access art through unconventional means (Morris and O'Neill 2014, 13).

As observed by Morris and O'Neil, when Street-Level Video (S-LV) and Iñigo Manglano-Ovalle put together an installation at Chicago's Museum of Contemporary Art as a component of the *Culture in Action* project, it drew many members of the S-LV as well as their neighbours to the museum for the first time. However, while several installations were also installed across the neighbourhood of the West Side, only a handful of the typical museum and galleries goers showed up at the finale block party organised by S-LV and Manglano-Ovalle at West Town. (Morris and O'Neill 2014, 13). Based on this observation, the two writers believe that if *Culture in Action* was produced to expand its audience, and to increase the connection between art and the public, then there is no doubt that the entire programme of the projects had also "served to problematise what 'public' might mean" (Morris and O'Neill 2014, 13). Based on Foucault's idea of problematisation explained earlier, *Culture in Action* can certainly be viewed as a process of problematisation that questioned how and why a certain behaviour or phenomena became a problem.

A Dialogical Process

Being a curator in the early 1990s, Jacob understood the urgency to demonstrate how the audience should be respected, because this would mean that their civil rights are also being respected. This idea of respect requires one to not regard those with no formal art education as "deficient" and those who do not appreciate high art as "lacking culture" (Jacobs 2014, 176). What Jacob (2014, 176) wanted to change was the demographic of the art audience and to adjust perceptions by showing that the depth or quality of one's experience with the arts has little to do with his class, educational or financial standing (Jacob 2014, 176). To Jacob (2014, 176), the purpose of *Culture in Action* was not merely to make "the public" the main subject of the discourse or to make art in public; it was to create a space to share concerns and to facilitate

the process of people coming together to know one another "deeply". Since the artists involved would be required to directly interact with people face-to-face, the outcomes that come out from this "shared process" should not be deemed as social work; instead, the attention should be placed on how ideas are generated collaboratively, which is by having authentic exchanges and gathering insights together to arrive at various mutual understandings (Jacob 2014, 177).

To facilitate this shared process more organically, Jacob (2014, 178) preferred to refer to each of the artists' works as a "project" and the collective projects as a "programme", as these terms imply that the exchanges can happen over a prolonged period, while an "exhibition" suggests that it is only temporary. Even though the term "exhibition", as a "rhetorical device", has been useful for Jacob to have a discourse with herself as well as others about what and how work can be done beyond the art establishments, she finds that all the components, namely the actions, forums, events, and symposiums that were held across and within the projects, and forming the overall programme, had constituted the entirety of the curatorial work (Jacob 2014, 179). Aligned with Jacob's way of thinking, art historian and critic Michael Brenson (1995, 16) also viewed the eight works as "community-based or community-oriented, site-specific projects" when he wrote about how *Culture in Action*, as a programme, had facilitated dialogues and performed the function of healing throughout the process (Brenson 1995, 16). It was also fitting that Brenson used words like "community-based", "community-oriented" and "site-specific" to describe the projects; as Brenson noted, each project was designed to confront "neglect and indifference", and at the same time to cultivate "respect and trust" in that environment so that dialogues and healing can take place (Brenson 1995, 32).

A Conscientising Process

Seeking to use public art to problematise the definition of "the public", Jacob wanted *Culture in Action* to be about the people as much as it was about art. Hence, the eight projects, namely "Full Circle", "Tele-Vecindario", "Flood", "Naming Others: Manufacturing Yourself", "The Chicago Urban Ecology Action Group", "We Got It! The Workforce Makes the Candy of Their Dreams", "Eminent Domain", and "Consequences of a Gesture and 100 Victories | 10,000

tears", were conceptualised and executed based on the notions of social or public space as well as topics such as public education and its environment, public housing, public health, et cetera (Brenson 1995, 32). Adopting a decentralised mode of programming within the city, the site of each project was decided on by where the artists would likely find the project's intended subject and where collaborations were expected to happen, and essentially, each project determined its own schedule and timeline because the process and its programming were critical components of each project (Brenson 1995, 32).

Unlike a conventional museum outreach programme that aims to educate the audience about art, the communication and educational activities carried out in each project were developed and executed during the art-making process with the artists, and basically, the goal was simply to initiate dialogue (Brenson 1995, 32). Furthermore, while acknowledging that the idea of "the public" is plural, *Culture in Action* also wanted to ensure that the social issues dealt with by the artists in their work were aligned to their audience's real-life concerns. Thus, from the beginning of the process, Jacob emphasised that the issues relevant to the identified audience group must be the focus of each project (Brenson 1995, 32). In order to stimulate dialogues and instigate changes within the community, Jacob had made it a point that the audience must be involved "physically, mentally, emotionally, and socially" in the process. As a result, each project and the entire programme became "a catalyst" for community communication, likened to an ongoing and ever-evolving conversation held among various groups of people from the same neighbourhood (Brenson 1995, 32).

Hitherto, the process described by Jacob echoes Freire's notion of problematisation, which he believes can only take place in the sphere of communication, and with respect to "real, concrete, existential situations" (Freire 1965, 135). In this process of problematisation, "the Subjects" are required to fully understand "the signs" embedded in communication that could only happen through dialogue, and with an understanding of the various terms, they can then accurately articulate the critical inquiry being conducted on the problem raised (Freire 1965, 136). Since the process is also fundamentally one's reflection on the consequence of an action, or a reflection on the action itself so that it can be better executed with others within the

situation, problematisation cannot take place without reality (Freire 1965, 136). Therefore, any step taken by "the interlocutor-Subjects" to probe into a problematic situation will reveal new paths for "other subjects" to grasp the problem being examined (Freire 1965, 136).

Even though Freire's idea of problematisation is discussed within the framework of critical pedagogy, it is relevant to curatorial practice to a great extent as contemporary curating has been marked by a turn towards education via the adoption of educational methods, procedures, processes, programmes, formats, and terms in both the practical and theoretical aspects of curating and contemporary art production (O'Neill and Wilson 2010, 12). It was noted by artist and researcher Mick Wilson and O'Neill (2010, 12) that the initial association of education with curating was triggered by the pervasive use of pedagogical models, as problematised through various critical art projects as well as curatorial strategies. Education-related programmes such as talks, symposia, discussions, and debates used to play a supporting role to the works of art on display, but as "discursive interventions and relays", they have increasingly become the centre of contemporary art practice (O'Neill and Wilson 2010, 12). Also, while these productions are shifting towards the realm of research, learning and knowledge production, there is a conscious act of steering them away from the predictable format of education found in art establishments and any forms of related cultural pedagogies that are deemed as official (O'Neill and Wilson 2010, 12). Such an act is less about reinstating the role of a curator as an expert who is driven to educate a public about the subject matter of a collection, than it is a kind of "curatorialisation" of education whereby the educative process often becomes the object of curatorial production (O'Neill and Wilson 2010, 13). Even though *Culture in Action* had taken place many years before this discussion of a curatorial turn to education was formalised, it bears strong similarities to what has been discussed by Wilson and O'Neil.

Furthermore, Freire (1965, 135) also highlights that if education is the key connection between "the Subjects" in the process of knowing, wherein the educator continually reconditions "the act of knowing", then education also needs to be problem-posing. Also, because problematisation is such "a dialectic process", it is impossible for someone to put

forward something as a problem to another person and then retreat to become a mere observer of the process (Freire 1965, 135). By contrast, the educator is also problematised even though (methodologically) he would prefer not to interfere with how the subjects try to encapsulate, analyse, and understand the problem after being presented with it (Freire 1965, 135). As noted by Freire, when the subjects are "entering into" the object of the problem, the educator also "re-enters into" it by keeping himself engaged in the process, and for the same reason, the educator continues to learn. Essentially, the more humility he displays, the more he learns (Freire 1965, 135). Notably, these thoughts correspond with Jacob's reflection on *Culture in Action*, which called "a learning process" (Jacob 2014, 179).

When Jacob was first appointed as the guest curator for *Sculpture Chicago* in 1990, a long conversation with its board was carried out over a period of one and a half years, while she continued to work on "Places and a Past" in the city of Charleston. Looking back, Jacob (2014, 179) saw that this process of negotiation, planning as well as implementation was a great opportunity for the board and herself to learn how to work cohesively towards the same goal. While trying to make *Culture in Action* thrive as an organic process, Jacob also learned how to reflect and act meaningfully through art regarding things that matter, and above all, she learned to believe in art again after losing faith in it when working for museums (Jacob 2014, 181).

While recognising the process of life itself is, in fact, organic, Jacob (2014, 180) also acknowledged that there were some specific but non-linear steps found in the process. Even though these steps seemed disorganised and even testing at times, because the people involved (including herself) did not always know what to do or and did not always make the best decisions at certain points of the process, she felt she was constantly informed by the life happening in the city as *Culture in Action* continued to materialise (Jacob 2014, 180). Describing the entire process as "a lived experience", Jacob (2014, 180) believed it was one that was led by emotions, intuition, ideas, and essentially, by listening. Because of her willingness to listen throughout the process in which dialogues with people living in the city took place, she arrived at a point where she understood how a process develops and realised how "curating can be a mindful practice of caring" for that process (Jacob 2014, 180).

Although Jacob had strongly emphasised that there is no formula to design or the process of implementation, and that it should always remain open, she was still asked to describe the key steps she would typically take to develop a curatorial project like *Culture in Action* in an interview for *oncurating.org*. Though hesitant, she provided a list of ten steps: 1) Locate the reason why you are doing an exhibition, the aim; 2) Let art lead you; 3) Have partners in the process of exploration; 4) Imagine opportunities; 5) Openly venture with ideas; 6) Listen to artists; 7) Listen to audiences; 8) Care about the process; 9) Trust the process; 10) Trust that art will make things happen (Molnàr and Trampe 2013). Fundamentally, the process is driven by "the problem" framed by questions that have been raised on a subject that cannot be determined clearly. Even if things might seem murky at first, the curator does not wait to have a concrete plan to start the process because getting it sorted out is part and parcel of the exhibition-making process. What matters the most to Jacob is that it must be a "shared process of research, collaborative more or less, among many persons" (Molnàr and Trampe 2013).

The Process as the Outcome

Since the beginning of her work on *Culture in Action*, Jacob (2014, 179) already knew that the project's so-called outcome was not something that could be established in advance, especially when the process involved working with people intuitively. Hence, the only strategy she had was to keep the process open and allow new opportunities to emerge and to point them to the next step spontaneously. However, not being able to describe what the concrete plan and outcome was proved to be problematic for Jacob when she was communicating with the funders, especially since they did not appreciate a process that was "organic, responsive and evolutionary" (Jacob 2014, 180).

So, to get grants to keep the programme going, Jacob (2014, 180) was obliged to make up probable outcomes at times, but despite the challenge, she got to witness how a funder's programme officer would get inspired by the projects and try to find a way to go through with it despite the risks. One such example was when a representative of the Rockefeller Foundation visited the site to experience some of the projects in person and came to realise that the

approach of the programme was, in fact, “bottom-up, not top-down” (Jacob 2014, 180). As a result, the Partnerships Affirming Community Transformation (PACT) was launched in 1995 to fund projects initiated by cultural professionals and artists to create social change through collaborations with communities across the United States (New York Times 2001). Although it was an unintended outcome, this can be regarded as one of the changes driven by the programme.

However, the real impact came from the social function of art when *Culture in Action* was allowed to percolate into social systems and was not confined within the structures of art establishments (Jacob 1995, 60). Notably, *Culture in Action* took place in the 1990s when public art was shifting from being large-scaled artworks that regenerated physical spaces, to site-specific projects that enriched life, and to audience-specific ventures that saved lives; public art moved from having “an aesthetic function, to a design function, to a social function” (Jacob 1995, 57). Yet, when socially conscious artists tried to create projects to include non-art communities in their works, be it through non-institutional sites, subject matter, or substantial participation in the art-making process, people in the art world began to disassociate themselves from them (Jacob 1995, 58). There were some art critics who questioned if social issues could be considered an acceptable discipline for art and made the claim that the involvement of non-art communities affects the quality of artistic practice. But to Jacob (1995, 5), because the focus of community-based art projects had always been on the process, in which education, events and dialogues are enabled, and never on the generation of tangible objects, the significance of the social, as well as political positioning of these works certainly outweighs that of aesthetics.

In the case of *Culture in Action*, while the idea of having the artworks created collaboratively with the public might have been discussed, it was not fixed as the theme for the entire programme until a year’s worth of dialogues had been carried out with the residents, art professionals, community overseers, neighbourhood groups, artists, board members, and the staff of *Sculpture Chicago* (Jacob 1995, 59). Similarly, the subject matter, sites and participants for each project were identified and decided on by the participating artists only after many rounds of conversations and return visits to Chicago starting from January 1992. By the end of

that year, the proposals were also opened for debate by various representatives and professionals at a forum and several roundtables before they were finalised (Jacob 1995, 59). Although the projects might not have been directed by a specific style, what they had in common was that the processes were started only with a small group of people, and in each case, a ripple effect occurred.

Take the project *Tele-Vecindario* by Iñigo Manglano-Ovalleas as an example. It was never anyone's intention to form a youth organisation that was going to stay permanent, but after having a group of people comprising high school students, a social worker, and employees of Community TV Network (CTVN) come to work together, they realised that they could not go back to the way things were, and that the only way forward was to continue with the collaboration (Jacob 2014, 181). As a result, Street-Level Youth Media was founded officially in 1995 as the first not-for-profit organisation to provide media art lessons and technology access to youth. Now renamed as Street Level as of 2018, it continues to engage young people in "creative self-expression and critical thinking through media programming" (Street Level, n.d.). Without a doubt, it was through the creative and co-learning space created via Manglano-Ovalleas' project that made people realise the importance of helping the underrepresented voices of youths to be heard, and in this case, via different multi-media art forms.

When giving his views about the artists and the projects that constituted *Culture in Action*, artist and educator Joe Scanlan (1993, 164) shared that it was the "invisibility" of the project's appealing aesthetic characteristics that contributed to the accomplishment of producing these open-ended and laborious art experiences. This idea of being invisible comes from the fact that most of the operations were not openly seen and understood, and that they could not be consumed easily (Scanlan 1993, 164). Fundamentally, the success of *Culture in Action* should not be determined by quantity, or the number of people who were involved, but rather by whether the participants had been "sufficiently enriched" (Scanlan 1993, 165). Meaning to say, it is the quality and depth of the engagement throughout the process that creates the lasting effect and favourable outcomes of these projects. Even though the artists do not necessarily hope to solve the problems raised by the respective communities through their

projects, Scanlan reckons that they can certainly help raise awareness of these issues, which might in turn lead to changes in attitudes or, hopefully someday, to produce tangible results (Scanlan 1993, 165).

Curatorial Project as Problematisation

Culture in Action came into being through questioning assumptions: "Who is the audience for public art?" and "How can public art present the public when there are many publics?" (Jacob 1995, 57) In the process of problematising what "the public" might mean, several responses from the artists and their constituencies were elicited via collaborative art-making. This is a process aligned with what Foucault (1984, 389) shared as a "work of thought" with Paul Rabinow in 1984, just before his death. Foucault pointed out that when dealing with a distinct set of problems, many responses can be gathered, and often, these proposed responses are relatively diverse. Although different, what makes all the responses feasible at the same time is the fact that their "simultaneity" is established and on grounds that can sustain them despite their differences and sometimes even when there are opposing ideas (Foucault 1984, 389). So, what "a history of thought" does is to uncover at the origin of these varying solutions the common form of problematisation that has made them feasible, or to find out what has contributed to the conversion of a set of difficulties (of a particular practice) into a general problem that permits many solutions to be suggested (Foucault 1984, 389). Other than responding to the challenges and making them palpable, problematisation also generates the conditions in which many feasible responses can be made and determines the elements that account for what the diverse solutions try to address. In short, problematisation comprises the process of turning a given situation into a question and transforms a set of difficulties into problems so that many different solutions can be proposed to generate a response.

As a methodology, Foucault (1984, 390) described problematisation as "a movement of analysis" by which one could use to find out how various solutions have been devised to address a problem, and at the same time to understand how these solutions ensued from a particular form of problematisation. Any new, possible solutions would emerge based on the

current problematisation, by altering some concepts or assumptions based on the responses that have already been given (Foucault 1984, 390). Essentially, Foucault's concept of problematisation should not be viewed as "an arrangement of representations" but rather as a "work of thought" (Foucault 1984, 390); or in other words, a practice of creativity, which is precisely what Jacob achieved with *Culture in Action* by first rejecting the idea of keeping to a generally accepted artistic statement, then connecting the project to the urgent issues of people in the local as well global context, and finally, favouring short-term but interactive processes over the task of creating a representational object (Jacob 1995, 60).

When *Culture in Action* came to an end, Jacob admitted that there were still questions like: "How can we broaden the audience for art outside the art world? How can our cultural institutions find ways to relate to multiple audiences and varied communities and develop sustained relationships with these audiences?" These questions and more have remained unanswered, but through this process of problematisation, it has become clear that the role of art can only manifest when it is allowed to penetrate social systems (Jacob 1995, 60). Jacob (1995, 60) acknowledges that *Culture in Action* did not set out to offer solutions or answers to the complex issues raised, but what is worth noting is the adoption of "a constructive approach" that translated into relevant and metaphoric aesthetic expressions created when the artists and the participants tried to find their own ways to deal with these distressing global problems. Furthermore, within the specific social environment in which each project took place, the artistic work generated became a means to "tap into the human experience of other audiences in Chicago and beyond" (Jacob 1995, 60).

Agreeing that the nature of these projects might have been short-term, but it is precisely because they were impermanent that they were more adaptable to changes and more open to experimentation. When the book that documented *Culture in Action* was published later in 1995, the conversations between artists and their collaborators were still continuing even though the programme came to an end in September 1993, and with the book itself, a discursive purpose was also fulfilled among its readers. Jacob also believed that each of the eight projects had an immediate effect on its constituencies in its own way, and also, more importantly, "in

collective memory and myth, in the lives of the individuals, and in programmes that continue" to impact lives (Jacob 1995, 60).

Conclusive Notes

To figure out if a graphic designer can adopt an interdisciplinary approach by taking on the additional role of a curator to problematise complex social problems sustainably, this sub-chapter has placed its focus on examining how the role of a curator has evolved from a caretaker of others' possessions to a carer of the communities through socially engaged art. Through the analysis of the exhibition, *c. 7,500*, Lippard is proven to have been a problematiser in how she emerged from the problematic situation of female artists being oppressed in the art world, reflected upon her role as a curator, and then intervened in the situation by reorientating her curatorial practice. Also, Jacob's curatorial project, *Culture in Action*, has been discussed as a process of problematisation that asked questions, facilitated conversations, and conscientised people and as a result, made social impacts in specific communities in Chicago that have lasted till today. Her process is arguably aligned with the concept of transdisciplinarity as it gathers perspectives from people of diverse background, focuses on communication, and champions co-creation to understand problems, extend methods, and rework solutions. With these findings, it seems promising and not too farfetched for graphic designers to take on the additional role of curators and use curatorial projects to problematise challenging social problems sustainably, especially since the two roles share certain commonalities as shown in the table below.

Table 1. Graphic Designers' Activities Versus Curators' Activities

Graphic Designers	**Curators**
• Communicate visual ideas or messages through visuals presented in the form of posters, advertisements, branding and more • Select, assemble, arrange, and oversee the layout/composition of visual elements	• Communicate curatorial ideas or messages through visuals presented in the form of exhibitions and words • Select, assemble, arrange, and oversee the layout/compositions of artworks in exhibitions

• Collaborate with other creatives such as writers, photographers and web developers to complete a project • Desire to create social change through self-initiated and/or commissioned graphic design projects	• Collaborate with creatives such as artists, researchers and exhibition designers to complete a project • Desire to create social change through self-initiated and/or commissioned curatorial projects

However, as the idea of graphic designers playing the role of curators is not peculiarly new, the following sub-chapter will study the directions and objectives of selected graphic designers and exhibitions that have explored the notion of "graphic designers as curators", with the intention to set this research's proposed direction apart from those that have been done previously.

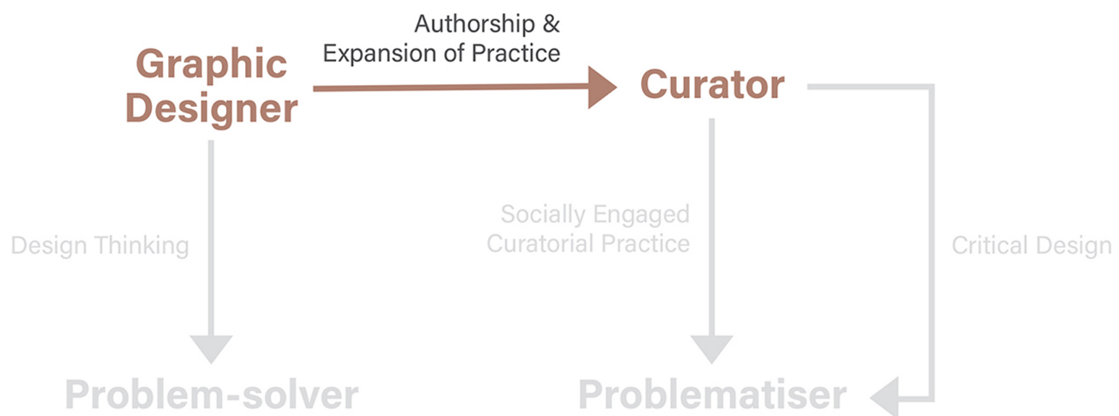

Fig. 4. Research Framework – Graphic Designer as Curator, by Junie Tang.

4.3 Graphic Designers as Curators and Curating as Authorship and an Expansion of Graphic Design Practice

With the word "curated" being defined as "carefully chosen and thoughtfully organised or presented" by the Merriam-Webster Dictionary (n.d.), it is not surprising to find that many people have started calling themselves curators despite not having a relevant qualification in the arts. From menus and fashion boutiques to properties, the word "curated" has become a buzzword used to denote "a manifestation of smartness" (Stoppard 2020). This trend has likely proliferated through the internet, which alters the way people connect with cultural objects. By modifying or "curating" digital materials as a form of self-expression as well as social and political

commentary, the users generated novel cultural products, personal stories, and social narratives, which could easily be mistaken as curatorial activities (Thompson and Reilly 2019, 25). In the last decade, many scholars and practitioners have also proposed the idea of "a curatorial turn" in various disciplines such as journalism, education, policy development and more.

Within the curatorial field itself, there is no lack of studies that discuss the "educational turn" and "social turn" in curating, which might be the reason why many new specialised education programmes in curating and/or curatorial practice have been designed with an interdisciplinarity approach. The interdisciplinary feature may pose challenges in how curating is taught, but such programmes are beneficial when they become platforms effective in administering diverse potentials within their matrix (Ciric and Onol 2012). While the approach implies the need of a broader scope of agendas, concerns, and methods, it also encourages the development of multiple perspectives and vocals (Ciric and Onol 2012). Hence, even though the term "curator" has been overused or even misused in various contexts, the broadening definition of a curator might just be helpful in expanding what art can mean and who has the access to it (Cohen 2022).

Calling design "Art's Little Brother" back in 2005, Rick Poynor (2005) recognised the fact that many designers had the tendency to feel inferior about their status and accomplishments when being compared to the artists. Poynor writes that even though design had been playing a more significant role in society, such a dated way of thinking still remained, and the imbalance of power had not changed much (Poynor 2005). One reason for this inferiority complex was that not many designers could achieve the same level of recognition and financial success attained by acclaimed artists, and another was media portrayals, which constantly associated art with affluence (Jacob 1995, 60). For instance, one could easily find art critics filling pages in the art and culture section of every newspaper with reviews on the latest art exhibitions, but design was covered simply as a lifestyle topic, which made design look as if it as not worth taking seriously (Jacob 1995, 60). Furthermore, editors gave little attention to design publications and exhibitions with the reason being that "historically, we haven't reviewed design" (Jacob 1995, 60).

Given these conditions, it is no surprise that the multi-disciplinary designer Peter Biľak (2006) had similar views expressed in his essay, which came along with the exhibition *Graphic Design in the White Cube* that took place during the 22nd International Biennale of Graphic Design Brno in 2006. Like Poynor, he acknowledged that graphic designers did not receive the desired level of professionalisation and accreditation in their practice, and graphic design exhibitions as well as books were not taken seriously because the former were merely used as a means to promote the commercialised aspect of the practice, and the latter were often filled with pictures of clients' projects which were often accompanied by little or sometimes no commentary at all (Biľak 2006).

In a humorous way, the essay begins with Biľak (2006) pointing out how the idea of presenting graphic design in a gallery space is similar to the concept of getting the audience to look at an exhibit of stuffed animals so that they can understand how the creatures behave in real life. He (2006) believes that graphic design and exhibitions are two conflicting notions because "graphic design does not exist in a vacuum, and the walls of the exhibiting space effectively isolate the work of design from the real world". Bil'ak identifies "decontextualization" as the primary problem in any attempt to organise exhibitions of graphic design, likening it to how design is merely presented in the form of objects in magazines and books, completely omitting the processes by which they are developed (Camuffo and Mura 2012). Even though Biľak (2006) believes that organising graphic design exhibitions will remain problematic in nature, he recognises that the idea of viewing design as an exhibit in the "white cube" space has been gaining more acceptance.

This change is believed to be evoked by the trend in which design is no longer regarded as merely a product of consumerism, but rather an outcome that can reflect the amount of freedom a designer could have with his work, as well as his readiness to embark on self-initiated projects (Biľak 2006). Indeed, designers of that calibre do not have to depend on their clients' briefs to produce creative outcomes; besides dedicating time to work on self-initiated projects, they have also integrated this kind of work into their day-to-day design practice. Those who are at the forefront of this trend include design collectives like Bailey,

Experimental Jetset and M/M. Bailey had not only directed theatre performances, but also helped organised the Europe Biennial of Contemporary Art and Manifesta 6 (Bil'ak 2006). Jetset's works have been presented in galleries found in Utrecht, Arnhem, and London as solo exhibitions, and in San Francisco and the Netherlands as group shows. M/M has installed several solo exhibitions within the space of well-reputed art galleries and the collective's members were involved as collaborators in international events such as the Venice Biennales. Significantly, in 2005, M/M's works were placed alongside some of the greatest artworks of the late 20th century, such as those by acclaimed contemporary artists Jeff Koons, Joseph Kosuth, Maurizio Cattelan and Takashi Murakami at Palais de Tokyo in Paris (Le Bourhis 2005). Titled *Translation*, the exhibition successively blurred the lines between art and design by investigating how a single work could be interpreted differently in varying contexts.

These exhibitions highlighted in Bil'ak's essay may not be reckoned as graphic design exhibition per se, but they prove graphic design's relevance to visual culture and are thus necessary in discussing graphic designers' works in consideration of other visual arts critically (Camuffo and Mura 2012). Notably, Bil'ak (2006) raised the point that when presenting graphic design in a museum setting, curators should not try to have the works shown passively in "glass cases", as the works would immediately become isolated with no real information about why and how they were produced. Hence, he emphasises the need to make the explicit motive of a work visible, which is usually not accessible to its audience; or else, the museum visitor might as well turn to a bookstore and read books about design, or simply walk around the city to make tangible contact with actual works of graphic design (Bil'ak 2006).

One specific exhibition that tried to tackle such issues was a retrospective showcase of British graphic design produced and curated by Poynor. With the *title Communicate: British Independent Graphic Design since the Sixties*, the exhibition was first presented in London at the Barbican Art Gallery before travelling to many places outside of the United Kingdom (UK) (Bil'ak 2006). The primary intention of the exhibition was to shed some light on how

graphic design has influenced contemporary culture, and to call attention to self-initiated works created by designers who do not limit their practice to answering clients' briefs (Biľak 2006). In light of Poynor's background in publishing and journalism, it made sense to have the works displayed in eight separate rooms, whereby each room represented a chapter of a book, and each section came with an explanatory text. Presented through Poynor's eyes as a curator, the exhibition turned the development of graphic design in the UK "into one inevitable, steadily unfolding story of innovative ideas and images, building upon each other" (Middendorp 2005).

As the trend of creating self-initiated works grew among graphic designers, Poyner (2010) called for more galleries to exhibit outcomes that blur the boundary between art and design via an essay published in *Print Magazine*. After paying a visit to the private gallery in Melbourne known as *The Narrows*, Poynor (2010) rekindled his interest in the discourse of exhibiting graphic design by asking the question of why graphic communication should be excluded from being studied as objects or artefacts within gallery spaces.

Founded in 2006 by graphic designer and educator Warren Taylor, *The Narrows*, is a curatorial project that facilitates collaborations among designers and artists, and presents works of graphic design alongside works of art (Poynor 2010). Noting that each exhibition is accompanied by a poster and an essay about the subject of the show, Poynor writes that Taylor's deliberated curatorial effort of fusing art with design is sensible for two reasons: first, many graphic designers have become eager to work for the art sector with the intention to find "sympathetic collaborators"; and second, their talents in visual making and editorial layout "make curatorial work a natural extension of designing in some cases" (Poynor 2010). However, Poynor (2010) still finds that such endeavours, where exhibitions are held in small galleries, are inadequate to support the growing trend and to facilitate the advancement of the field. He believes that more resources and larger spaces to hold substantial exhibitions, and hence well-established institutions like MoMA in New York, V&A Museum in London, and Musée des Arts Décoratifs in Paris have a critical role to play (Poynor 2010).

According to researcher and graphic design historian Maddalena Dalla Mura (2018,

29), when Poynor wrote that article in 2010, many graphic designers had apparently prevailed over their inferiority complexes by confidently appropriating exhibition formats and contexts in different ways. Employed as another means to expand the field of graphic design, these exhibitions were framed as part of the designers' design practice by the accompanying text and essays written in relation to the designers' involvement as an exhibitor or a curator. Generally, such discourses are produced not to fulfil the purpose of "a systematic theorization", but to "prove their engagement on conceptual grounds" (Mura 2018, 29).

As observed by Mura (2018), the trend of creating self-initiated projects among graphic designers in the 2000s had evolved into the movement of participating and organising exhibitions themselves in the early 2010s. With that, Mura saw the urgency to contribute to its development by getting involved with the research project, "Graphic Design, Exhibition Context and Curatorial Practice", initiated by graphic designer and curator Giogio Camuffo at the Free University of Bozen-Bolzano in 2011. While the growing trend already proved that there was indeed room for graphic designers to work in the context of exhibiting in and curating exhibitions, the research project hoped to "analyse and interpret the relationship of contemporary graphic design with the exhibition context and with related curatorial practices, to discuss its relevance through an assessment of its characteristics and specificity as a form of cultural production, and to investigate its implications for graphic design in terms of practices and discourses" (Camuffo, 2011). One of the significant outcomes that came out of this project was the GEC Conference held in 2012, titled "Graphic Design, Exhibiting, Curating", and a published book bearing the same title in the following year. Although the research project ended in 2014, but Mura's interest in the discourse remained, and she contributed an essay titled "The Relationship of Graphic Designers with Exhibiting and Curating" to the twenty-fourth edition of *Graphisme en France* (2018), which tried to address some of the questions raised about exhibitions of graphic design (Mura 2018, 29).

From the above discussion, it is clear that the idea of "graphic designers as curators" is not new, and before this thesis can present a new perspective on how graphic designers can play the role of a curator and take up exhibition-making to fulfil a different purpose, it is

necessary to study and understand what the existing discourse has already covered. Therefore, Sections 4.3.1 and 4.3.2 will examine the ways in which graphic designers have taken on the additional role of curators and utilised exhibition-making as a medium to connect people to museums, to create an authorship, as well as to expand their graphic design practice.

4.3.1 Graphic Designers as Curators – Willem Sandberg

In order to gain a more in-depth understanding of how a graphic designer can play the role of a curator in the context of an established art museum, the following section will discuss the life work of Willem Sandberg as a museum director cum curator of Stedelijk Museum in Amsterdam, who balanced these roles while remaining active as a typographic designer, particularly from 1945 to 1962.

From a Typographic Designer to a Curator

Born in 1897, Willem Sandberg was a descendent of a wealthy Dutch family, and as a youth, he received formal training to become an artist in Amsterdam until he realised it was not the right fit for him (Rawsthorn 2018, 18). While spending time with avant-garde groups in various part of Europe and working at a Swiss printer, his fascination for typography grew (Rawsthorn 2018, 18). Although he had received very little training in design, Sandberg became a typographic designer officially in 1928 when a publisher commissioned him to produce a calendar (Marcar 2013, 58). Before he knew it, Sandberg was running his own graphic design studio in Amsterdam and started producing work for Stedelijk Museum (Marcar 2013, 58).

The first exhibition Sandberg contributed to Stedelijk Museum as a designer was known as *Arbeid voor Onvolwaardigen* (Work for the Handicapped]. Having prior experience with the creation of visual statistics for the Dutch Post and Telecommunications company, he was given the autonomy to design a room with them (Marcar 2013, 60). Hence, it was Sandberg's role as an exhibition designer that first connected him to the museum. Then in 1932, Sandberg was invited to join The VANK (the Association of Arts and Crafts) as a member and became the alternating

chairperson of the exhibition committee of the association with interior designer, Paul Bromberg (Marcar 2013, 58).

As a member of the Committee for Non-permanent Exhibitions of VANK, Sandberg was given opportunities to organise exhibitions for the other members, some of which include *The Light Machine*, an exhibition that showcased works by Moholy-Nagy in 1934 and *De Stoel* [The Chair], which presented the history of chairs up to 1935 (Marcar 2013, 62).

Then, in 1937, the director of the Municipal Museums offered Sandberg the job of a curator for the Stedelijk Museum, because the previous curator had been made a professor, and a replacement was urgently needed (Marcar 2013, 63). Sandberg took the job with the condition that he could continue doing graphic design work alongside the work required for the museum (Marcar 2013, 63).

From a Curator to a Rebel

When World War II broke out in 1940, the Netherlands was occupied by Germany and the activities of the Stedelijk Museum were compromised (Rawsthorn 2018, 18). To protect the modern art collection, which was viewed as "Degenerate Art" by the Nazis, Sandberg ordered the construction of a large vault underground close to the edge of the art storage, where he kept more than five hundred collections safe during the war (Shaffer 2016). Additionally, works from the collection that were deemed as important were shipped away, and artworks owned by the Jewish collectors were intentionally kept off the record (Shaffer 2016). By 1941, the Culture Chamber was set up and any writers, artists and performers who wished to present their works publicly would need the approval of Arthur Seyss-Inquart, the appointed German Reichskommissar for the Netherlands (Shaffer 2016). Viewing it as a threat to their livelihoods, many arts and cultural workers became involved with the Dutch Resistance, and among them was Sandberg (Shaffer 2016). Hence, while retaining his status as a museum curator, he joined the Resistance and secretly met up with dissident groups while making work trips to Germany (Shaffer 2016).

The turning point of Sandberg's career as a designer was when he started using his typography knowledge and graphic design skills to forge identity papers for the Jews, and later

extended this service to illegals as well as those persecuted by the Nazis (Rawsthorn n.d.). The false identity papers were printed at a printworks operated by Frans Duwaer, whom Sandberg had regarded as his close friend and Resistance associate. Calling it "the best piece of typography" he had ever created, the forged papers were convincing enough to deceive the Gestapo and helped many people escape the fate of being arrested or deported (Rawsthorn 2018, 19). However, the Resistance members knew that this solution was not foolproof, since the false identity papers could always be verified against the official records kept in the Amsterdam Public Records Office, and so the next logical thing to do was to find a way to destroy these public records (Rawsthorn 2018, 19).

Hence in 1943, Sandberg and four other associates came together and conceived a plot to set the Public Records Office on fire, but unfortunately, one of the co-conspirators was captured and pressured into giving up the names and addresses of remaining participants to the Gestapo (Marcar 2013, 166). Almost all who had participated in burning down the registry office were caught and executed, but Sandberg managed to escape by hiding behind a false identity and living quietly in Gennep, a small town in the eastern part of the Netherlands (Rawsthorn n.d.). While living alone in fear of being captured, having little to eat, and knowing that many of his associates were dead, and also that his wife and son were incarcerated, Sandberg was able to find some comfort in design (Rawsthorn 2018, 19). In the period between December 1943 and April 1945, Sandberg started producing a series of nineteen pamphlets that he appropriately named "Experimenta Typografica" to document his observations.

Each pamphlet had up to sixty pages of collages, drawings, writings, and typographic expressions made in the approximate dimension of fifteen by twenty centimetres. Some texts were written by Sandberg himself, while others were by his favourite writers such as French political philosopher Pierre-Joseph Proudhon and novelist Stendhal (Rawsthorn 2018, 19). Due to a lack of funds and resources, Sandberg improvised and made copies of each pamphlet using paper scraps, cardboard, magazine pages, wallpaper swatches and other materials available to him (Rawsthorn 2018, 19). The content of each edition was developed based on a theme that had a profound impact on him and his practice, including typography, architecture, education and more

(Rawsthorn 2018, 19).

By keeping himself busy with the tedious and lengthy process of designing *Experimenta Typographica,* Sandberg found the will and courage to press on, even though he was surviving through each day with the fear that he might lose his life as well as those whom he loved (Rawsthorn n.d.). Other than highlighting Sandberg's resilience, the project also gave him the opportunity to reflect upon his past curating practice, which later significantly impacted his future directorship at the Stedelijk Museum. Furthermore, the experimentation involved in combining unconventional materials, bright colours and abstract typefaces had not only prepared the ground for his future graphic design practice, but also helped determine the unique visual identity of the museum in the days to come (Rawsthorn n.d.).

From a Rebel to a Museum Director

When the war finally ended in 1945, Sandberg reunited with his wife and son upon returning to Amsterdam, and soon after, he was appointed as the director of Stedelijk Museum (Rawsthorn 2018, 20). As the war had caused severe damage to many European museum buildings, with some completely demolished and their collections partly destroyed, stolen, or hidden at various sites, the role of overseeing their restoration was a challenging one (Cagol n.d.). However, this had also created an opportunity for the authorities, directors as well as architects to re-examine the role of museums within society (Cagol n.d.). Notably, Sandberg was one of the few frontrunners who rejected the traditional model of the art establishments, which was to serve the purpose of art history, and explored alternatives that were directed towards the future (Cagol n.d.).

One of the many radical changes Sandberg made was the adoption of the "Anti-Museum" approach, which involved converting the conventional dimly lit rooms into spaces that were bright and accessible, thus creating an inviting space for social interaction (Garfield, 2016). Besides introducing the innovative concept of having a museum shop, a café and learning centre within its premises, he had also tried to make the Stedelijk visually more prominent when he had the entire building painted in white (Garfield, 2016). Furthermore, he introduced contemporary art to the post-war Dutch society when he curated exhibitions that showcased European and

American artists like Picasso as well as Jackson Pollock (Garfield, 2016). With good foresight, Sandberg built one of the best modern art collections in Europe through the acquisition of works by Wassily Kandinsky, Piet Mondrain and Kurt Schwitters (Garfield, 2016). Under Sandberg's directorship, the Stedelijk Museum had evidently transformed into a modern art institution not just conceptually but physically as well.

Sandberg's "anti-museological" vision was shared by Paolo Marinotti, the general secretary of CIAC, a privately owned multi-disciplinary centre housed within Palazzo Grassi in Venice (Cagol n.d.). When Sandberg and Marinotti were first acquainted in 1958, they spontaneously agreed to combine their visions and resources to realise the exhibition *Vitaliteit in de Kunst* (Cagol n.d.). The exhibition was presented from 1959 to 1960 in both Stedelijk and CIAC, as well as two other venues in Europe (Cagol n.d.). As curators, they adopted the theme of "vitality" as the core concept and continued to develop *Van Natuur tot Kunst* (1960) and *Arte e contemplazione* (1961) subsequently. As a series of three, the exhibitions became the *Cicio dell Vitalità* (Cycle of Vitality). From Sandberg's perspective, the concept of "vitality" represented his vision of revitalising museum policies and making a significant move away from the traditional approach of displaying art as commonly seen in many art establishments and biennales (Cagol n.d.).

While *Vitaliteit in de Kunst* was introducing works of art that were inspired by the idea of "vitality" to the audience, it also served as an admonition to them to be aware of the present moment (Cagol n.d.). With *Van Natuur tot Kunst,* Marinotti and Sandberg were interested in expanding the connections between art and nature among the selected artists, and to determine where the "vitality of making" is found (Cagol n.d.). Although both exhibitions were attached to the genre of thematic exhibitions, Italian curator and researcher Stefano Collicelli Cagol (n.d.) argues that they were drastically different from other such exhibitions because the curators had adopted "a critical approach" to how a subject could be explored, rather than designing exhibitions that visualised a common theme. Hence, both exhibitions provided the opportunity for their organisers to express their concerns about urgent issues, and at the same time to prove that there was an alternative to the how art could be presented (Cagol n.d.). Their approach altered the

public's view regarding the function of a museum, which in turn dealt with the problem of elitism.

Since both Sandberg and Marinotti were not architects themselves, Cagol (n.d.) believes that the focus of the two exhibitions was more discursive than design-oriented, because exhibitions were traditionally a medium adopted by artists and architects for visual expression. Thus, when the two director-curators adopted exhibitions as a medium, it was purely "the institutional context" that got redefined (Cagol n.d.). In the case of the Stedelijk Museum, Sandberg's discursive approach had brought value to its monographic way of presenting contemporary art movements or artists, and successfully added pressure to the institution's habitual attachment to art history (Cagol n.d.). Given his background as a graphic designer, Sandberg had found new purposes and meanings for an art museum through "the culture of display within the commercial field" (Cagol n.d.). Additionally, drawing inspiration from how shopping malls were designed to attract visitors, he had the New Wing of the museum built with glass walls (Cagol n.d.).

As a museum man, Sandberg wanted the museum to be a place for "experimentation and reflection" of the culture of the present and his own role as the catalyst between artists and the general public (Spencer 1997). Through Stedelijk, he fostered the relationship between art and life by considering different strands of the arts, namely poetry, music, dance, design, typography, architecture, photography, and film, as important as the fine arts. By 1952, photography was added to the museum's collection, and subsequently, Sandberg brought in music performances, film screenings as well as an education programme, and also inaugurated a library, reading room and restaurant within the premises (De La Warr Pavilion 2016).

When Sandberg retired from the Stedelijk in 1962, he was already in his mid-sixties, and all he wanted to do was to simply be a graphic designer again. However, this desire to return to his core did not stop him from turning away the invitation to be involved in setting up the Israel Museum in Jerusalem in 1964, to teach at Harvard in 1968, and to be part of the design committee for the Pompidou Centre in Paris in 1971 (Garfield 2016). Thereafter, he worked prolifically as a graphic designer until 1984, when he died at the age of eighty-six.

Setting a Precedent

For seventeen years, Sandberg had acted as the director at the Stedelijk, but that did not keep him away from his design practice. To avoid compromising on his day-to-day work, Sandberg kept on producing printed matter like catalogues, posters, and cards for the exhibitions that he organised in the evenings and over weekends (Spencer 1997). His dedication to the side job was clearly motivated by his belief that these printed matter played an essential role in publicising the exhibitions and attracting visitors to the museum. With a "preview function" embedded in the catalogues, Sandberg found them particularly effective in promoting the lesser-known artists, and many internationally acclaimed artists gained their reputation through this inspired form of communication (Spencer 1997). While working on them, Sandberg drew inspiration from the striking letterpress pieces created by typographer H. N. Werkman, and he also made the most out of his close relationship with the museum's printers to develop his own unique typographical work, which also helped to form a distinctive identity for the museum (Northover 2016).

In 2016, the exhibition titled *Willem Sandberg: From Type to Image* was opened to the public for the first time at De La Warr Pavilion in Bexhill-on-Sea, South East England. Curated by Carolien Glazenburg, the former curator of graphic design at the Stedelijk Museum, the show is known as the first retrospective presentation of Sandberg's graphic design works in the United Kingdom (Garfield 2016). Displaying more than 270 posters and 250 catalogues produced by the prolific designer from between the 1930s and 1980s, the show was identified as the "first UK survey of an internationally renowned icon of graphic design (Garfield 2016). According to Glazenburg, the amount of work selected for the exhibition accounted for only a quarter of what is listed in the Stedelijk's archives, but they were sufficient to tell the story of how Sandberg had used "warm printing", experimental typographic expressions, basic materials or existing printed matter to turn text into image, inventing a one-of-a-kind visual language (Garfield 2016).

Along with the experimentation of raw materials and printing techniques, Sandberg's distinctive design can also be easily recognised by its asymmetrical typography formed by a mix of fonts, ciphers and rough-edged shapes made out of torn paper (De La Warr Pavilion 2016). The design decisions he made with the promotional materials were mainly based on his deep

understanding and personal involvement with the subject matter, and by using an artistic yet playful approach, he knew exactly how to bring the public's attention to art through his design (Myles 2016). As reviewed by designer and writer Jim Northover (2016) for *Eye* magazine, this retrospective exhibition effectively brought to light Sandberg's "most significant contribution not simply as a designer but as a design-inspired leader in museum management, a field where his influence has been more widespread, if less generally acknowledged".

In this life-long process of transitioning from a typographic designer to a curator, a member of the Resistance and a fugitive to a museum's director, and finally back to his origins of being a graphic designer, Sandberg had used design not only for self-expression, but also as means to protect the vulnerable from their oppressors, and a way to connect people to the museum. Additionally, Sandberg had also authored many writings throughout his life; a total of seven hundred items were listed in the bibliography of his published pieces (Spencer 1997). Sandberg (1967) once wrote in a verse note that "creativity is the capacity to shape life as it grows underneath the surface". This expression that shows how much Sandberg appreciated the most fundamental aspect of things, and with a touch of imperfection, he wanted others to look at things with a broader perspective (Garfield 2016). Sandberg's unwavering way of employing design as an attitude had certainly helped him to achieve his life's goal, which was to invigorate the connection between art and the public through his work. Even though such an achievement may seem ordinary and humble in current times, we need to keep in mind that it was Sandberg who set the precedent to make it this way.

4.3.2 Curating as Authorship and an Expansion of Graphic Design Practice

With Sandberg establishing a quintessential model for what "graphic designers as curators" would mean in the context of an established art and design institution, there have evidently been more designers following suit today. Some of these designers include Andrew Blauvelt and Ellen Lupton. Holding the multiple roles of graphic designer, educator, researcher and author, Blauvelt was the former Senior Curator of Architecture and Design at the Walker Art Centre, and now serves as the director of Cranbrook Art Museum; while Lupton is known as the Senior Curator of

Contemporary Design at Copper Hewitt, Smithsonian Design Museum, and writes about graphic design actively. As Sandberg continues to inspire many who have taken up or have the desire to take on the role of curators within art and design establishments, the accomplishments of graphic designers who have acted as curators outside of museum walls to fulfil different purposes should not be overlooked. Hence, the next part of the sub-chapter discusses how curating has been effectively deployed by some graphic designers to create a design authorship and to expand their design practices.

Curating as Authorship

Perhaps it is possible to begin this discussion on authorship with the notion of "design art", a term that emerged in the late 1990s to describe works that blur the line between art and design. This term is mainly associated with celebrated design practitioners and entities like Andrea Zittel, Jorge Pardo, N55, M/M and more (Cole 2007, 10). As noted by art and design critic Alex Cole (2007, 10), a more concise definition of the term was given by artist Joe Scanlan (2007) in the article titled, "Please, Eat the Daisies", co-authored with the economist Neal Jackson in 2001. In the essay, Scanlan wrote: "Design art can be defined loosely as any artwork that attempts to play with the place, function and style of art by commingling it with architecture, furniture and graphic design" (Scanlan 2007, 61). However, prior to that, any attempt to make a connection between art and design was likely to have been shunned by designers themselves. For example, when Potter (1969, 20) tried to answer the question "Is a designer an artist?" in 1969, he made it clear that designers then were generally happy to include a certain level of artistry in their work, and accepted that there were many commonalities between some of the great masters in the fields of medicine, science, philosophy, art, and design. However, designers were are not interested in uniting the vastly different standards that co-existed in any of these professions (Potter 1969, 20). Furthermore, in 1981, renowned American designer Paul Rand (1981) did not hold back with his view that since design works as a problem-solving activity with the purpose of clarifying, synthesising, and even dramatising a word, a product, an image, or an event, and it therefore does not function in the "world of art" but in the "world of buying and selling".

Nevertheless, the rise of "design art" that occurred in the late 1990s might have been the result of a strong interest in authorship that emerged within graphic design circles during the mid-1990s. It is likely that the notion of "designers as authors" and its related theories were first formalised in 1995 via issues of *Émigré* magazine that were guest-edited by designer and critic Anne Burdick. Two issues (Issues 35 and 36) of the publication were dedicated to featuring essays and creative design works that had been created based on the theme of "Mouthpiece: Clamour Over Writing and Design Issues", and gathered through a nationwide open call in that same year (McCarthy 2013, 49). A year later, Rock published his famous essay, "The Design as Author" (1996), which asked the question: "What does it really mean to call for a graphic designer to be an author?" Even though the question of how graphic designers can become authors is challenging, this did not stop some courageous individuals from making attempts to establish their authorship beyond the conventional practice of design, which is to have both the agency and ownership over the "why and how of their work, including anything from art-like expression and social political activism to the entrepreneurial venture" (Mura 2018, 30).

Known as to have contributed significantly to the discourse of design authorship, American graphic designer and educator Steven McCarthy was particularly interested in the examination of how different roles and models could implicate the discipline, practice as well as education of graphic design (Mura 2018, 30). While the theories about authorship in graphic design were flourishing, McCarthy (2013, 203) noticed that the idea of design authorship was often discussed within the limiting scope of graphic designers producing self-initiated projects with "an enlarged sense of agency". Comprised of both printed matter and interactive media, these artifacts proved that graphic designers had a greater role to play in the field of communication, and as a result, the space for design expanded culturally, economically and even politically (McCarthy, 2013, 203). The movement eventually reached its intellectual peak with writings that either questioned or opposed the idea of design-authorship began to surface, and it came to a point where the mere use of the term "author" could be easily criticised (McCarthy 2006, 49). Hence, many scholars started to explored alternatives, such as the notion of "designer as producer" as proposed by Ellen Lupton and Steven Heller introduced the term "designer authorpreneur" in the late 1990s.

About a decade later, Australian design-educator Katherine Moline (2006) responded to calls for a return of design authorship with a paper that spotlighted the omission of experimental design in renewed debates around the notion of designer-as-author as opposed to designer-as-service-provider. Besides recounting the various figurative constructs of a graphic designer as an author, producer, and social entrepreneur, Moline (2006, 57-66) urged the design community to first reflect upon design practices and products before turning to art as a model to rethink design-authorship. Moline (2006, 57) saw the need to respond when designer-educator Gerard Mermoz appropriated art theorist Nicolas Bourriaud's Relational Aesthetics theory and when design critic Rick Poynor (2005) proposed the alternative model of design-art as contemporary design for the purpose of recasting graphic designers' role as authors. While acknowledging that the criticality of these art theories could be beneficial to the field of design, Moline was disturbed by how cultural thinkers had overlooked the experimental approaches to typography that had sparked notions of design-authorship in the 1990s (Moline 2006, 66). Through discussing the publication *Re-magazine* by Jop van Bennekom, she hoped to bring graphic design practitioners and educators' attention to the omission of experimental design in this attempt to reinvigorate the design-authorship debates (Moline 2006, 62-63).

With the paper "Designer as Author: Diffusion or Differentiation?" presented (with C. M. de Almeida) in 2001 at the Declarations conference in Montréal, Canada, it was likely that McCarthy (2002) had also contributed to the revival of the discussion on design-authorship by advocating the spread of design authorship's attributes throughout the practice itself, and not to accord exclusive status to design-authors. With that, he called for a revision of the scope of what constituted design-authorship to include "an expanded and more meaningful role" for graphic designers by various means: 1) self-initiated works; 2) creative and original collaborations; 3) writing, designing, editing and publishing; 4) recognising personalised methodologies; 5) recognising sub-cultural users; and 6) undertaking entrepreneurship (McCarthy 2006, 49). Some of the works he saw fitting the criteria include *Raygun* magazine by David Carson and the Obey Giant campaign by Shepard Fairey (McCarthy 2006, 49).

While Moline (2006) pointed to experimental design as an option to reconsider the role of

graphic designers as authors, McCarthy proposed the idea of "Curating as Meta Design-authorship", arguing that the act of establishing design-authorship had reached a whole new level with graphic designers playing the role of a curator to produce themed exhibitions that showcased designer-authored works. By calling them "meta-authors", McCarthy (2006, 49) writes that there is an establishment of design authorship "at the level of the conceptual exhibition" when the designer-curators present the design-authored work within new contexts. This new idea of meta-authorship is based on the approaches of "the exhibit of" and "the exhibit as" design authorship, and since these exhibitions are held as public events, the audience, who are also design's most common users, get to think about the influence of authorship when they visit the show (McCarthy 2013, 203).

To support his argument, McCarthy (2013, 203) explains that the selected exhibitions he has chosen to use as case studies generally have the following characteristics: 1) designer-curators would determine the themes for the show and start gathering artifacts that are coherent conceptually; 2) the artifacts are taken from existing collections, borrowed from archives, or gathered through open call or commissions; 3) the works correspond to a specific curatorial idea; and 4) the idea is generally reinforced by the design and installation of the exhibition, complemented with didactic texts, and enhanced with promotional materials and a catalogue.

With a strong interest in the notion of curation as meta design-authorship, it is no surprise that McCarthy had already organised a group show (with his former colleague Cristina de Almeida) in 1995 titled *Designer as Author: Voices and Visions* (*DA:VV*). This was, notably, a year before Rock's famous article was published and circulated within the community. Although Rock (1996) regards this exhibition as the very first show that had explored the concept of curatorial meta design-authorship in a direct manner, he notes that it was The American Centre for Design's *100 Show* competition held in 1992 that had set the precedent. While the *100 Show* might have been known more as a publication than as an exhibition, McCarthy (2013, 203) finds the selection process similar to the way any design-authored show would have had been carried out. Katherine McCoy has been identified as the meta design-author in this project, and her work involved inviting acclaimed designers Bruce Mau, Lorraine Wild as well as Rick Vermeulen to be

the jurors for the competition, and then assigning them the role of curators to select works for the show (McCarthy 2013, 203). What made the show stand out from any other competition-cum-exhibitions was that the jurors did not simply vote or come to a diplomatic consensus in the selection process. Instead, their choices were deliberately biased to ensure that noteworthy works that might not otherwise have seen the light of day had the chance to be uncovered and shown to the design community (McCarthy 2013, 203). Having gone through this unconventional selection process, many of the works chosen were evidently the products of the "designers' expanded voice" and made with "an increased sense of agency" (McCarthy 2013, 203).

In the case of *DA:VV*, the aim was to account for works and practices that involved graphic designers not only in developing visual, but also textual content (Mura 2018, 31). With the idea of "authorship" heavily embedded in the curatorial theme, designers submitting works to *DA:VV* had to fulfil the following requirements: 1) they have contributed to the literal content as much as they have to the visual form; 2) they raise questions and pose problems as promptly as they develop solutions, and adopt graphic design as a tool for investigation; and 3) they are proficient with the use of words, both typographically as well as literally or poetically (McCarthy 2013, 203). Interestingly, the call for entries was also opened to editors and writers who: 1) made use of type to expand the meaning of or to attach a commentary about their work; and 2) worked "graphically", possibly by borrowing from disciplines such as literature, language, art, psychology, technology, and politics (McCarthy 2013, 203).

As the central theme of *DA:VV* was not fixed on a specific design style or medium, the type of works selected for the show were largely created via diverse literary and visual approaches. Some of significant works include a series of anti-consumerist posters by Daniel Jasper, *Rethinking Design* publications by Michael Bierut, and *The History of the/my World* (an artist's book) by Johanna Drucker (McCarthy 2013, 204). Among the participating designers, some were recognised as the key representatives of design-authors, namely, Abbot Miller, Ellen Lupton, Katie Salen and Rudy Vanderlans. While there were also others who were not as well-known, they were identified as "forward-thinking practicing graphic designers, faculty and students" (McCarthy 2013, 203). Further contributing to the significance of *DA:VV* was the guest

editor of *Émigré*'s "Mouthpiece: Clamour Over Writing and Design" issue, Anne Burdick, who was invited to give a keynote speech at the event's opening event. Essentially, her speech can be read as a "critical commentary" on the rising field of design authorship which, as Burdick revealed at the end of her speech, was put together from the writings of other authors as well (McCarthy 2013, 207).

While McCarthy and De Almeida may have been regarded as the first graphic designer-curators to have curated an exhibition of design-authored work that directly manifested the quality of "meta-authorship", they are certainly not the last. The approach taken with the curation of *DA:VV* was relatively straightforward, which was to showcase artifacts with prevalent features of design authorship. But as more graphic designers-educators started to produce shows that adopted a similar approach in the United States, they evolved to become platforms to not only present but also expand discourses around the various types of graphic designer-authored works developed (Mura 2018, 31). This development led McCarthy to view "exhibitions" as more than a means to bring attention to works of graphic designer-authors; the curatorial work becomes a form of meta-design authorship in itself (Mura 2018, 31). In this context, a design-curator performs an "authorial act" when he develops a concept that governs how the works are being gathered and commissioned, and the individual design-authored works become less significant than the over-arching concept (Mura 2018, 31-32).

The Next Word: Text and/as Design and/as Meaning (1998) curated by Johanna Drucker, *Soul Design* (1999) by Kali Nikitas, *Adversary: A Traveling Exhibition (of) Contesting Graphic Design* (2001) by Kenneth FitzGerald, and *I Profess: the Graphic Design Manifesto* (2004), jointly curated by Chris Corneal and Maya Drozdz are some of the few exhibitions McCarthy (2013) identified to have contributed to the discourse of curating as meta design-authorship. In particular, the project *I Profess* was singled out as one that has brought "the complexities of the design authorship exhibit curator as meta-author to the fore" (McCarthy 2013, 208-212).

Presented in seven locations over a span of three years, *I Profess* mainly showcased works by graphic design educators from the US, and also included several representatives from Turkey, Croatia, and Great Britain (McCarthy 2013, 212). As curators of the show, Corneal and Drozda

(2003) made an open call for entries that challenged graphic design educators to use posters as a medium to visualise their teaching philosophies, and the works were a consolidation of diverse viewpoints as well as ideological and pedagogical priorities that set out to inspire and spark conversations among faculty and students. Essentially, the curators' aim was to provide a platform for designer-educators to engage their colleagues and students in thought-provoking and intellectual conversations in relation to their core beliefs in graphic design (Corneal and Drozdz 2003). Even though posters might not necessarily be viewed as the best format to communicate the message, McCarthy (2013, 212) believes that posters have proven to be graphic designers' preferred "canvas for virtuosity", and furthermore, there was a notably wide variety of visual and conceptual presentations, and also many ways in which design authorship was manifested through posters in the context of a gallery environment; this made them comparable to works of art.

In McCarthy's view (2013, 212), it was through *I Profess* that the audience had the opportunity to witness how graphic designers could take on a variety of roles, and even when the boundaries and relationships between the "subject (by designer) and object (about designer)", "immersion and self-promotion", "display and critique", "communication and expression", and "process and product" were all blurred. In this instance, the notion of curatorial meta-authorship did not only see a shift in terms of scale, but it also became an expansion and blend of roles. As the idea of curating as meta-design authorship has gained a new meaning to include the redefinition of roles as well as an elimination of distinctions, McCarthy (2013, 214) anticipates that new concoctions of activity will set off new contexts, and thereby generate new activities. And as exhibition curating spreads beyond the cultural sphere and into the realm of commerce and politics, McCarthy also believes the notion of "designers as author as curators as designers" will inevitably continue to evolve (McCarthy 2013, 214).

Referencing the selected exhibitions that his paper has discussed, McCarthy (2006, 51) concludes that the establishment of design authorship via exhibition curating indicates "a maturation of design connoisseurship and its concurrent democratisation". Beyond the scope of exhibition-making, McCarthy's idea of curating as meta-design authorship has expanded the definition of design authorship to also refer to an extensive activity that crosses many boundaries

and confronts unconventional approaches (McCarthy 2013, 212). Particularly, because exhibitions are also organised as social events, the act of curating can also be regarded as a "community-oriented pursuit", and hence, curating becomes a process of discovering and sharing via "a plural form of authorship" (McCarthy 2013, 212).

Although McCarthy is known for championing the approach of using curating as a means to bring design authorship to the next level, Mura (2018, 32) notes that McCarthy's overarching idea of authorship is "an approach or attitude" that is not limited to one specific medium. As discussed in his book, *The Designer As* (2013), it is clear that curatorship, alongside with production, activism, entrepreneurship, and collaboration, is merely one of the many models of communication available for graphic designers to establish design authorship. This discussion reveals that the exhibitions of graphic design, organised and curated by graphic designers who were also educators, have a strong desire for opportunities and spaces to pursue a more autonomy practice, as well as to share knowledge with the next generation of graphic designers.

Curating as an Expansion of Graphic Design Practice

Held in Moravian Gallery in 2006, the exhibition *Graphic Design in the White Cube* curated by Peter Bil'ak is known as the turning point in the understanding of how galleries can be related to graphic designers. Prior to that, Bil'ak already had the experience of organising a retrospective show in Brno that spotlighted Dutch graphic design (Mura 2018, 30). Considering the fact that displaying graphic design in a gallery environment could result in a certain level of isolation for the work, Bil'ak (2006) chose to throw light on its function by presenting the threefold relationship formed between the client, the designer and the public. Beyond bringing commercialised design into the gallery to be judged as art by the public, Bil'ak (2006) wanted the focus to be on the hidden component of the works: the clients. To do that, he created space in the gallery to present actual words from the clients' original creative briefs, and since these words had defined the objectives of the work, the public could use them to evaluate the success of the outcomes. However, ultimately, Bil'ak (2006) acknowledged that the retrospective approach taken to reconstruct the context of the work could be problematic and was certainly not "the

ultimate solution".

For this reason, Bil'ak had a different game plan when organising *Graphic Design in the White Cube* as an exhibition that could meet the brief requirements stated in Moravian Gallery's brief, which was to "present to the public certain specific aspects and tendencies of contemporary graphic design worldwide" (Bil'ak 2006). To avoid any sense of inauthenticity caused by the recreation of "the outside world" within a gallery space, Bil'ak and his team proposed to "make the gallery conditions the context for the work" instead (Bil'ak 2006). Accordingly, a total of nineteen designers and design collectives were given the commission to design a poster for the same exhibition in which they were invited to showcase their works. The participating designers were asked to produce the posters like how they would with any commissioned project within four weeks, and they were promised a nominal fee for the work. These posters served two purposes: one set of posters was collected to be displayed in the gallery, and then copies of each poster were made and placed around the city to perform the function of promoting the exhibition (Bil'ak 2006). For the show itself, beside making the original brief visible to the public, the sketches created by the designers were also on display, and as rationalised by Bil'ak (2006), his goal was not to get the public's approval of the work, or to merely put something up for appraisal, but rather to have the design process revealed. To him, the process of exploring possibilities through failure revealed more valuable information about the work than just showcasing its successes.

Bil'ak (2006) also acknowledges that the "self-referential" approach is not particularly new since it has been adopted in the realm of art as well. For example, artist Sol LeWitt came up with the idea of breaking down the mystified artistic process to its basic elements of lines and colours. By naming the book project *Four Basic Kinds of Lines and Colour*, LeWitt was evidently looking into the fundamentals of offset printing techniques for books, and he did that by using the four standard CMYK (cyan, magenta, yellow and black) colours to draw lines at the varying angles of 0, 45, 90 and 135 degrees, which are also the actual angles used in reproduction techniques. Even though there were only four basic inks to begin with, LeWitt could mix them into sixteen elementary colours, and by varying the opacity of black ink, he also created sixteen more

grayscale alternatives (Bil'ak 2006). With a similar strategy in mind, Bil'ak (2006) wanted to expose and strip the "deceptive aura" off from the design process, to experiment with a new format with which design can be presented in a gallery space, and to adjust the expectations of the visitors who came to see a "graphic design" show.

According to Mura (2018), the final display of items like creative briefs and sketches made the exhibition unengaging, but she also noted that the real value of Bil'ak's curatorial project was not found in the actual exhibit itself, but rather in the discourse created "about and around" it. While the exhibition was contextualised within the traditional framework of viewing design practice as the provision of a client-oriented service or a problem-solving activity, the real intention was to show the world how design practice was evolving (Mura 2018). Notably, the participating graphic designers were also some of the leading figures who were active in the movement of creating self-initiated projects as part of their daily design practice, embracing new possibilities, and engaging in activities such as "writing, organising, conceptualising, reflecting as well as exhibiting" (Mura 2018). Along with the installations and projects by M/M, Experimental Jetset and Bailey, *Graphic Design in the White Cube* became part of the trend with which exhibitions are used as "a convenient setting for displaying self-initiated designs", and to Mura (2018), Bil'ak's accompanying essay for the exhibition made the phenomenon even more apparent. Undoubtedly, it was the designers' longing for more freedom over the way they worked and how they reflected critically of their practice that blurred the boundaries between art and design, and as a result, opportunities were created for graphic designers like Bil'ak to take on the role of a curator to fulfil those desires.

The trend of graphic designers taking on additional roles as authors, producers, and curators to create design, albeit not in a traditional sense, suggests that it is possible to develop an interdisciplinary approach to uncover what design can offer. Thus, while graphic designers explore curating or initiate curatorial projects as a means of practising design, it is not surprising to find the potential of design and Design Thinking being explored in the museums. For example, design educator and curator Diane Mikhael (2018, 4) studied and proposed that a curator reacting to a social need could be called a "design thinker", and that he would be adopting Design

Thinking as a "mindset and process" to create participatory projects. Also, educators and researchers Suzanne MacLeod, Jocelyn Dodd and Tom Duncan (2015, 314–341) discussed the value of design research and the potential of Design Thinking in the development of museums as visitor-centred organisations through the case study of IWM North. Such mutually beneficial exchanges between roles and approaches could just be what the world needs to create more possibilities when addressing complex issues.

Conclusive Notes

Acknowledging that the notion of "graphic designers as curators" is not new, Section 4.3 discussed how some graphic designers have performed this role in the past to fulfil different purposes. First, there was Willem Sandberg who served as a museum curator and director of Stedelijk Museum while maintaining his core identity as a graphic designer from 1937 to 1962. Sandberg set a precedent for many graphic designers-curators who are based in established art and design institutions today by playing the role of a curator while employing design principles when invigorating the communication between art and the public. After Sandberg, Steven McCarthy emerged as an advocate of design authorship and developed the idea of viewing curating as a form of meta design-authorship, particularly when he organised the exhibition *Designer as Author: Voices and Visions* (*DA:VV*) in 1995. Even though the idea of establishing a design authorship seemed to have dominated how graphic designers were involved in curating and exhibition-making in the 1990s, with this trend still going strong today, it appears that there were also design practitioners like Peter Bil'ak who consciously moved away from that direction by adopting exhibitions as a medium to reflect on their own design practice in more recent times. The exhibition *Graphic Design in the White Cube* is also discussed as one of the examples that contributed to the trend of exhibitions becoming platforms for designers to not only showcase self-initiated projects, but also to expand their graphic design practice. Moving forward, the next sub-chapter will explore the notion of graphic designers as curators by proposing the adoption of Critical Design as the more appropriate approach for them to make critical inquiries into complex design problems or in their own practice, which will then concretise their role as problematisers.

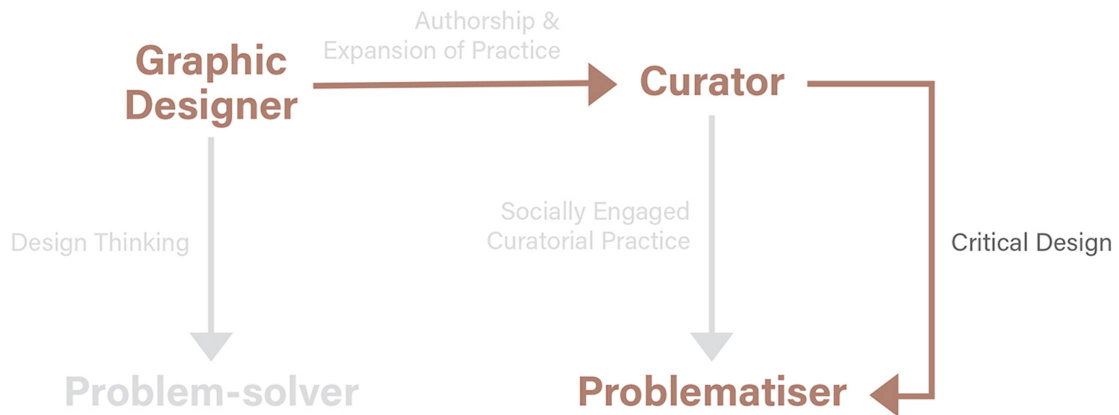

Fig. 5. Research Framework – Graphic Designer as Problematiser, by Junie Tang.

4.4 Graphic Designers as Problematisers and Critical Design as Problematisation

Circling back to the beginning of this chapter, this thesis has looked into how the term "wicked problems" was used by Rittel and Webber (1973, 155-169) to describe social system problems that are "ill-formulated", and they argued why Design Thinking as a problem-solving methodology is not adequate to deal with them. Based on the introduction of Rittel and Webber's paper, it appears that they were driven to write this paper because they had witnessed how the protests that took place between the 1960s to the early 1970s developed into a social movement that attacked many modern professionals like the educators, social workers, public health officials, city planners and so on.

Rittel and Webber observed that people were on edge because they did not like the things that were proposed or offered to them by these so-called "professionals"; from educational programmes by academics, redevelopment projects by urban renewal agencies, law-enforcement methods by the police, to the administrative behaviour of the welfare agencies, and more (Rittel and Webber 1973, 156). The protests seemed to be against anything that were "professionally" designed or certified, which included the diagnoses of people's problems and the standards of public services (Rittel and Webber 1973, 156). The development of this "anti-professional" movement was perplexing to Rittel and Webber (1973) as the attack came at a time when social service professionals were beginning to gain competencies in their jobs. Nevertheless, Rittel and Webber also acknowledge that some of these confrontations were not

entirely unforeseeable and in fact had an intellectual origin; they were either brought about by a redefinition of a particular professional's job or by conditions that were no longer tolerable because of unexpected societal events that demanded different forms of intervention (Rittel and Webber 1973, 156). Their observations about the inadequacies of social planning professionals and systems in the late 60s to early 70s align with sociologist and writer Peter Townsend's conclusion in his review of the Labour Government's record in the social policy field from 1964 to 1970, which identified the lack of means to unify the government's separate activities in the field of social services, income policy, and taxation as one of the key reasons in its failure to effect significant impact on inequality (Townsend 1972, 298).

Prior to that, a professional would simply perceive himself as one who deals with a variety of problems that are "definable, understandable and consensual", because all he had to do for the job was to get rid of the conditions that were generally regarded as unacceptable by most (Rittel and Webber 1973, 156). With the streets properly paved, roads well-connected to all locations, pestilences eliminated, clean water piped to almost every building and so on, the professionals were applauded for their prowess through these accomplishments that were visible to all through the growth of the modern city and urban society (Rittel and Webber 1973, 156). However, as soon as these "tame" problems were tackled, people turned their attention to problems that were more tenacious, and therefore, the once instrumental use of "efficiency" to measure the success of a professional's work was challenged by the revived obsession with the notion of equity (Rittel and Webber 1973, 156).

When people became increasingly aware of the country's pluralism and began to have more concerns about the disparity of values that came with the diversity of communities, it was clear that distributional problems could no longer be dealt with based on presumed consensus (Rittel and Webber 1973, 156). The professionalisation of both cognitive and occupational approaches might have been refined in the early 20th century, but these scientific adjustments did not make these approaches any more adaptable to the inception of interlinking open systems as well as the growing concerns with equity (Rittel and Webber 1973, 156). As sensitivity grew towards the repercussions created by systematic networks as well as the value consequences

that came with these repercussions, so did interest in the re-examination of the collected values and the formulation of national goals. Rittel and Webber (1973, 159) believe that people had gradually come to realise that the inadequacies in the professionals' support systems were where "goal-formulation, problem-definition and equity issues meet".

Identifying specific goals is known to be one of the key purposes of planning, yet it is an extremely tedious task to fulfil. Hence, Rittel and Webber (1973, 159) agree with American economist Charles J. Hitch that it is important for them to look at objectives as professionally and critically as they would at their models as well as other inputs when studying systems. Instead of wondering "What are systems made of?", they should be asking the question, "What do they do?", followed by the toughest question, "What should these systems do?" With regard to problem definition, planners were beginning to wonder if what they were doing was the "right thing to do". So, besides learning to ask questions about the actions to be taken and the problem statements to be posed within measurable frameworks, designers would also have to learn to view social processes as connectors that bind open systems, turning them to larger and interlinked networks of systems so that the outputs generated from one turn into inputs for the other (Rittel and Webber 1973, 159). Still, it can be difficult to locate where the problem lies exactly within a structured framework, and it becomes challenging for planners to intervene even if they know what the desired outcomes are. In addition, it is necessary for planners to be sensitive to the repercussions caused by an attempt to problem-solve a specific node within the network, and be prepared that the action would give rise to problems that are even harder to deal with (Rittel and Webber 1973, 159). Accordingly, city planners try to "internalise those externalities" by extending the limits of the systems that they are dealing with.

One way to understand the point that Rittel and Webber (1973, 161) are making is through the example of mental health problems. If "deficient mental health" is identified as a problem to be dealt with, the solution to it would simply be the "improvement of mental health services". Likewise, if "the lack of community centres" is found to be one of the deficiencies in the mental health services system, then "the procurement of community centres" would be the next prescribed solution. However, if "deficient mental health" is due

to “inadequate treatment within community centres”, the solution should then be to improve “therapy training of staff” and so on. Meaning to say, if every problem can be regarded as a symptom of another problem, and one cannot understand the problem without learning its entire context, then the best approach to such problems is to circle back to the problems themselves.

Based on this particular characteristic of “wicked” societal problems, Rittel and Webber (1973, 162) believe that the popular “systems-approach” could reveal a way to treat them even though they are aware of its limitations. The known systems-approach (used by NASA and military) is based on the premise that planning a project can be done with the following steps: “understand the problems or the mission”, “gather information”, “analyse information”, “synthesize information and wait for the creative leap”, and “work out a solution”, or something similar (Rittel and Webber 1973, 162). Built upon an operational model, the “Operation Research” methods were a key component in the development of the first-generation approach, which can only be used after pivotal decisions are made, or in other words, after the problems are tamed. But with wicked problems, this classical approach is arguably inadequate because it is not possible for one to fully understand the problem without learning its context, and consequently, without any sense of which direction to take to arrive at the solution, one also cannot gather relevant information (Rittel and Webber 1973, 159). Since a wicked societal problem cannot be grappled with easily because it is impossible for the planner to fully comprehend in the first place, then clearly, the former step-by-step systems-approach is no longer useful in this instance, and a new generation needs to be developed.

Hitherto, the discussion on Rittel and Webber’s study can be summarised into the following points: 1) people got frustrated when social service professionals became comfortable with a traditional and limited approach to solving new and more complex problems; 2) the development of a new approach involves asking difficult questions concerning the problem posed and the actions to be taken; 3) designers must learn to bind open systems with social processes that turn them into inter-connected networks of systems,

and at the same time, be aware of the repercussions generated by any attempt to resolve a node within the network. These outcomes not only highlight the necessity of a new approach as opposed to a traditional one when new and more wicked problems surface, but also point to a design process that is arguably feasible for graphic designers to ask critical questions concerning the problems and their actions, and essentially, how they can adopt it to keep circling back to the problem sustainably, and all of which are helpful in the development of this new approach in the following sub-sections.

4.4.1 Graphic Designers as Problematisers

According to design theorist Christopher Alexander (1964, 1), a design process involves the creation of things that "display new physical order, organisation, form, in response to function". As a design practitioner himself, Alexander (1964, 1) recognises that functional problems are becoming more complex each day, yet not many designers acknowledge that they lack the competency to deal with them. More often than not, a designer would simply make do with some randomly chosen conventional order instead of finding the right order that he needs because he fails to understand a problem fully, and as a result, the problem remains unsolved because of its "insoluble levels of complexity" (Alexander 1964, 1).

Written in the mid-1960s, what Alexander had observed was relatively aligned to the frustrations that led to the anti-professional movement that happened during the late 1960s and early 1970s, which Rittel and Webber discussed in their paper. Alexander's notes were gathered during the time when design problems were becoming impossible to solve because they had underlying conditions and requirements that were far too complex for a designer to fathom intuitively. As problems grew and became more challenging, so did the amount of the information and professional experience required to deal with them. For this reason, not only would this body of information be wide-ranging, scattered and messy, its sheer amount would also be harder to obtain and handle by a single individual (Alexander 1964, 4). To make things worse, many designers had no clue how to consult with the specialists who owned the information, as they were generally intolerant and ignorant of the problems faced by the

form-makers (Alexander 1964, 4). Even if a designer was aware of the fact that a perfect form should be an honest representation of the acquired facts related to its design, because he could only rely on whatever information he chanced upon, and then consult a specialist when he could not overcome certain peculiar difficulties, he would end up randomly developing all of the collected information into forms (Alexander 1964, 15).

While problems are getting larger in quantity, difficulty, as well as complexity, they are also changing much quicker than before because new materials are being invented, and social behaviours as well as culture itself are undergoing changes faster than what anyone could anticipate (Alexander 1964, 15). It is clear then that the task of gathering and understanding all the information needed to create an ideal form is not within the reach of a single designer, and a different approach is required.

The Unselfconscious Process as An Alternative System-approach

In *Notes on the Synthesis of Form,* Alexander (1964, 15) refers to the fundamental outcome of design as “form”, and explains that a design problem emerges when an attempt to ensure that two specific entities, namely “the form in question” and its “context” fit well together. While the context defines the design problem, the form becomes the solution to it, and a design activity is about creating a “good fit” for the ensemble (Alexander 1964, 16). Known as an architect, Alexander tries to simplify this idea of a good fit between form and context in the form-making process with the example of house building. Within the architectural circle, many practitioners find some truth in the claim that houses built by ordinary people are seemingly better than those built by architects (Alexander 1964, 16). To explain the facts behind the myth, Alexander made a comparison between the constructs of “the unselfconscious culture” and “the self-conscious culture” in a non-judgemental manner (Alexander 1964, 16).

At one point of time, the term “unselfconscious” was generally associated with other labels like “primitive”, “folk”, “closed”, and “anonymous”, so as to differentiate them from those who paid less attention to the family ties in their social structure, and separate them

from mainstream culture, highlight the responsibility one has in the modern and more open condition, and set them apart from the cultures where the profession of "architecture" matters (Alexander 1964, 36). To master the craft of creating form, those who operate in the unselfconscious culture tend to make the same form repeatedly in order to become familiar with one specific method. But in the case of form-makers operating in the self-conscious culture, there is a need for them to constantly keep up with new requirements, and that involves dealing with completely different or, with some luck, old problems that are tweaked (Alexander 1964, 36). Thus, when dealing with such problems, falling back on former physical patterns is no longer adequate, and getting new ideas on form-making for modifications and innovation are necessary.

Based on this understanding of the two cultures, the unselfconscious process is arguably the better one because of its ability to adapt. The so-called "primitive" forms produce better results because they went through "a process of gradual adaptation", by which the form was made relevant to their cultures because of a series of recurring and purposeful adjustments (Alexander 1964, 37). This process has a structure that is "homeostatic", making it capable of producing fitting forms that adapt to changes consistently, and by contrast, because this homeostatic structure of the self-conscious process is being deconstructed, the forms produced through it will likely fail to fit well within their contexts (Alexander 1964, 38). Nonetheless, a designer must acknowledge that misfit variables are ever-present in both processes, and whether as thoughts, criticisms, actions, doubts or failures, they all serve as stimulus for one to create new forms (Alexander 1964, 38).

According to Alexander (1964, 38), when a form-making process begins, the "system of variables" changes its condition; every time a misfit is eliminated, another arises, causing reactions within the system that can alter other variables' states. These changes highlight the point that there is an active system found in each form-making process, and the variables are the conditions that need to be fulfilled by making sure the form and context fit well together. Within a system of variables, the misfitted variables cannot be adjusted by themselves individually due to the interconnectivity, but because they are not bonded with equal strength,

sub-systems exist and can operate with a fair amount of independence (Alexander 1964, 43). Hence, the form-making process can be summarised as “the action of a series of subsystems, all interlinked, yet sufficiently free of one another to adjust independently in a feasible amount of time” (Alexander 1964, 43). Alexander (1964, 43) believes this process works because the recurrence of correcting and recorrecting only happens to a single subsystem at one time during adaptation. So, it is this “reaction to change” that determines the internal structure of every dynamic process (Alexander 1964, 44).

In the context of culture, changes do not take place in clear distinct steps; new strands entwine with one another constantly, creating continuous but smooth changes that can affect how we perceive and utilise a form (Alexander 1964, 44). When it reaches a point where the change becomes obvious and a misfit becomes critically important, people will begin to realise that the current form no longer fulfils their needs (Alexander 1964, 44). Such inadequacy of form prompts action to be taken directly, and it is this “directness” that allows failure and corrective action to happen simultaneously (Alexander 1964, 50). Ultimately, the aim of this process is to achieve the “equilibrium of well-fitting forms” in theory, but for that to happen in practice, sufficient time must be given for adaptation to take place (Alexander 1964, 50-51). In short, the system cannot generate forms that fit, and the balance for adaptation cannot be sustained without giving it time.

About adaptation, how swiftly it occurs in a process depends very much on how independent or controlled the subsystems are (Alexander 1964, 51). These subsystems are not visibly seen in an unselfconscious process, but it is possible to understand how they operate from the two distinct attributes of the process, which are “directness and tradition” (Alexander 1964, 50). If every direct response generated can be regarded as “feedback” of the process, it has to be sensitive enough to bring about action every time a potential misfit occurs, so that the process can continuously produce forms that fit (Alexander 1964, 51). That said, the “sensitivity” of feedback alone is inadequate to achieve the desired equilibrium, thus the feedback needs to be restrained, and such restraint can come from the resistance caused by the traditions that are rooted in the unself-conscious culture (Alexander

1964, 51). Because resistance helps to slow down the changes, and restrains the extension of these changes to other features of the form, only pressing changes are permitted (Alexander 1964, 51-52). So, as long as a form fits well again, changes are not required until another misfit occurs. This characteristic of tradition helps to prevent any ripple effects brought about by a trivial failure from spreading too quickly, and to an extent that they cannot not be rectified (Alexander 1964, 52).

Direct action and unbending tradition may seem to be two contradicting concepts, but it is the immediate reaction to failures as well as the resistance to excessive changes that permit the process to become "self-adjusting" (Alexander 1964, 52). By making a series of small adjustments to the subsystems continuously, the "process of adjustments" is capable of operating at a rate faster than the changes that occur in culture (Alexander 1964, 52). As a result, equilibrium is restored with assurance every time a minor disruption happens, and the forms generated do not only fit well in their cultures but also, essentially, in equilibrium with the cultures actively (Alexander 1964, 52).

To summarise, Alexander's theory of an unselfconscious systems-approach that is self-adjusting seems useful in shedding some light on an alternative methodology for designers to address complex problems that they cannot deal with by themselves.

The Unselfconscious Form-maker as Problematiser

As discussed earlier, it is reasonable to assume that a designer can solve an independent problem considerably well without paying attention to its implied basic physical order, but it is not possible for him to do so when confronting a mesh of problems that are intertwined. Since he can no longer proceed by coming up with a single solution by himself to address complex problems, it is then vital to understand what this unselfconscious systems-approach can do, if not to permanently "solve" such problems. Notably, when comparing Alexander's theory of the unselfconscious approach to Freire's theory of problematisation, which is known to be a dialogical approach, some similar qualities can be identified.

According to Freire (1968, 179), cultural action can be defined as a "systematic and deliberate form of action" that acts in the context of a social structure to either maintain the existing structure or to change it. Because they are methodical and planned, each cultural action comes with a theory that determines its outcome, and thus has a corresponding approach needed to achieve it (Freire 1968, 179). Cultural action can either dominate (intentionally or unintentionally) or liberate people who are caught in a problematic situation, and since the two opposing kinds of action operate upon and within the same social framework, they form the "dialectical relations of permanence and change" (Freire 1968, 179).

Freire (1968, 179) calls the cultural action that liberates, "dialogical cultural action". He notes that this type of cultural action does not aim to eliminate the "permanence-change dialectic", since the social structure and human beings would always exist. Instead, the purpose of a dialogical cultural action is to overcome the adverse contradictions that are rooted in the social structure, so that people can be liberated (Freire 1968, 179). To a certain extent, Freire's idea of "permanence" arguably corresponds to Alexander's notion of "tradition", and "immediate action" to "change", which suggests that the unselfconscious form-making approach could also be a dialogical one.

From a design perspective, Alexander (1968, 58) believes that the form-maker (designer) does not see himself more than a mere agent in the unselfconscious system. Rather than trying so hard to invent new forms, he identifies misfits and makes small changes to them even if these adjustments do not necessarily improve the result significantly (Alexander 1968, 58). The pattern that is identified here in the unselfconscious culture is its ability to become "self-adjusting", and thus, its actions permit the making of well-fitting forms "to persist in active equilibrium with the system" (Alexander 1968, 58). Essentially, the form that emerges from such a system will not be regarded as the work of an individual, and the favourable result does not rely on one person's creative skills, but rather, on his place within that process (Alexander 1968, 58-59).

By contrast, the form-maker has a strong awareness of his "individuality" in a self-conscious process, and this can have a significant impact on the process of creating a form (Alexander 1968, 59). When a form is viewed as the work of an individual, the success of the form becomes the achievement of the form-maker, and his alone. With this sense of self-consciousness, the form-maker would be inclined to break free from constraints, to express his personal taste, flee from tradition, and persist in having autonomy over the process (Alexander 1968, 59). Unfortunately, it is not realistic to think that a form that fits well in its context can be produced by a single designer just because he has spent some time exploring an idea on the drawing block based on what had already been accomplished through many years of "adaptation and development" (Alexander 1968, 59). Clearly, the scope of the work is beyond what an average designer can cope with. To make things worse, as soon as he discovers that he lacks the competence to overcome a complex design problem, he will take actions to deal with his weaknesses, but more often than not, these actions would also have negative effects on how he develops the form (Alexander 1968, 59-60).

Freire writes of a similar issue where an individual relies on his own ability to help people overcome a problematic situation, dismisses the use of a "donor-recipient" method, and then proceeds to develop solutions "for" them and not "with" them (Crotty 1998, 155). Freire suggests that instead of imposing solutions upon those who want to be liberated, the use of dialogue is the best approach, and the people involved need to be committed to participating as well (Crotty 1998, 155). As for the one encouraging the dialogue, not only must he have faith that these people would speak reason, he also needs to be critical enough to facilitate well (Crotty 1998, 155). Having this strong faith in people himself, Freire (1965, 140) proposes to adopt a methodology that is "dialogical, problem-posing and conscientising". This approach is known as problematisation, which is also "a pedagogical process" that poses "the concrete, existential situation" of those participating in the dialogue "as a set of problems" (Crotty 1998, 155). In the process of problematising, any action taken by a participant to probe into the problematic situation will open up new paths for others who are caught in it to understand the purpose under analysis (Freire 1965, 135). This reaction to

change is also found in the unselfconscious culture where "new threads are being woven all the time, making changes continuous and smooth", and it is this active existence of subsystems that are accountable for the production of forms that allows problematisation to fit well (Alexander 1968, 44).

A problematic human situation may be formed by old understandings that come about "naively" because reality has not been considered as a whole (Freire 1965, 137). So, when problematising, to present the human world as a problem would mean asking people to "enter into" it critically, and to look at the whole operation as an entity that incorporates their own actions as well as others' into this world (Freire 1965, 137). As they "re-enter" the world via their former ways of understanding, they become informed about the ways in which they acquire knowledge, and thereby become aware that they need to know even more (Freire 1965, 137). As new paths open up, not only will the ones being problematised "enter into" the object of the problem, the one initiating the dialogical process will also "re-enter" it at the same time (Freire 1965, 135). Essentially, through this process, the problematiser himself gets to learn continuously, and with much humility, he will learn more along the way.

From Alexander's (1968, 63) point of view, an inexperienced form-maker can learn something new every time he eradicates an error through the unselfconscious process. The right course of action would simply be the process of having all the wrong ways put right, so no arbitrary concept is being formulated in this process (Alexander 1968, 63). When the novice is allowed to question what he has been told, the explanation becomes valuable because it spells out why this way works while the other does not (Alexander 1968, 63). The novice's training can also progress quickly when efforts are made to consolidate all the successes and failures that occur in the process into principles of what can be done and what should be avoided (Alexander 1968, 63). Now, it becomes clear that it is through first-hand experience in the unselfconscious culture that one can learn about the misfits that can happen in the form-making process, and especially when the list becomes too large and complex for a form-maker to grasp abstractly. Comparatively, however, Freire (1965, 136) believes that the process of problematisation is about "the act of knowing" as much as it is about the real

and existing situations. Thus, it is impossible for one to learn without confronting the problem first-hand.

With regard to learning, Freire (1965, 137) believes that it is about “duration”, as one can only become educated when sufficient time is given for “permanence” and “change” to interact within a dialogue. It is contradictory to claim that education should occur within a duration when permanence and change are at equilibrium, because in this context, “permanence” does not refer to “the permanence of values”, but rather “the permanence of the educational process”, which is an ongoing one (Freire 1965, 137). The dialectic of permeance and change is what makes the educational process “durable”, and for this reason, education can be understood as being “in a stage of being” (Freire 1965, 136). Being “historical-sociological”, education has to adapt to the tempo of the real world in order to last and remain “in a state of being” constantly. Therefore, education can be viewed as “a force for transformation” based on the fact that it has to endure long enough to transform and adapt to reality (Freire 1965, 136). This brings us back to what Alexander (1968, 50-51) spoke about on the fundamental principle of adaptation, which is built on the reality that the process taken to achieve equilibrium is not reversible. In theory, the ultimate goal is to eventually come to the point where the balance of well-fitting forms is accomplished, but in practice, this fit can only happen under one condition: the process must be given time to happen. Without time, the system cannot churn out forms that fit, since the “equilibrium of adaptation” cannot be maintained (Alexander 1968, 51).

As discussed, one of the key characteristics of an unselfconsciousness system is “directness”, meaning that every failure or inadequacy of form that occurs will trigger an action directly (Alexander 1968, 50). Hence, for a fit to occur in reality, the process needs to be a continuous one, and with sufficient time given, adjustments can be made as promptly as the culture context changes (Alexander 1968, 51). Without this condition, the “equilibrium of adaptation” cannot be sustained, and consequently, the system cannot produce forms that fit well (Alexander 1968, 51). Relatively, in the process of problematisation, the people involved do not get a clearer view of themselves only when confronting their problematic

situations, but also when they go through the confrontation again (Freire 1965, 136). The process can be regarded as an outcome that came from “an act, or reflection on the act itself”, which allows one to act more fittingly with others in the order of reality (Freire 1965, 136). Therefore, problematisation points to “a critical return to action” whereby the process begins with an action and then continues by cycling back to it (Freire 1965, 136).

To compare Alexander’s and Freire’s positions, Alexander’s idea of an unselfconscious culture or process suggests a systems-approach which a designer can adopt when facing a design problem that is hard to deal with, which is to make small adjustments to a form continuously to make it fit. On the other hand, Freire’s definition of a problematisation process is an approach that is problem-posing and dialogical to liberate people from of their problematic situations; though if a graphic designer wants to have a meaningful part to play in dealing with complex human and societal problems that are described as “wicked”, he might just have to strip off the traditional role of being a problem-solver and take on the role of a problematiser, who is unselfconscious and relentless enough to keep cycling back to the problems critically.

4.4.2 Critical Design as Problematisation

Acclaimed architect, industrial designer and curator Emilio Ambasz (1972) once wrote about two opposing directions of architecture: “The first attitude involves a commitment to design as a problem-solving activity, capable of formulating, in physical terms, solutions to problems encountered in the natural and socio-cultural milieu. The opposite attitude, which we may call one of counter-design, chooses instead to emphasize the need for a renewal of philosophical discourse and for social and political involvement as a way of bringing about structural changes in our society.”[9] This insightful statement is arguably relevant to graphic design as well.

[9] This statement is found in the catalogue of exhibition *Italy: The New Domestic Landscape* (1972) that was directed and installed by Ambasz when he was the curator of Design at The Museum of Modern Art’s Department of Architecture and Design. Showcasing 180 household objects, the exhibition was set up to report the design developments in Italy at that time. See “The Museum of Modern Art”, published by MoMA in 1972:

Aiming to help graphic designers develop their practice more meaningfully, Poynor (2010, 116) points them to Critical Design as a form of speculative practice that is more suitable than Design Thinking for addressing social problems. As discussed previously in Section 4.1.2, the latter works well when graphic designers solve their clients' tame problems, but might not be effective when making critical inquiries through self-initiated projects in the social and cultural realms. Hence, the next section focuses on exploring how Critical Design can be considered as an alternative approach for graphic designers to problematise critically.

What is Critical Design?

Compared to Design Thinking, which has been endorsed by internationally known corporations, affluent universities, and widely distributed business periodicals, Critical Design is a considerably more subtle and "almost grass-root phenomenon" within the field of design (Poynor 2010, 119). Poynor (2010, 119) noticed that the term "critical design" was frequently used in the titles of art and design exhibitions organised between 2007 and 2009, and these shows have largely contributed to the term's definition. These exhibitions include *Designing Critical Design* held at Z33 Gallery, as well as *Don't Panic: Emergence Critical Design* and *Forms of Inquiry: The Architecture of Critical Graphic Design* at Architectural Association (Poynor 2010, 119). Although the term "critical design" was not included in the title of the exhibition *Wouldn't it be Nice… Wishful Thinking in Art and Design*, Poynor also notes the exhibition's role in defining Critical Design, observing that Critical Design was briefly mentioned in its catalogue, and that it had some participating designers in common with the other exhibitions, namely, design studio Dunne & Raby, Hurgen Bey, Dexter Sinister and Martí Guixé (Poynor 2010, 119). Expanding on the idea of "wishful thinking" in Critical Design, Poynor explains these exhibitions also anticipate "a different scheme of things, one that is imagined in spite of, or maybe even because of, harsh realities" (Poynor 2010, 119).

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https://www.moma.org/momaorg/shared/pdfs/docs/press_archives/4800/releases/MOMA_1972_0029_26.pdf.

Distinctly different from Design Thinking, designers who practice Critical Design think and create critically and reckon that the role of design in society should be more investigative and functional, beyond the scope of fulfilling commercialised demands (Poynor 2010, 120). While commerce and profit-making are indeed a vital part of people's lives, it is also important to explore how design can contribute differently to other aspects like healthcare, culture, sustainable living and so on. Anthony Dunne and Fiona Raby, two designers whom Poynor identifies as having contributed the most to the conceptualisation and propagation of Critical Design, also co-founded the London-based design studio, Dunne & Raby. The studio aims, through design, to "stimulate discussion and debate amongst designers, the industry and the public about the social, cultural and ethical implications of existing and emerging technologies" (Dunne & Raby, n.d.).

Officially coined by Dunne in 1997, the term "Critical Design" was used to represent the practice he developed with Raby and other colleagues in the early 1990s while they were research fellows at the Royal College of Art (RCA) in London (Malpass 2017, 4). The term refers to the approach applied by RCA's Computer Related Design Studio in various projects that they were working on from 1994 to 2005. Dunne and Raby discussed how they came to adopt Critical Design, and recalled being vexed by the "uncritical drive" behind many technological advancements as well as the uncritical assumption that technology was always good and could solve all problems. Therefore, the design duo advocated the adoption of Critical Design as an approach to working on speculative design projects, where a designer would confront conservative beliefs, preconceived notions and known facts about the role played by products in people's daily lives (Dunne and Raby 2013, 34). As opposed to affirmative design, speculative design is a practice established outside of the conditions set by mass production and corporate wealth; it contradicts the traditional notions of technology, efficacy and even financial gain (Malpass 2017, 4). As speculative design involves identifying problems within societal and disciplinary discourse without the obligation to solve them, the outcomes are designed primarily for exhibitions and not remuneration (Malpass 2017, 4).

The initial idea of what Critical Design might be was put into writing by Dunne and William Gaver (1997, 361-362), one of pioneers associated with the practice, in the paper titled

"The Pillow: Artist-Designers in the Digital Age" in 1997. Written with reference to the work *The Pillow* (designed by Dunne for an exhibition at RCA), the paper emphasises that the work is not to be viewed as art for two reasons: first, because it is made of low-cost materials and with techniques typically used for manufacturing products in mass quantity, and second, because it is a design prototype that aims to prompt audiences to consider its functionality in a certain context and to ask questions like, "Would I own one, and why?" (Dunne and Gaver 1997, 361).

Designed to be used in one's home, *The Pillow* is capable of detecting the signals made by walkie-talkies, mobile phones, pagers and baby monitors in the surroundings and reflecting them visually with lights (Dunne and Gaver 1997, 362). It was made to heighten awareness about one's electro-climate by allowing the user to listen to others' conversations as an intruder and thus, to prompt them to question the meaning of privacy; at the same time, the user is made aware that the information is also invading his home and body (Dunne and Gaver 1997, 362). Highlighting words like "value fiction" and "artist-designer", Dunne and Gaver explore how a designer can be "a sort of applied artist, drawing on the issues and techniques raised in the arts to inform and inspire design" (Dunne and Gaver 1997, 361). Essentially, Dunne and Gaver's paper is about introducing a design-centred approach that they believe is instrumental for research designers to examine hypotheses and ideas through design.

After Dunne and Gaver's paper, the term was subtly used in the subtitle of Dunne's first book, *Hertzian Tales: Electronic Products, Aesthetic Experience, and Critical Design* (1999), and the concept was progressively concretised in *Design Noir: The Secret Life of Electronic Objects*, a book Dunne wrote collaboratively with Raby in 2001 (Poynor 2010, 120). In the latter publication, Critical Design is described by Dunne and Raby (2001, 58) as "design that asks carefully crafted questions and makes us think", and is " just as difficult and important as design that solves problems or find answers". Many people would not associate the words "provocative" and "challenging" with design, because these words are typically associated with art, though the latter is considerably isolated from the world of public consumption (Dunne ad Raby 2001, 58). While Dunne and Raby write about Critical Design primarily as an approach that challenges "the cultural and aesthetic potential and role of electronic products and services to its limits", they also

emphasise that its key purpose is to invigorate debate and dialogue between designers, businesses and the general public (Dunne and Raby 2001, 58). With Dunne formally trained in industry design and Raby in architecture, their combined expertise has led to them advocating Critical Design as a medium that embodies values (social, cultural, psychological, economic, and technical) that push the boundaries of both "lived experience" and of the form itself. As Dunne and Raby also point out, this level of intelligence and sensibility is already present in the field of architecture, but less so in design (Dunne ad Raby 2001, 58).

While Dunne and Raby are often credited for the conception of Critical Design, some argue that it was started by the Dutch design collective, Droog, with their Milan exhibition in 1993. Designer educator and researcher, Dr Matt Malpass (2017, 17), recognises that these designers have all contributed signficantly to the genesis and development of Critical Design in its contemporay form, but points towards research that connects the earliest practice of Critical Design to "radical design", "anti-design", or "counter design", a movement that first emerged during the 1950s in Italy. Laying the ground for contemporary Critical Design practice, the movement occurred during a time when designers were questioning the existing conservative and narrow-minded approaches in design.

According to Penny Sparke (2014, 114), a writer and Professor of Design History at Kingston University, we unknowingly use the term Critical Design today to refer to the events, designs and images that have been arranged or created in opposition to the practice of producing items industrially. In fact, it is argued that Critical Design has existed for many decades, offering an unorthodox alternative to the way that design has been being held to the standards set by the international modern movement in the fields of design and architecture, the logic of rationalism, as well as the aesthetics of the neo-modern Italian movement; all of which have made design ideal and acceptable universally (Malpass 2017, 17). Essentially, the Italian Critical Design movement was initiated in the realm of product and industrial design to cause a shift in the way designers worked, to move from merely contributing to the industry by providing a service for financial gain to being engaged in a more meaningful practice that orients itself towards the "concerns of the day" and pays attention to "discursive and propositional ends" (2017, 17).

To Dunne and Raby (2013, 34), Critical Design is intrinstically an attitude or position more than a methodology. They acknowlege that many people have been using design as a means of critique for years without knowing that the term existed. As they were writing the book *Speculative Everything*, they noticed the term were reappearing in the expanding discourse found in exhibitions, design research and, unexpectedly, in the articles of mainstream media (Dunne and Raby 2013, 34). Although they welcome the reinvigoration of the practice, Dunne and Raby are also concerned that it may become "a label rather an activity, a style rather than an approach" (Dunne and Raby 2013, 34). Admitting that what Critical Design meant to them and what it could it do had changed over the years, they felt there was a need to provide an updated definition of it.

First of all, Dunne and Raby (2013, 34) clarify that the term Critical Design is neither related to critical theory and the Frankfurt School, nor is it mere criticism; rather, it is about "critical thinking", which means "not taking things for granted, being skeptical, and always questioning what is given". A critical design does not only offer a vision of "what could be", but also an alternative that spotlights deficiencies that are embedded in the current state of normalcy (Dunne and Raby 2013, 35). When the design is critical, it is also good because the designer has gone through a rigorous process of finding faults in the form that they are redesigning before producing an improved version of it (Dunne and Raby 2013, 35). Hence, Critical Design promotes the ability to materalise critical thoughts into form, and allows designers to deal with issues that are complex and hard to deal with. Critical Design engages people differently; it creates a space for people to think through design and not written text. At its core, it is about "questioning underlying assumptions in design itself", and moving forward, it can also be directed towards techology development as well as its market-oriented limitations, and then progressively to politics, doctrines and even conventional social theory (Dunne and Raby 2013, 35).

Additionally, the practice of using design as critique should not be equated to creating commentary that only focuses on drawing out restrictive weaknesses. What makes Critical Design different from "negative design" is the alternative that it offers, and how it gives designers the ability to point out "the gap" that occurs between reality and a speculated idea of it (Dunne and Raby 2013, 35). When aided by a critical design proposal, designers and users are given an

opportunity to discuss and debate, and in the long run, it is a positive approach because it instills possibilities and encourages change (Dunne and Raby 2013, 35). Nonetheless, there has been no shortage of criticism of Critical Design in recent times, the most common being that it is an egomaniacal and pointless practice performed for its own pleasure, and since the outcomes do not serve any practical function or solve any problem, achieving them is a complete waste of time and resources (Jakobsone 2017, S4255). Such criticism is driven by the widely-accepted definition of design as a problem-solving activity that should create forms that are inherently functional (Jakobsone 2017, S4255).

It is not entirely surprising that design critics have struggled to understand what Critical Design does, as the success of a design work has traditionally been measured by the merits of an idea, how well the idea is being materialised, and whether the finished form fits its intended purpose (Malpass 2017, 76). Furthermore, it could be challenging to engage in the discourse meaningfully because to analyse and critique Critical Design, one would also need to expand their understanding, methods, and language beyond what they already know (Malpass 2017, 76). Whatever the reasons might be, the argument of non-functionality does not provide adequate grounds for rejecting Critical Design, because such criticism can only be valid when "function" is limited to its utilitarian meaning, and its dynamic and relational traits are completely disregarded (Malpass 2017, 71).

To understand how and why Critical Design works, it is necessary to begin with the quality of "criticality", which is a concept deeply rooted in the history of philosophy, aesthetics and art, but relatively new in the realm of design (Malpass 2017, 76). Thus, one would need to seek out other disciplines, especially in areas of visual culture and aesthetics, to gain a deeper theoretical understanding of Critical Design as the practice continues to develop. In the field of graphic design specifically, the use of the term "critical" could easily be interpreted as an extension of rationalist design discourse, which claims that design is propelled by efficiency and control. This view of the term "critical" focuses on "intellectual engagement, and thus "minimises the emotional, sensual, and contradictory aspects of design" (Moline 2006, 65). Another art-grounded critique of the practice is becoming more common because of the resemblance of its outcomes to

conceptual art. That said, the works are still arguably considered design because critical designers operate with their functional abilities as designers, by relying on the skills gathered from their training and practice, albeit re-directing them to create forms that function "symbolically, cultirally, existentially, and discursively" (Malpass 2017, 71). While critical designers are working towards extending their role beyond the client-designer framework, they are also redefining the purpose of design beyond the perceived idea of functionality, which in this context, is to "pose questions, encourage thought, expose assumptions, provoke action, spark debates, raise awareness, offer new perspectives, and inspire" (Dunne and Raby 2013, 43).

Bearing these abilities, Dunne and Raby (2013, 47) believe that the most functional application of "design as critique" is in science research, since designers get to explore ideas and understand their could-be human consequences before they are made into consumable items or technologies. In this context, speculative designs help veer the discussion away from abstract or vague generalisations by materialising knowledge-based ideas into physical forms that can be used to facilitate debates on their possible political, cultural, ethical as well as social implications (Dunne and Raby 2013, 51). For example, as the science of biotechnology is advancing rapidly, making speculations through design plays a significant role in creating dialogues among the users and specialists who influence the laws and policies that will affect its future development (Dunne and Raby 2013, 51).

In the realm of social science, Critical Design practice allows designers to understand the social effects of design not only when they study designed forms in their given social context, but also when they investigate how the process of design can be used as a means to make inquiries, to discuss and even gather people together to address social issues (Malpass 2017, 72). The growing interest in applying Critical Design in this area is noticeable in various social science forums, specifically those organised by anthropologist and design ethnographer, Anne Galloway (2011), who aims to explore how grounded action and ethnographic research methods could take the form of speculative designs, giving people first-hand experiences and accessible tools that drive them to action while technologies continue to evolve and get implemented.

With speculative proposals, it appears that the function of an object is neither fixed nor limited by its its physical form and characteristics, or even the way it has been categorised, since whether the object functions well or not depends on the actions that place it in "a system of use", which is dependent upon the intention of the designers and is open to the users' interpretation at all times (Malpass 2017, 81). However, by saying that the function of an object is open to interpretion, many may argue that it is a feature of art and not design. While many critical designers have indeed adopted approaches and methods borrowed from art, but what makes Critical Design different from art is that it produces work that is made with reference and is relevant to our daily lives, thus giving it the ablity to disturb the status quo and raise awareness for issues that are not commonly known (Dunne and Raby 2013, 43). So, if function can be interpreted as a series of actions taken to achieve a goal, and this goal is based on a mutual understanding between the designer and user, then the function of an object can then be regarded as "a symbolic communicating concept" or "a matter of understanding" between them (Malpass 2017, 81).

Like Critical Design, problematisation can too be viewed as "an experimetal attitude" rather than simply an analytical tool when putting it under "the test of our present" as proposed by Belgian philosopher Isabelle Stengers (2019, 81). When discussed retroactively, Stengers sees Foucault's notion of problematisation as a "breath of fresh air" that rejects "a figure of non thought" which is often disguised as common sense, and instead upholds "thought as creative engagement". But in view of the prospect of socio-ecological destruction brought about by climate change, Stengers (2019, 89) suggests that designers employ the same approach Foucault did, as a philosophical disposition that requires one to experiment with "possibility" or in another words, adopting a "speculative" attitude and subjecting the work to the test of "comtemporary reality", so as to capture the points where desirable change is viable, and to figure out the exact form the change ought to take.

Thus far, some of the key characteristics of Critical Design that are identified and discussed include: 1) challenging narrow-minded assumptions and prejudice; 2) embracing critical thinking; 3) presenting alternatives that spotlight shortcomings that are embedded in our everyday lives; 4)

creating space for dialogue that lead can to change; 5) posing questions rather than solving problems; and 6) making the consequences of our actions known. Drawing a comparison between these properties and Freire's notion of problematisation, it is possible to argue that Critical Design is about problematising and not problem-solving through design.

As mentioned in the previous sub-chapter, problematisation is defined by Freire (1965, 140) as a methodology that liberates those being oppressed from their real and concrete situations, and for it to work, the approach must be a "dialogical, problem-posing and conscientising" one (Crotty 1998, 155). In other words, it is a didactic process that liberates people by involving them in a dialogue to frame their problematic situation as a set of problems that need to receive intervention and to be transformed. Fundamentally, it is about "demythicisation" where the myths that are fed to people are posed as challenges, so as to offer them a fresh view of reality (Crotty 1998, 155). In this process, critical thinking is not just a requisite for those facilitating the dialogue, but also for those who are trying to grasp the totality of their reality, including all the causes and effects. As soon as the myths are exposed and put to an end, it is critical awareness that fuses reflection and action, allowing change to take place (Crotty 1998, 155). Evidently, there are many notable commonalities between problematisation and Critical Design, and essentially, they all echo the transdisciplinarity's emphasis on being reflexive, action-oriented and collaborative (Lawrence 2010, 127).

Curatorial Projects as Critical Design

At its best, Critical Design (by the means of speculative design) can be used to do more than just communicate ideas; it reveals plausible applications, interactions and reactions that are not always known to us immediately (Dunne and Raby 2013, 139). This information is best circulated through media such as the press, the internet, publications, and exhibitions, and each media platform has its own audience, range of access, and appeal through which it can effectively disseminate materialised ideas and engage members of the public or experts in active dialogue (Dunne and Raby 2013, 139). For Dunne and Raby, exhibitions have proven to work well for them as a reporting platform to present the outcomes of their experimentation and research. Even

though design exhibitions typically showcase actual products, reviewing historical trends or commemorating celebrities or heroes, but they can also operate as spaces for "critical reflection" (Dunne and Raby 2013, 140).

When looking for spaces to present Critical Design, designers tend to shy away from museums and galleries because these are regarded as too snobbish and unreachable for works of design (Dunne and Raby 2013, 140). However, placing designed objects in everyday places like shopping centres, homes, cafés and gardens can also result in the audience's attention being diverted by the space or context, and away from the ideas being presented (Dunne and Raby 2013, 140). Hence, it is still appropriate to display Critical Design in galleries and museums not just because they provide spaces for experimentation and testing, but also because they allow designers to report outcomes and share the findings with other designers and a broader audience. When complemented by other media platforms (print or online), the public can be engaged with the ideas or issues in a more "aesthetic, initimate, unmediated, and contemplative" manner (Dunne and Raby 2013, 140).

There are severel reasons why exhibitions are the preferred choice of form to communicate difficult concepts, make critical inquries, and facilitate reflection. In aesthetics studies, the significance of form is highlighted by Polish art historian and philosopher Władysław Tatarkiewicz (1980, 200-221), who identifies five different aspects of form: 1) Form A is materialised by "an arrangement of parts" the same way a melody is formed by an order of its sounds; 2) Form B refers to the form that is concerned with what "is directly given to the senses", such as the sound of words in poetry; 3) Form C is concerned with the "boundary or contour of an object", such as drawings; 4) Form D is based on the "conceptual essence" of an object, a term invented by Aristotle; and 5) Form E is based on Kant's concept of "the contribution of the mind" to the object under consideration. Form A, B and C are intrinsically about aesthetic creation, while Form D and E, have been imported into aesthetics from general philosophy (Tatarkiewicz 1980, 221).

Generally, an exhibition can also be understood as being comprised of forms, where there is the arrangement of various components (Form A), the appearance of things (Form B), and/or

the essence of an idea (Form D). But if an exhibition is created via Critical Design and becomes a form for making critical inquries into today's problems and speculating about the future, to understand its nature, further investigation beyond Tatarkiewicz's notion of forms would be required. According to Italian philosopher Umberto Eco (1962, 142), if art as an articulated form is supposed to speak of man in a contemporary sense, it has to flee from all sorts of formalised orthodox systems. This established a vital aesthetic principle that allows contemporary art to speak about "today's man" as well as his world not by making public statements, but through the organisation of its forms in a purposeful way (Umberto 1962, 142). In this sense, exhibition-as-form must not function as "a vehicle for thought", but rather, it must be "a way of thinking" (Umberto 1962, 142).

Based on this understanding, an exhibition-as-form created through Critical Design would best correspond to the definition provided by Kant (Form E), who saw form as "a property of minds which compels us to experience things in a particular way" (Tatarkiewicz 1980, 236). The Kantian form is also known as "a priori" form, since the knowledge from before is imposed onto the object by the subject, and because it has such a subjective origin, Form E is bestowed with the unique qualities of its "universality and necessity" (Tatarkiewicz 1980, 236). The precursor of Kant's definition of forms comes from Plato, who uses a similar a priori approach and perceives that ideas are forms in our minds, and claims that it is through ideas that thinking about the world is possible (Tatarkiewicz 1980, 236). Furthermore, in the book *Critique of Pure Reason*, Kant writes that a priori forms of knowledge include "space and time, substance and causality", and they are universal, necessary and constant (Tatarkiewicz 1980, 237). In essence, knowledge is possible only in such forms.

As discussed earlier, when design is presented in the form of an exhibition and as a critique, Critical Design can enable designers to pose questions, challenge assumptions, stimulate thought, raise awareness, elicit action, start a debate, offer new perspectives and even inspire audiences, which arguably also leads to the generating of knowledge. However, some may find it hard to see Critical Design as graphic design per se, particularly if it is adopted as an approach to create exhibitions-as-forms that engage the public.The best way to understand how exhibitions

can work as part of graphic design practice is via the idea of exhibition-as-medium, and by asking the question: What makes exhibitions the fundamental medium through which art is distributed? O'Neill (2012, 90) discusses the notion of exhibition-as-medium with reference to curator-writer Bruce Ferguson's thoughts on why exhibitions have become the "the medium" of contemporary art; the reason is its power to communicate. O' Neil (2012, 90) believes that this view is based on the idea of how temporary exhibitions can act as "the meditating event" through which dialogues on art are generated and transformed. In this sense, communication forms the core of all exhibitions, though the information transmitted is not always neutral and tends to position or even control the spectators within the space of the display. As exhibitions (like text) can facilitate both broad and distinct forms of communication, through exhibitions, designers can articulate their intentions to the public and thus, these exhibitions become part of the "political economy of cultural production" (O'Neill 2012, 90).

Notably, it is this very idea of communication that suggests that exhibitions and graphic design, as medium, have the same purpose. According to acclaimed graphic designer Tibor Kalman (1994, 27), graphic design is not a profession; it is a "medium" and a "mode of address, a means of communication" that is utilised in our culture at different measures of complexity and with different results. Richard Hollis (1994) expands on this definition further by suggesting that graphic design is "a form of visual communication", and it involves the selection and arrangement of marks to convey an idea (Barnard 2005, 11). In the context of graphic design, the meaning of communication is best comprehended through semiology (the study of signs and codes), which emphasises that graphic design, like language, is one of the ways in which meaning is "socially and culturally constructed and negotiated" (Barnard 2005, 29).

O'Neill (2012, 90) points out that, interestingly, when "the medium" is discussed as a definite article, exhibitions are referred to as an essential cultural form through which knowledge and ideas around art are constructed and shared; but when "the medium" is used as a noun, the emphasis is placed on the fact that exhibitions are the "body and voice from which an authoritative character emerges". Although O'Neill was referring to the discourse surrounding art institutions and curators when exhibition-as-medium was becoming a dominant subject, it is

notable that curators were also being perceived as artists, and this suggests that there had been a change of power. Art critic and curator Elena Filipovic (2014, 5) recognises that exhibitions had indeed become a form when they "made art history", meaning that attention has shifted from the objects on display to the exhibition itself. This is especially true in cases where "the new" is brought into a space and when the basic understanding, protocols and structures of exhibition-making are radically challenged (Filipovic 2014, 5). Furthermore, when an artist took on the role of a curator, not only did this blur the common understanding of certain notions such as "authorship" and "artistic autonomy", but also, the definition of an exhibition began to unravel (Filipovic 2014, 5). Falling into the genre of "artist-curated exhibition", such exhibitions are the outcome of artists who conceptualise and create exhibitions as "an artistic medium", "an articulation of form" for the purpose of dismantling the conventional understanding of what the term "exhibition" could mean (Filipovic 2014, 5). The critical actions of artist-curators might not necessarily be regarded as "artistic" when assessed according to traditional standards, but these activities do indicate that the artist-curators have an acute awareness on the untapped potential for exhibitions to work as a form, to be "pressed, challenged, and even undone" (Filipovic 2014, 5).

In a similar sense, when graphic designers take on the role of a curator to conceptualise and produce exhibitions, the outcome may not be understood as graphic design in a conventional way, but it would demonstrate the designers' deep understanding of its power as a form, and a medium, to communicate linguistically and semiotically. However, it is not the interest of a critical graphic designer to question what graphic design or an exhibition could be, but to demand, challenge and raise awareness for issues that are not yet known to many (Dunne and Raby 2013, 43). In this instance, when playing the role of a curator, a critical graphic designer would avoid establishing an authorship and speaking as a central subject of the exhibition-as-form by not focusing on his act of curating, but rather on the process that is dialogical in nature.

Using the example of his own work of curatorial speculation, *Coalesce*, O'Neill (2012, 93-94) explains how an exhibition-as-form is co-productive and dialogical when a collaborative and methodological approach is being adopted. From the first to its fifth iterations (2003-2010), the number of artists included in *Coalesce* grew from three to more than eighty, and it transformed

from a temporary exhibition to a durational event. Different curators and artists would congregate for each exhibition, and the multiple iterations of *Coalesce* were produced over different spaces and periods, formulating a continuum that kept evolving (O'Neill 2012, 93). Each version was presented in the form of a group exhibition with various artists working together on a single installation, allowing their works to fuse with one another's. By accommodating various curatorial and artistic positions within the same curatorial project and over a substantial amount of time, each exhibition served as an interim space for dialogue among all the participants, albeit at varying paces and with each displayed in a different way (O'Neill 2012, 94). Because hierarchies were never permanent and always re-consulted, the curators were not bound to or controlled by a single curatorial subject (O'Neill 2012, 93). In this example, exhibition-making is a constant process of negotiation, liaison, dialogue, and even "agonistic coproduction" that rejects the authorial position of the curator (O'Neill 2012, 93).

Notably, many graphic designers started developing curatorial projects when Critical Design was developing between the late 2000s and early 2010s. There was one particular project that was recognised for setting the scene for a new generation of critical designers, specifically graphic designers, to start circulating their projects via exhibition-making (Mura 2018, 37). Organised by Swiss-American graphic designer Zak Kyes in collaboration with Architectural Association (AA), *Forms of Inquiry: The Architecture of Critical Graphic Design* was an event that took place in 2007 at London. With the aim to examine the relationship between graphic design and architecture, the exhibition was set up to present contemporary graphic designers "who base[d] their work in critical investigation" (Kyes and Owens n.d.).

Eventually, *Forms of Inquiry* progressed into a durational space (both online and offline) for discourse on concepts that were generally tied to "criticality", which included "design as investigation and inquiry, design as research, speculative design and relational design" (Mura 2018, 33). The exhibition had expanded in size as it travelled across various venues in Europe, and also expanded in scope when it was integrated into a larger programme of similar initiatives, which ambitiously included publications, conferences and a reading room. These added features were instrumental in the provision of tangible and discursive spaces for participating designers to

reflect and have conversations with practitioners from other creative fields like architecture and art (Mura 2018, 33).

A pivotal moment of this curatorial project occurred when the exhibition, together with a seminar, became part of the International Artists Studio Program in Stockholm (Iaspis), and as a result of the seminar, a publication titled *The Reader* was produced (Mura 2018, 33). Mura (2018, 33) explains that this format of organising an exhibition, of complementing it with a seminar and a follow-up publication, sparked discussion on how the organisation of exhibitions can be regarded as a kind of critical practice. In *The Reader*, Kyes highlights that exhibitions can generally be utilised as “spaces for production” and “zones of contact”, and specifically with *Form of Inquiry*, the exhibition was conceptualised to “develop alternative forms of agency” that were not planned, and this allowed the curators and artists to explore freely (Mura 2018, 33). This corresponds withs Kyes’ notion of criticality as “an open-ended inquiry” (Mura 2018, 33).

Expressing similar thoughts, educator and researcher Ramia Mazé (2009, 378-397) looks at criticality as “a form of criticism from within design practice” in her article “Critical of What”, which is also featured in *The Reader*. Mazé argues that placing design in a gallery space is not just about getting people to talk about design, but to consciously engage with it in a context so that a different kind of discussion can emerge. It is through the formula of “exhibition plus book plus event” that design can be exposed to “another set of ideas, perceptions, and critiques” and therefore regarded as a kind of critical practice (Mazé 2009, 393).

By 2009, a different direction had emerged, and designers were exhibiting and curating speculative projects that were expansive and capable of redefining themselves. This trend was studied by Na Kim, the art director and editor of *Graphic* magazine (Mura 2018, 34). For the issue titled, *Ideas of Graphic Design Exhibition*, a total of twelve shows that took place between 2006 and 2009 were selected and featured as the quintessential representatives of a new trend of exhibitions that Kim regarded as “more conceptual”, and offered deep insights into what design really meant (Kim n.d.). Listed on the cover of the magazine are the names of the twelve shows, some of which include Kyes’ *Forms of Inquiry* and Stuart Bailey’s *Extended Caption* (DDDG). When the designer-curators were interviewed for the magazine, other than telling the editor their

motivations for their projects, they also talked about how exhibitions could create opportunities for them to develop conversations and build relationships among people of different disciplines, and additionally, to allow their works to be developed in different formats and contexts (Mura 2018, 34). Without the burden of having to define their works as art or design, the interviewees expressed how at ease they were with their involvement in both exhibiting and curating, regardless of whether the main role they took on is that of a designers or curators (Mura 2018, 34).

Nonetheless, Poynor (2010, 122) observes that contemporary critical designers do have some concerns in common with contemporary artists. One common concern is that their work is primarily but not limited to self-initiated projects; another is that exhibitions are the most effective way to present their speculative proposals and to engage audiences; and finally, some critical designers also develop friendships and work closely with artists (Poynor 2010, 122). But it is vital to note that the designers who consciously develop their careers around the idea of having a critical practice have different attitudes to those who are working towards the objective of establishing a design authorship. What sets them apart is the quality of humility, meaning that the former do not wish to shine the limelight on themselves as unique authors, but rather on their role "as participants and collaborators", and such designers see the true value of the process and want to re-evaluate the methods of distribution (Poynor 2010, 122).

As the idea of a "critical approach" for graphic designers continues to develop in the field itself, the abovementioned attitude has also come to be associated with the adoption of this same approach to exhibiting and curating (Mura 2018, 35). Using exhibitions as a medium, this new wave of critical designers focus more on open-ended explorations and debate rather than on trying to prove something right; they place greater emphasis on the conceptual thought process behind their exhibited works than on the artefacts themselves (Mura 2018, 35). By actively engaging in exhibiting and curating activities, they form a small community of Critical Design practitioners whose practice depend heavily on collaborating with "the actors of art production and mediation"; namely, artists, curators and cultural institutions (Mura 2018, 36). Such exchanges then led to the blurring of roles between artists or designers and curators, as well as the growing of spaces and

opportunities for self-initiated curatorial projects (Mura 2018, 36). Furthermore, it is through such exchanges that a common understanding in terms of the "modes of practice, concepts, references, and even vocabularies" can be reached, though in the process, art strategies also seem to have overpowered the traditional strategies of design (Mura 2018, 37).

These traits are especially visible in the exhibition *Wide White Space* curated by graphic designer and curator, Jon Sueda, in 2011. It was conceptualised as part of a series of exhibitions initiated by the CCA Wattis Institute of Contemporary Art, San Francisco, themed as *The Way Beyond Art*. Sueda's relationship with the Wattis Institute began conventionally, with him being appointed as the "in-house" designer whose job scope included the design of the gallery's outdoor and indoor signage, the exhibitions' identities, the website, catalogues, invitations, and some artist books (Sueda 2013, 111). At Wattis, graphic design plays a significant part in conveying the narratives of all of its exhibitions because its curator, Jens Hoffmann, understands the importance of using design language to create the most fitting environment for the exhibitions (Sueda 2013, 112). Through Hoffmann, Sueda had his first exhibition design experience at Wattis with the show *Blockbuster: Cinema for Exhibitions*, an exhibition about various film artists and contemporary video works and how they were influenced by the most celebrated filmmakers of the 20th century (Sueda 2013, 113).

Being a graphic designer at his core, and given a substantial amount of budget and a space at an established arts institution, Sueda decided to make his very first exhibition about "graphic design's relationship with exhibition-making" (Sueda 2013, 115). What triggered Sueda to come up with this theme was his interest in understanding how graphic designers had worked in different curatorial projects and contexts. Although he was facing a huge challenge since this was his first big curatorial project, Sueda felt extremely motivated by the opportunity he was given to carry out some critical research into what he thought was an important development for graphic designers' practice (Sueda 2013, 115). After determining the theme of the show, *Wide White Space*, Sueda started picking out designers who fulfilled one or more of his criteria, which included whether they had designed identities for exhibiting establishments, collaborated successfully with artists and curators, or organised and presented self-initiated exhibitions (Sueda

2013, 115). The selected works were presented in a linear progression, where graphic design was displayed in ways that were familiar to the audience in the first room, but as they navigated through other rooms, their expectations were challenged progressively by the works, and when they emerged from the show, they would have realised how difficult it actually was to tell the difference between art and graphic design (Sueda 2013, 115).

As Sueda's involvement with the project was in a purely curatorial capacity, he did not include any of his design works in the show (Mura 2018, 36). Mura (2018, 36) infers from the text found in the book that was published along with the show, as well as the interviews and talks Sueda gave, that he was likely trying to avoid blurring the act of curating with designing as he has acknowledged there is a parallel between graphic designers and curators as they both "develop a concept, analyse artworks and display them in meaningful ways". However, Sueda also saw the additional value of his curatorial work because to him, it was a unique activity that brought with it "a number of different responsibilities and standards in terms of criticality and research" (Sueda 2011, 121).

Living up to its name, *Wide White Space* became a curatorial project that went beyond the scope of putting works on display within "white cubes" when Sueda came up with a supporting programme that comprised a lecture series delivered while the exhibition was still on, and a course after the exhibits were taken down. To make the course more relevant to the underlying concept of the exhibition, Sueda had the four participating design studios each send him works that were not used for the show and could fit into the size of a FedEx box (Sueda 2011, 121). With the aim to help graphic design students explore curating as part their future practice, those enrolled into the course were tasked to use the works sent by the four studios to create a series of mini exhibitions (Sueda 2011, 121).

At the beginning of the course, Sueda noticed that the participants struggled to grasp the idea of curating as an activity that was independent from their conventional roles of "graphic designers"; they thought that they could simply complete the task by coming up with an identity for the exhibition and a poster about the show, and putting some works on display (Sueda 2011, 121). To change their mindset, Sueda (2011, 121) stressed that it was vital that they "stop

designing", and restart the process by investigating how they could conduct meaningful research on the studios involved. Through the course, the participants learnt that it is only when they have gathered sufficient information via research that can then develop an appropriate curatorial concept, and finally, select works to communicate that concept (Sueda 2011, 121). Other than this, the course also covered how graphic design can be exhibited in a white cube space, and how they can approach it in a critical manner (Sueda 2011, 121).

Reflecting upon his motivation behind all the exhibitions he had organised, Sueda realised that it was purely for social reasons – to have people come together to talk about graphic design and other activities that were related to the profession (Sueda 2011, 125). Essentially, for Sueda, it was the desire to open up a space to facilitate such dialogues and critical debates that motivated him, more so than any intention of becoming a curator. Although he was not comfortable with calling himself "a curator", Sueda continued to organise more shows, namely, *Work from California* for Brno Biennial of Graphic Design in 2012, and *All Possible Futures* at San Francisco in 2014. With a strong belief that the history of graphic design is somewhat connected to exhibition-making, and that there are only a handful of designers who have actively contributed to shaping it, Sueda (2011, 125) urges other designers of his generation to start expanding their practice through the sharing of important contemporary work with others, and through the creation of space for different voices to contribute. It is clear to him that the best way to achieve this goal is by creating curatorial projects that best present the context in which designers work, and by keeping records of the exhibitions as well as conversations that happened in such occasions so that they become vital resources for future projects (Sueda 2011, 125).

True enough, *Wide White Space* did become the source of inspiration for a thesis show that took place later in the same year at Rhode Island School of Design, where the graduating graphic design students conceptualised the exhibition in the form of a catalogue that was displayed and distributed during the school's graduation event (Mura 2018, 30). The publication features curated works by the students, the curatorial narrative, an illustrated diagram of the installation concept as well as the poster of the exhibition (Mura 2018, 30). In the introduction of the book, the students explained how they drew inspiration from Jon

Sueda's *Wide White Space*, when they were mulling over how the works of fifteen individuals could be presented coherently in the gallery context (Mura 2018, 30). They were particularly drawn to these designers because they have "exposed the systems of the conceptualisation, production, exhibition, and distribution of graphic design" (Mura 2018, 30). By asking themselves the question, "How do we show graphic design in the gallery setting?", these students adopted a self-reflective approach and presented the show as a work that continued to exist without the need of an exhibition space.

Critical Design as Approach and Attitude

As discussed earlier, graphic design may have been a discipline and practice developed outside of the gallery context, but exhibitions have certainly played a significant role in broadening design's potential as a medium for communication and critique. Exhibitions are more than just a means for graphic designers to have their works validated, or to break away from their day-to-day commercial work and to expand the narrow view of their practice; essentially, they also create spaces for designers to self-articulate as well as to self-reflect through self-initiated works.

Even though there was no lack of interest in studying and documenting "critical" graphic design exhibitions, the notion of "criticality" and what constitutes a "critical practice" were not comprehended consistently among the graphic design practitioners, and therefore, failed to mature into a methodical mode of application (Camuffo and Mura 2012, 34-35). This development is not entirely surprising since the early advocates of Critical Design have consciously regarded Critical Design as "an attitude" or "a position" rather than a methodology (Dunne and Raby 2013, 34). Yet, the recurring features that stood out and differentiated the emerging critical approach from regular curating was its emphasis on the process and its reliance on collaboration and starting conversations. Whether it is manifested through physical exhibitions, workshops, lectures or publications, the way that Critical Design enables people to gather and create space to facilitate discourses and dialogues, which in turn becomes a process for teaching and learning, shows its potential as a methodology for dealing with

social issues. Freire refers to this methodology as problematisation.

When graphic designers make critical inquiries through their self-initiated curatorial work, their exploration of criticality emerges from within their own design practice (Mazé 2009, 378-397). Their “critical intentions” as well as the pursuit of self-articulation and self-reflection in their works are driven by their will to investigate and contextualise all aspects of their expanded work, even if it means exposing themselves to harsh criticism (Mura 2018, 41). Essentially, their involvement in curation is to be read as “an invitation to criticism”, as designers cannot become critical unless they subject themselves to “sustained critical thinking about design in the form of ambitious, intellectually penetrating criticism” (Poynor 2005). Hence, when critical graphic designers like Zykes and Sueda took on the additional role of curators, their outputs were intrinsically design-centric. Arguably, developing such criticality in one’s practice is necessary for the development of projects that aim to problematise challenging social problems through design.

In the context of social research, critical forms of inquiry are instrumental in questioning popular ideology and can bring about action to overcome social injustice. This is because when one engages himself in a critical inquiry, he will probe into assumptions and values, confront widely accepted social structures, and initiate social action for change (Crotty 1998, 157). This form of inquiry takes an interest in examining power relationships embedded within the society and aims to expose social injustice and oppressive authoritarian forces (Crotty 1998, 157). It is an invitation to researchers and participants to get rid of their “false consciousness”, be ready to find alternate ways of understanding, and then take action that leads to change (Crotty 1998, 157). Inquiry that is critical is an ongoing endeavour; it should not be regarded as an individual’s project that can be completed simply because it has achieved its goal, because every action taken will change the context in ways one might not anticipate. It is thus necessary that one keeps critiquing his assumptions, repeatedly (Crotty 1998, 157). Hence, critical inquiry is also described as a “spiralling process” that relies on constant reflection and action to keep it advancing upward and forward (Crotty 1998, 157).

Combining the thoughts and ideas discussed thus far, Critical Design does seem like a

feasible approach that graphic designers can use to sustainably problematise complex problems, such as those related to ageing population and climate change. To practise Critical Design on such problems, designers would need to develop curatorial projects as a medium to communicate, invite collaboration, and facilitate dialogues as ongoing endeavours that would continually and sustainably make critical inquiries into these problems.

Conclusive Notes

Section 4.4 began by circling back to the idea of a new systems-approach, which Rittel and Webber suggested as they noted that the former step-by-step systems-approach was no longer adequate in dealing with wicked social problems. Upon examining Alexander's theory of an unselfconscious process, a process that self-adjusts to create a form that fits, it appears that if a graphic designer wishes to adopt a different systems-approach to address an intricate design problem, he will need to play the role of a problematiser. As a problemtiser, the designer will need to involve others and keep cycling back to the problem critically and relentlessly. Given the that Critical Design can be used to probe into areas like politics, general social theory and even ideology, it is a promising transdisciplinary approach that graphic designers can adopt to develop curatorial projects not simply to expand the scope of what graphic designers can do in their day-to-day work, but also to make critical inquiries into problems that cannot be easily addressed through short-term design solutions. When graphic designer-curators like Bil'ak, Zykes and Sueda developed a critical practice by taking on the role of a curator, their intention was intrinsically design-centric and their openness to critical criticism allowed them to reflect upon on their practice constantly – which this thesis argues is an essential and relevant trait for a problematiser who wishes to address wicked social problems through design.

Next, to understand how playing the role of a curator can help a graphic designer act as problematiser to create sustainable social change, the next chapter will examine three case studies of graphic designer-curators from the Netherlands and Singapore. These graphic designers have manifested the qualities of a problematiser, having adopted Critical Design as an

approach to create self-initiated curatorial projects that continuously probe into specific complex social and political problems.

5. CRITICAL GRAPHIC DESIGNERS AS CURATORS AND CRITICAL PRACTICE AS PROBLEMSTISAION – CASE STUDIES

In 1919, when Walter Gropius founded Bauhaus, a German institution of art, design and architecture, he was trying to bring back the model of medieval craftmanship by building a guild of craftsmen that could do away with the elitist class distinction between artists and craftsmen (Wick 2003). This sentiment was instigated by the devastation brought about by the first World War, which led Gropius to reject the rise of machines and the expected progress that came along with it (Wick 2003). Gropius (1919) believed that one's actions could gain direction and meaning through a return to the ideals and spirituality of the Middle Ages, and thus, he urged architects, sculptors and painters to join him in creating the "new building of the future," which was to be one that unites the disciplines of architecture, sculpture and painting.

Advocating for art that fulfils human needs, Gropius led Bauhaus in the direction of using "simplicity and utility" to create objects that were "human-centred" decades before the term became a buzzword with the revival of design thinking (Esteve 2019). Since the days of Bauhaus, there has been no lack of acclaimed graphic designers who have been trained and have worked across different disciplines to establish their creative careers. To name a few: Charles and Ray Eames designed furniture and buildings, made films and produced graphic design between 1943 to 1988; and Massimo Vignelli, together with his wife, designed many well-known identities and graphics with Helvetica, as well as products, interiors and clothes until his death in 2014. Today, the list includes Japanese graphic designer Kenya Hara, who remains active in creating designs for branding, advertising, products, exhibitions and more. The idea of having a multidisciplinary, transdisciplinary or interdisciplinary approach in design education and practice may seem common today, but clearly, it was Bauhaus that has paved the way for its development since the 20th century.

Design is widely understood as a multidisciplinary practice, and more than ever, graphic designers are expected to work across different mediums, at varying scales, and in various contexts and settings (Fuller 2020). Even though it may not be possible for a graphic

designer to acquire every single tool or to participate in every phase of a complex project, the challenges of figuring out the how-to and putting things together have always been part of the design process (Fuller 2020). For the case studies considered in this research, it is vital to clarify that being multidisciplinary or interdisciplinary, and adopting a transdisciplinary approach does not displace graphic designers from the core of their creative practice.

Some may argue that the emergence of conceptual art in the 60s has created much space for creative practitioners to experiment with art that focuses on ideas (or concepts) rather than the finished object, some of which have even reconciled art-making with social criticism by asking critical questions about the purpose of art and its outputs, and thus there is no point in setting graphic designer-curators who produce outcomes based on concepts, curatorial ideas and social-political issues apart from conceptual artists. This thought could possibly elevate the social standing of graphic designers since the conceptual artist is seen as a visual thinker who deal with ideas rather than beauty. Contradictorily, the term “conceptual art” has also become “a catch-all” for “art based on the sketchiest of thoughts” more recently (Poynor 2005).

As industrial designers who also curate critical art and design in exhibitions, Dunne and Raby exemplify how the relationship of art and design can be addressed without fixated constraints (Poynor 2005). The reasons why they do not wish to be perceived as artists are firstly, that they are empathetic, and secondly, that the context of design and their role as designers render their speculative research more relevant and impactful (Poynor 2005). Categorising their self-initiated projects as art and displaying them only in galleries would make their work appear to be “a kind of artistic fantasy” that is not taken seriously by the institutions, companies and policy-makers they want to influence (Poynor 2005). With this in mind, the focus of this chapter shall be on studying some graphic designers, namely Metahaven from the Netherlands, and from Singapore, Atelier HOKO and Supernormal, who have both deliberately and serendipitously developed a critical practice across different disciplines through their work, as they problematise challenging social issues via research, writing, and exhibition-making.

5.1 Metahaven

Founded by Vinca Kruk and Daniel van der Velden, Metahaven is an Amsterdam-based research-led design studio that creates visual concepts through identity branding, graphic design and products for the purpose of spurring social and political change. Formally trained as graphic designers, the members of the collective are often described as editors, writers, critics and curators who go beyond the idea of "designer as form-maker" in developing their interdisciplinary practice (Chae 2013). Characterised by their clever use of internet slang, bold experimentation with texture and layers as well as strong pop culture influences, Metahaven's graphic design work can be easily identified by their unique aesthetic strategy, which the members have developed by collaborating both as work and life partners (Archey and Metahaven 2018, 8). The two graphic designers got acquainted at the Jan van Eyck Academie in Maastricht and began working together in the early 2000s. Their unique strategy can be observed in the first design-research project they created together as a collective, which was based on the transformation of the Principality of Sealand, former World War II sea fortress built by the British in international waters about 12 kilometres off the coast of Suffolk. This project is further discussed below.

Developing a Critical Voice

The transformation of Sealand began when HavenCo Ltd, a start-up initiated by a young MIT dropout, Ryan Lackey, established its headquarters at the fortress in the 2000 (Garfinkel 2000). Ryan Lackey and his crew had the vision of making Sealand "the world's first truly offshore, almost-anything-goes electronic haven", and "a place that occupies a tantalizing grey zone between what is legal and what is…possible" (Garfinkel 2000). Kruk and Van der Velden came to work on the Sealand Project during the time when Sealand was gaining a reputation as "an unregulated data haven" (Muraben 2018). Hence, they focused on collecting stories that revolved around the self-proclaimed sovereign state, and eventually came up with a "hypothetical identity" to match Sealand's reputation.

In addition, during the few years when they worked on the Sealand project, the two designers reflected on their own identity as a collective. Technology was advancing rapidly, particularly the internet and social media, and Kruk and Van der Velden saw how these developments had a significant influence on the way that one would "make work," "arrive at work", and "work through work" (Muraben 2018). Hence, they came to define their own identity and named their collective "Metahaven". Using a PI symbol as a part of the collective's brand identity, they have since aimed to "trace a constellation of aesthetic, theoretical, practical, and political interest[s]" using the tangible forms of graphic design (Archey and Metahaven 2018, 10).

The first time the collective went off-screen and used an exhibition space to present its speculative proposal was with the installation titled, *Stadtstaat: A Scenario for Merging Cities*, held at Caseco Art Institute in Utrecht (Mura 2018, 35). Opened to the public from July to November in 2009, the curatorial project was presented in two parts to project the mise-en-scene of an imaginary city-state formed by the merger of two cities, Utrecht and Stuttgart. Reflecting on the "homogeneity" that might result from the EU's idea of a "European unification", the narrative is conceptualised to help the audience imagine how two Northern European cities could merge and boost their competitiveness, enabling them to overcome economic turmoil and strengthen their networking power (E-Flux 2009). The scenario presented through this fictional city-state is inspired by contemporary geopolitical phenomena, including the economic recession, the shift towards "networking, partnership[s] and alliance[s]" by self-governing states, as well as the growing trend of cities competing to become more visible globally (Butler 2009). In order to facilitate debate on the role of design, and turn the graphic "surface" into a means to generate conversation, the exhibits include items like posters, letterheads, tapes and models (Butler 2009). The two-parts exhibition concluded with a public forum that had gathered many prominent practitioners and thinkers (including Metahaven themselves) from various parts of Europe to talk about issues related to the governing of urban development and politics, with respect to network influence and the implications of participation (Butler 2009).

A few months later, the collective published *Uncorporate Identity*, a book developed to present the identity they came up with for their very first project, *Principality of Sealand*. As Kruk and Velden created the book, its scope grew to include serious issues such as the refugees at Europe’s borders, terrorism, and the shifting of power to networks. The collective spoke to even more people to gather more relevant material, which they later labelled as “Design, Identity and Geopolitics” (Schmidt n.d.). Metahaven had a clear direction for the book, which was going to be an “anti-design” statement piece that defied all traditional notions of what a typical branding book is; in other words, to be more than just a guide book about a logo and identity’s design. Therefore, Metahaven titled the publication *Uncorporate Identity* (Schmidt n.d.). Although the book’s design was criticised as “hostile” and difficult for the average reader to consume, Van der Velden explained that he sees the design as a “strong stylistic signature”, and that Metahaven’s objective was never to make the book straightforward or to have the content be simply “about something” (Schmidt n.d.). Because the themes and issues involved were complex and hard to grasp, Metahaven adopted an approach for the design that aimed to reflect this complexity, acknowledging that there was no way to please everyone (Schmidt n.d.). Despite being difficult to read, years after the book was launched, people started to realise that many of the predictions made in the book eventually became of contemporary interest (Schmidt n.d.).

Exhibition-making as Critical Design

Metahaven’s involvements with exhibitions are not always tied to their role as curators. For example, Metahaven’s installation of *Facestate*, displayed at the show *Graphic Design: Now in Production*, demonstrates how their work also has connections to Critical Design, or the idea of exhibitions as a form of critical practice (Hyde 2011). When Dunnes and Raby (2013, 15) were explaining what constitutes Critical Design, they argued that conceptual approaches do not apply only in the realm of art, but also in various fields of design. They added that in its purest form, Critical Design is mainly used in exhibitions, but when melded with commercial objectives, the outcomes can also become available for mass consumption. This

is particularly true in the area of graphic design, since graphic designers are known to experiment with ideas, with “an established critical context for discussing and debating them” (Dunnes and Raby 2013, 15). Dunnes and Raby have cited Metahaven as a key example of a collective that has produced highly conceptual works in the context of graphic design, with *Facestate* as a quintessential example of such work.

Facestate was first presented as part of the exhibition *Graphic Design: Now in Production* in 2011, commissioned by the Walker Art Centre in Minneapolis, USA (Hyde 2011). The idea behind the work came from Metahaven’s interest in “the ways in which Facebook and government, Facebook and employers, Facebook and friends, Facebook and enemies constitute a power arrangement, and the way in which this constellation might influence politics, currency, and the social contrast” (Hyde 2011). They derived the first half of the work’s title, “face”, from the social media platform Facebook, and added “state” to reflect the work’s theme on the concept of statehood. To the design duo, Facebook was like many governments, always prying into people’s private lives and restricting civil freedom via its system (Hyde 2011). Metahaven observed that users of social networks like Facebook often accept the terms of service offered without questioning how they affect them, and in the same way, people often accept that it is not uncommon for the state to spy on and monitor every aspect of their lives (Hyde 2011).

As a research project, *Facestate* was initiated at a time when social media was becoming more integrated in society, and aimed to explore the parallels between the state and social networks (Hyde 2011). Areas that Metahaven scrutinised include the technology of facial recognition, the administration of social networks, the future of currency circulated within these networks, the unrealistic expectation of total participation, and more. Essentially, *Facestate* was about how social media platforms like Facebook were being utilised as “backdoors” for authoritarian surveillance. As an installation, it was a “visual translation” of the above ideas and “the meme” of imposed standards or norms that are prevalent in the space of social media (Hyde 2011). While first realised in the context of a graphic design exhibition, the collective acknowledged that the project had only just begun; in fact, the work

was presented more like a sketch or prototype, instead of a finished product, among other finished commissioned works (Hyde 2011). Although this was not a specific objective that they set out to achieve, the collective hoped that the installation could make people think deeper about where wide-reaching social networks are leading us to, especially if they can be used as a form of state-control (Hyde 2011).

When Metahaven was asked if the gallery was the appropriate context in which to convey these ideas, they shared that the installation of *Facestate* was merely the first instalment of their research, which would also involve presenting prototypes of digital gargets like smartphones. Metahaven saw potential in the function of such prototypes in graphic design, and also acknowledged their significance as these devices have become such a necessity in people's lives (Hyde 2011). In addition, like many of their projects, the ideas behind *Facestate* would also be materialised via other formats like print, digital media and writing. *Facestate* was used as the title of a book; the last book in a series of two, with the first named *Black Transparency.* As a book, *Facestate* became one of several instalments in Metahaven's project, which used graphic design as a means to make continual inquiries into how power comes into play between Facebook and the government, between Facebook and its employers, as well as between friends and enemies, while also investigating how social media impacts politics, economics, and social arrangements (Hyde 2011).

By end of 2010, merely three years since the design studio was formed, Metahaven had already organised twelve exhibitions and had been involved in even more curatorial and editorial projects (Drenttel 2010). The prolific outcomes of their self-initiated and research-focused projects had been driven by their interest in "producing alternatives", and while they continued to explore new ways to carry out speculative design and research work, they sustained their operations through commissioned design and writing assignments, research grants as well as teaching. The studio had realised within the first eighteen months of operation that it was impossible to stay away from "for profit" commercial work completely (Poynor 2009), and even though neither member had a permanent job arrangement with any

organisation, they relied on the support and trust of partners, clients and institutions to keep doing what they had started (Drenttel 2010).

In the next few years, Metahaven continued to relentlessly install their exhibitions in many parts of the world; some of the group exhibitions they participated in include *Manifesta 8* in Murcia in 2010; the Gwangju Design Biennale; *Graphic Design: Now in Production* at Walker Art Centre in Minneapolis in 2011; *The New Public* at Museion, Bolzano; and *Power of Powerless* at Kunsthalle Baden-Baden. They also held a solo show, *Islands in the Cloud* at the MoMA in 2013.

Problematising Post-truth, Transparency and Accessibility

In 2014, Metahaven launched the book *Black Transparency*: *The Right to Know in the Age of Mass Surveillance*, a compilation of research and design directed at WikiLeaks' resistance to imposed transparency (Wiesenberger 2014). *Black Transparency* was about the act of revealing "secrets that is itself secretive"; a paradox where the act of reclaiming secrets from a protected server for the sake of the public is also kept secret. Also, Metahaven described the process of working with WikiLeaks as "enigmatic", even though the collaboration had been initiated to fulfil a "very open" objective. Hence, the term "black transparency" was deemed as the most appropriate to reflect the contradiction (Wiesenberger 2014).

Even though the members of Metahaven had identified themselves as graphic designers, the ideas behind *Black Transparency* were also presented as a film. In fact, *Black Transparency* was originally meant to be a documentary instead of a book because many of the materials that the collective had gathered through their research on WikiLeaks were in video format (Wiesenberger 2014). Making the shift from working on publications and exhibitions to moving images may have seemed like a huge step for Metahaven, but they embraced the new format because they knew that the content they were dealing with was complex and had many narratives embedded in it; film proved to be an effective format for the collective to invent a new visual language (Wiesenberger 2014). In addition, instead of calling it a film, Metahaven came up with the new term "videogram", defined as "graphic

design with moving pixels" (Wiesenberger 2014). Essentially*, Black Transparency* was still a graphic design project; the videogram format was simply liberating it from the traditional, static form of prints. In that same year, Metahaven was commissioned by Lighthouse and The Space (a not-for-profit service initiated by Arts Council England and the BBC) to make an online documentary that ironically confronted the internet "as a weapon of mass disruption" (Muraben 2016). What came out of it was a video installation comprised of a feature-length film as well as episodes of the documentary known as *The Sprawl.* The aim of the project was to present the "ways in which fantasy can be designed so as to seem or feel like a truth" (Muraben 2016).

With the success *Black Transparency* and *The Sprawl*, Metahaven established films or "videograms" as new form of graphic design, which then became the main medium through which they developed their critical practice in more recent years. In particular, *The Sprawl* was reviewed as being comparable to the works of English documentary film-maker Adam Curtis, who is known for marrying riveting visuals and thoroughly-researched material to produce stirring visual essays (Schons 2017). Given the subtitle "propaganda about propaganda", Metahaven's 70-minute documentary was the collective's first attempt to expose some of the most powerful ideologies, such as information technology, global-scale computing and present-day propaganda, that inform and impact our lives through visual culture itself (Gavin, n.d.). The kind of social issues that Metahaven aims to explore include the ungoverned "democracy of authorship" offered by the internet, how this may be a potential threat to truth, the spread of online propaganda campaigns that can result from these conditions, and the numbing effect of the pessimism that permeates the media scene (Archey and Metahaven 2018, 13).

As much as *The Sprawl* was an attempt to critique the internet, the project's reach spanned both online and offline platforms, with its physical exhibition being a platform to showcase the broken down "islands" or "shards" of the film, accompanied with an animated script that not included in the original feature-length version (Archey and Metahaven 2018, 13). Online, Metahaven aimed to use the film to reach a broader audience through social

media, in part out of their admiration for the internet activism that brought forth movements like Anonymous, WikiLeaks and more; the internet, despite its dangers, would remain the most appropriate platform to host this project (Muraben 2016). While Metahaven did believe that authentic discovery could only occur offline, the collective was also open about their use of YouTube and how it influenced the way they created their work (Muraben 2018). The collective also readily used social media platforms like Tumblr as online gallery spaces where they curated and published their work. While Metahaven has established their critical voice on the internet as well as the digital environment, the collective also acknowledges that as the contexts in which they present their work change over time, so should be their focus. Instead of presenting works that talk about technology in a direct manner, they find the approach of implying ideas more interesting. Notably, their works have never been about technology itself; the focus has always been about the misuse of power, and essentially, about human experience.

After presenting their first documentary to the public in 2016, the collective decided to steer toward a different direction for their subsequent moving images work. They pursued their growing interest in exploring different genres, mainly sci-fi, and creating pieces that are infused with narratives (Muraben 2016). One such example is *Information Skies*, a film project commissioned by Maria Lind who was curating for the Gwangju Biennale in the same year. Described as being more “fable-like or poetic”, the online artwork narrates the story of several politically detached characters in an unknown landscape with VR headsets, in a “nuanced and ambiguous” style (Muraben 2016). In their following film project, *Hometown*, Metahaven attempted to depict a fictional city that appears to be a blend of Beirut and Kiev, to communicate complex ideas about sense of belonging, as well as the strange experience of déjà vu (Muraben 2016).

By 2018, with the creation of *The Sprawl*, *Information Skies* and *Hometown*, Metahaven completed their trilogy of films which they described as “truth futurism” (Rickett 2018). As observed by Karen Archey, the curator of their first survey exhibition, this series of films by Metahaven presented new aesthetic forms and political realities through storytelling

(Gavin n.d.). With poetry becoming more prominent in their scripts as well as voiceovers, they were also shifting their attention from confronting super-structures to living experiences (Gavin n.d.). The idea that propaganda no longer works if based on a controlled perspective, rather than on doubt, was explored in the film that Metahaven named *Eurasia (Questions on Happiness)* (Rickett 2018). The collective figured that since they could not access facts because of the intervention of cognitive space, they could create stories through a fictitious yet possibly real future of Europe (Rickett 2018). Their main intention was to manipulate historical events and landscapes in order to shape the future, by "retrofitting the past to an outcome that is in the future" (Rickett 2018). With *Eurasia*, a film about post-truth and film-making itself, Metahaven found themselves coming back full circle to where they had first begun with their first film, *The Sprawl* (Rickett 2018). Essentially, the text that had been written for these films did not merely narrate the issues that they had made inquiries into, but also reflected how Metahaven had internalised what they had discovered in their work, and went beyond just making statements about the issues or problems that the work addressed (Muraben 2018).

Critical Graphic Designers as Curators

In recent years, the collective has remained active and have focused on developing their conceptual work through filmmaking and graphic design, as well as writing, bookmaking, educating, mentoring and even parenting (Archey and Metahaven 2018, 8). Besides having their first solo show in a well-established art institution in the United Kingdom in October 2018, the collective has also published the accompanying book *PSYOP: An Anthology* in February 2019. Presented at the Institute of Contemporary Arts (ICA), *Version History* showcased *Eurasia* as a new film commission and together with their past film work, *Hometown* and *Information Skies*, the collective hopes to spark conversations about the interconnections between technology, geopolitics and human emotion (Muraben 2018). Together with ICA, Metahaven curated a series of programmes, ranging from live

performances and symposiums to the screening of related works, *Possessed* and *The Sprawl*, to broaden the scope of exchange (ICA 2018).

As for the accompanying book *PSYOP: An Anthology*, its design bears the collective's signature aesthetic approach of keeping the pages heavily illustrated, with content that summarises their invested research in the area of geopolitics, overlapping with their updated interest in the conflicting correspondences between fiction, truth, information media and online platforms (Stedelijk Museum 2018). Despite the fact that the collective's members are often associated with their additional role of being artists, the book, as "a densely illustrated exhibition publication", also manifested their abilities as graphic designer-curators who have critically reflected upon their design practice and dedicated time and resources into problematising complex issues that they care about (ICA 2019).

With reference to Psychological Operations, a political scheme that aims to alter people's thoughts, motivations, emotions and even behaviour through providing only selected information, Metahaven titled their book *PSYOP* to present their overall ideas and concerns about the world we live in (Stedelijk Museum 2018). Besides featuring Metahaven's portfolio of work which had been built upon a series of graphic visuals and films developed via speculative investigation into some of the pressing questions of today to create imagined new realities and possible futures, the book also gathered many important practitioners from the fields of technology, poetry, music, fashion, film and art to contribute their takes on the these issues (Stedelijk Museum 2018). Through vigorous examination and careful appropriation of Psychological Operations, and through *PSYOP*'s unique visual language comprised of design, script, text and images, Metahaven presented Psychological Operations as one of the greatest threats that contemporary society is experiencing (Stedelijk Museum 2018).

Metahaven's professional accomplishments in writing, design and film are accompanied by their success in the international design scene, as well as their prolific achievements in the form of awards, exhibitions and institutional connections (Hromack 2015). In light of their accomplishments, they have been described as "auteur-producers", which is a combination of the concepts "designer as author" by Rock, and "designer as

producer" by Lupton; the term "auteur-producers" also reflects Metahaven's "can-do optimism" and their ability to work across a variety of platforms to produce functional design outcomes and critical writing (Hromack 2015). In addition, according to Poynor (2008), designers who develop critical practices also have a different frame of mind compared to those who focus on developing design authorships. Critical designers pay more attention to the process rather than the final outcome, and they are also more interested in playing the role of participants and collaborators rather than authors (Poynor 2008). Their approach to exhibitions as a medium is "less a question of affirmation and differentiation and more one of open-ended investigation and exchange, less on displaying and more designing, less on the exhibited work in and of itself and more one the conceptual process behind the exhibit" (Mura 2018, 30).

Spanning art installations and projects, writings, publications, communication strategies, interviews and public lectures, Metahaven's output is, by and large, categorised under the spectrum of "critical design" by themselves as well as the design community (Drenttel 2010). They have persisted in problematising the notions of "post-truth," "transparency of institutions," and "accessibility" in the time of the internet. Even though they do not envision their work as a direct means of effecting any measurable political or social change, they do see their work as a form of "abstract reporting," which involves absorbing and transforming the states of making into the outcome itself (Oralkan n.d.).

On the other hand, Mura has argued that the relationship Metahaven has with galleries and the collective's use of the exhibition format appears to be "episodical" and does not seem to have developed into a more committed "critical activity" the way Dunne and Raby have demonstrated. She believes that Metahaven is less concerned about what their exhibits' content and messages are about than they are interested in showcasing their works in various settings and institutional establishments, in order to expand their practice via a different format as well as to create more experimental works (Mura 2018, 30).

Poynor's 2009 article about Metahaven, however, describes the collective as "one of the most theoretically informed, strategically adept and articulate groups of thinkers

operating in graphic design". He sees Metahaven's approach as comparable to Dunne and Raby's, who have demonstrated how graphic design can be functional beyond the marketplace when it is used as a means of inquiry manifested in visual form (Poynor 2009). Additionally, the advocates of critical design, Dunne and Raby themselves, acknowledge that the collective was one of the few "highly conceptual studios" whose work has actively been exhibited, talked about, debated and melded with intensive research (2013, 15). They included the collective in their book because they believed that when designers like Metahaven consciously move away from the commercialised realm of design, they enter the space of the "unreal" and "fictional", or more accurately, the space of "conceptual design", which is "design about ideas" (Dunne and Raby 2013, 15). It is a place where less-understood forms of design such as design fiction, speculative design and critical design and more can come into being (Dunne and Raby 2013, 15). Hence, such conceptual design has the potential to develop a design language that can "pose questions, provoke and inspire" (Dunne and Raby 2013, 15).

To Dune and Raby (2013, 170), Metahaven's criticality is evidently manifested via the installation of *Facestate*, in which they adopted a conceptual approach when critiquing the ideology of neo-liberalism; specifically, by developing a series of "uncorporate identities" for fictional corporate-government states that overturn commercialised notions of corporate identity design and branding strategies from a graphic designer's viewpoint. Through design, *Facestate* draws parallels between the state's authority and a social software, this design being a visualised outcome of Metahaven's vigorous research combined with their speculated idea of what a fictitious corporate-government synthesis might be (Dunne and Raby 2013, 171).

For more than 15 years, from *Sealand* to *Eurasia*, the focus of the collective's work has evolved from studying the medium of communication to pointing out the "ideological cause and effect" of misinformation (Archey and Metahaven 2018, 17). The collective used their idiosyncratic visual language as an interface to reflect the human desire to understand and to seek clarity, both politically and morally. Being members of the world, the collective

has chosen not to be mere observers of the ordinances and egos of powerful states and entities, and how they affect people in incalculable ways; instead, Metahaven relentlessly creates designs that pose questions about these issues (Archey and Metahaven 2018, 17). Moreover, regarding Metahaven's identity as defined in their book *PSYOP*, curator-editor Archey (2018, 9) highlights that even though Van der Velden and Kruk direct all the activities of the collective, they do have a group of collaborators from various fields whom they admire and have worked constantly with. Thus, Metahaven's criticality and the "incredibly collaborative nature" of their work suggest that the design duo's approach in their inquiries into political and social issues is well-aligned with the process of problematisation, which is always problem-posing and dialogical (Archey and Metahaven 2018, 9).

Additionally, as they have expressed in a conversation with their regular collaborators, the musicians Holly Herndon and Mathew Dryhurst, Metahaven acknowledges the importance of seeking a union between the original birthplace of ideas, the production process, as well as the distribution of work; meaning to say that work and life are closely tied together or even the "same things (Archey and Metahaven 2018, 9). For this reason, "caregiving and…love" must be the origin of their work, and it is this very principle that illuminates the collective's role as curators, whose intrinsic responsibility is to "[give] care" (George 2015, 2). In conclusion, the nature of their practice, which is based on "sharing, caring, collaboration and positivity", defines the design duo's role as curators (Archey and Metahaven 2018, 9); while their "obsessive, monomaniacal, and borderline impenetrable" traits define their role as problematisers (Archey and Metahaven 2018, 9).

5.2 Atelier HOKO

While the first case study on the Dutch collective Metahaven has discussed how graphic designers can establish a critical practice centred on problematising political and social issues via work in research, writing and curating, this dissertation will now shift its focus to its central concern of investigating how Singaporean designers, as graphic designer-curators, can

direct their practice towards meaningful contributions to the local community. The first local case study shall be on the design studio known as Atelier HOKO.

Founded by Alvin Ho and Clara Koh in 2000, Atelier HOKO is described as a research lab that focuses on making inquiries into the "growing disengagement between people, things and space", as explained on their website (Ho and Koh n.d.). The word "lab" suggests that their work, as a design collective, involves researching, teaching as well as experimenting, and the studio works to support specific causes that they are deeply concerned about. In order to foster the growth of "open-ness" and the ability in people to "unknow" things, their speculative approach has always been about provoking an amplified interest towards events that happen around the local community by presenting reality from a brand-new perspective (Ho and Koh n.d).

Formally trained in the specialisation of Product and Industrial Design at Temasek Polytechnic (TP), and subsequently at the Design Academy in the Netherlands, HOKO's range of work includes curation, publications, jewellery, videos, and exhibitions (Ho 2020). In an interview with Ho (also representing Koh), he admitted that the initial plan for the collective was to operate as a design studio that accepted commercial assignments such as branding projects, but they soon realised that this was not what they wanted to do as designers. Being inspired by the Dutch design studio, Droog, since they were still students in TP, HOKO had always wanted to create design with a fresh approach, such as by creating "almost conceptual art", even this may not be the most practical method (Droog n.d.). Hence, HOKO's identity as a studio run by designer-curators began to emerge when they started proposing and executing self-initiated curatorial projects in the 2009.

Arrangement: Exhibitions as Visualisation of Research Work

Fig. 6. First instalment of Arrangement: On Arrangement
exhibition at The Substation, Singapore, 2009, image courtesy of Atelier HOKO.

One of HOKO's earliest engagements in curation was incited by the idea of "arrangement", a research topic that extended from Koh's Master's thesis at the Design Academy (Ho 2020). Fascinated by their observation of how people are always arranging the things around them, Ho and Koh invited a total of fourteen international as well as local designers and artists to interpret the theme according to each of their unique geographical and cultural contexts. The first instalment of the exhibition named *On Arrangement* was executed at The Substation, Singapore, in 2009. As a self-initiated curatorial project, *Arrangement* was set up as a research platform to explore the intrinsic conditions under which things are arranged (Ho and Koh 2009). With sufficient funding from DesignSingapore, HOKO decided to produce and distribute an accompanying publication in collaboration with the participating designers and artists (Ho 2020).

Fig. 7. Second instalment of Arrangement: Arranging
exhibition at The Substation, Singapore, 2009, image courtesy of Atelier HOKO.

To expand their research further, HOKO saw a need to have two more iterations of *Arrangement*, from different perspectives. Hence, when curating the second instalment of *Arrangement*, HOKO chose not to display the items that were exhibited in the first instalment at The Substation. Instead, they had the audience experience both the behavioural and aesthetical aspects of arranging things via "observations, exploration and narratives (Ho and Koh 2009)." Held at Singapore's Old City Hall in the same year, the exhibition showcased a mix of ordinary objects as well as the developments of some of the projects previously shown at the first instalment (Ho and Koh n.d.).

As for the final instalment of *Arrangement*, *Re-arrange* was brought overseas in June 2011 and installed at the Tempelhof Airport in Berlin, to explore the intuitive behaviours involved in tasks of arrangement that are absorbed and integrated into everyday life (Ho and Koh n.d.). Adopting the speculative approach to recreate various daily use items like tableware and clothes, the exhibition aimed to reveal the basic conditions and characteristics of arranging (Ho and Koh n.d.). With the conclusion of this third instalment of *Arrangement*, HOKO acknowledged that the theme was "huge", and that the attempt and process of interpreting it had been exhausting (Ho 2020). Although HOKO recognised that exhibitions

were a medium that they enjoyed and could utilise to generate content and visualise their research work, they were not comfortable with the idea of labelling themselves as the "curators" of these shows, because neither of them had received any formal training in either curation or art history (Ho 2020). Instead, they described themselves as the directors of the projects, though they had performed the role of organising the shows, setting the theme and selecting the participating artists (Ho 2020). HOKO might not have wished to highlight their roles as curators, but their role as designer-curators is apparent in this exhibition-publication format, which would also become one of HOKO's signature ways of presenting their speculative proposals to the public.

Fig. 8. Third instalment of Arrangement: Re-arrange *exhibition at Berlin Tempelhof, Airport Berlin, 2011, image courtesy of Atelier HOKO.*

Fig. 9. Audiences interacting with exhibits of Re-arrange *exhibition at Berlin Tempelhof Airport, Berlin, 2011, image courtesy of Atelier HOKO.*

After *Arrangement*, HOKO began to search for a new research topic to understand how people become emotionally detached from mundane objects and places, in order to raise their sensibility and awareness of them. At first, they thought of making "light" their theme, but they soon realised that research on this subject would not be sustainable, as the scope would be too vast (Ho 2020). Having no defined "premise and parameter[s]" both literally and conceptually, HOKO decided to halt the initial stage of their research and moved on to other explorative projects to gain more experience before diving into another idea (Ho 2020). Later, when making their second attempt to find a new topic, the couple decided that they should return to the basics by looking at "something very small and unremarkable" (Ho

2020). Accordingly, they eventually selected a fruit, the apple, as the first research topic of a long-term publication project.

Science of the Secondary: Publications as Printed Exhibitions

Science of the Secondary is an ongoing research project conceptualised by HOKO to study everyday objects where their research outcomes are visualised and distributed as a series of publications. The decision to report their research findings in the format of light-weight booklets instead of physical exhibitions was purely based on accessibility. This series of publications can arguably be regarded as "printed exhibitions", since the approach of converting a physical exhibition into a publication has its precedents. First adopted by Lucy Lippard and Seth Siegelaub back in the 1960s, the former is known for her dematerialising exhibitions, which could be packed in a suitcase and taken from one place to another, while the latter is recognised as an exhibition-maker who is "inventive" and has a keen interest in investigating what archives mean; both Lippard and Siegelaub explored the idea of making exhibitions "immaterial" and proved that exhibitions can exist outside of gallery spaces (Obrist 2015, 50).

Starting with the "Xerox Book" project (1968), Siegelaub set some specific requirements for each of the project's seven participating artists. These requirements included making a 25-page artwork on a piece of paper measuring 8.5 inches by 11 inches, and the finished work must be reproducible through photocopying and digital printing techniques (Obrist 2015, 50). Setting standardised conditions for the production helped illuminate the differences among the artists' projects, which in turn made the underlying meaning of each work more visible (Obrist 2015, 53). Additionally, the problems that arise from representing art works in books via traditional methods of reproduction, such as photography, would no longer persist since the original work was itself already a reproduced copy (Obrist 2015, 53). Hence, the integrity of the art was not undermined since allowing the works to be reprinted and distributed in mass quantities was in fact part of the exhibition's concept (Obrist 2015, 53).

In 1970, Siegelaub went further with the idea of a printed exhibition when he proposed the concept of "magazine-as-exhibition" to Studio International (Melvin 2016, 466). Interestingly, although he provided a statement to explain the idea, he did not assign a title to the show like a curator would; instead, he designed the cover for the magazine (Melvin 2016, 469). As the curator-designer, he adopted a simple typographic approach by creating a layout that fitted into two columns the list of critics involved and their selected artists' names, which is a notable change from Studio International's usual visual-based covers (Melvin 2016, 469).

For the project, a total of six art critics, namely David Antin, Germano Celant, Michel Claura, Charles Harrison, Lucy Lippard and Hans Strelow were asked to each edit a section of eight pages (Obrist 2015, 53). Although they were given the same parameters, the critics did not respond to the brief in the same way; one chose to display work by a single artist throughout the eight pages, some decided to show work from eight different artists, while the remaining two critics presented ten and three artists' work respectively (Melvin 2016, 470). This time, Siegelaub consciously excluded himself from the selection process even though it was his responsibility as the curator to make such decisions. But by doing so, he became more aware of his involvement in the exhibition, and in a paradoxical manner, his role as a curator also became more prominent in the process (Obrist 2015, 53-54).

In a similar way, HOKO's approach of presenting their research in the format of publications is also an attempt to "demystify" the design research process by choosing to work alongside other creatives to present their findings in a clear and simple manner (Ho 2020). When conceptualising their book's design, the design duo agreed that it should not be a heavy coffee table book; instead, it was to be a simple and light-weight booklet that would be easy to circulate (Ho 2020). By using "simple text, simple photos and simple diagrams" for the design, HOKO ensured that the end product was not "vain" and would not "alienate" people, but rather, it was "accessible" and contained content that brought "clarity" to its readers (Ho 2020). Even though they were not formally trained as graphic designers, the design collective did the best that they could with the layout and type-setting, as well as to

produce the publication's photographic images. Some help was also hired for the illustration work (Ho 2020).

The simple typographic approach practised by Siegelaub when designing the cover of his magazine suggests that he was also trying to avoid drawing attention to his presence as a curator. Yet his involvement as the project's designer was noticed because of the contrast that he created between his publication's design and Studio International's other visual-based covers, albeit unintentionally. Similarly, as graphic designer-curators, HOKO made a conscious effort not to over-beautify the design of their publications, which helped them to focus on communicating their findings to their audience without alienating them. This had the effect of making their role as curators apparent.

Aiming to make the project accessible, HOKO dedicated the first book of their new project, *Science of the Secondary*, to an object everyone is familiar with – the apple. (Ho 2020). With "Apple" beginning with the letter "A", the first letter of the alphabet, and also one of the first words one would introduce to a young child, the choice is a logical one (Ho and Koh 2013). Despite being formally trained as product designers, HOKO consciously shied away from choosing a designed object such as a chair for two reasons: they did not wish to be needlessly scrutinised by other designers, and also, an apple is an organic form that everyone knows (Ho 2020). As a result, *Science of the Secondary*, a long-term and on-going research project that HOKO would be most engaged and associated with, was born.

Fig. 10. Science of the Secondary: Apple *(Cover Page), 2013, image courtesy of Atelier HOKO.*

Fig. 11. Science of the Secondary: Apple *(Inside Pages), 2013, image courtesy of Atelier HOKO*

Described as a "methodical science experiment", *Science of the Secondary* sets out to examine the "secondary functions" of everyday objects that have often been overlooked (Ho 2019). As suggested by the title, each object that the collective conducts research on would comprise two aspects: the "science" and the "secondary" (Ho 2019). The scientific aspect of the project comes from the collective's goal-oriented and analytical approach to studying their selected subject matter, and the "secondary" aspect touches on the distinctive attributes and details of everyday objects that we do not pay much attention to when interacting with them (Ho 2020). Presented in the form of an experimental publication, HOKO wants the readers to keep an open mind, and be prepared to enter "a world of unknowns" (Ho 2020).

HOKO's research process looked into how people interact with objects and the environment, and began with the couple each eating an apple a day. When they had accumulated a substantial amount of data, including drawings, writings, et cetera, they began to think about how to visualise and disseminate their findings to the public (Ho 2020). Their initial idea was to share their research via an exhibition, but learning from their experience with *Arrangement*, they realised that setting up a physical exhibition would be very tedious logistically, and additionally, there was a lack of interest from institutions to fund exhibitions. Thus, HOKO turned to publications as an alternative (Ho 2019). In an interview, Ho shared that they decided on this format because of other reasons as well: first, HOKO was aware that they had gained some recognition as a design collective over the years and the interest in their published works had grown (Ho 2019); and second, that books were affordable, could be easily distributed, and in their opinion, were "still very powerful" as a medium (Singapore Art Book Fair 2021).

For Siegelaub, a motivating factor for adopting a mass-media approach was to create new kinds of experience for the audience, such that they did not need to make a "pilgrim-like" trip to the "sacred" gallery space to see art, and when made available in reproducible a form, the works would also become accessible to people across different geographical locations (Obrist 2015, 53). Therefore, what Siegelaub did decades ago opened the door for many who desire to democratise the art world or to challenge conventional ways of

presenting and experiencing art. Likewise, as a design lab that strives to be experimental, HOKO did not play safe by launching the first issue of *Science of the Secondary: Apple* in a regular bookstore, like any other designer-author would. To bring the experience to people directly, the books were placed at real fruit stalls in marketplaces so that anyone who purchases a copy would also receive a complimentary apple (SABF 2021).

In spite of their reluctance to set up exhibitions in a physical space due to the laborious process, HOKO could not resist doing so for some of the subsequent issues of *Science of the Secondary*, namely, *Cup*, *Clock*, *Egg* and *Toilet Paper*. The collective acknowledged that there were also limitations to the publication format, and that to offer a more tangible "experience" to readers, there was no better way than creating an exhibition in a physical space so that the audience could interact with the objects being researched (Ho 2020).

In 2015, an exhibition titled *Your Rhythm* was conceptualised to launch the *Clock* issue from the *Science of the Secondary* series. Collaborating with media artist Ong Kian Peng, a time-based kinetic installation was developed to present the varying rhythms of reading (Ho and Koh 2015). To simulate reading habits such as "browsing", "quick flip", "image grazing", or reading "word-by-word", six copies of *Science of the Secondary: Clock* were displayed with automated machines that turned the pages at different time intervals (Ho and Koh 2015). While the pages of each book were being flipped, the audience got to read the content at various rhythms to find out which tempo suited them the best, and essentially, to help them realise how such a simple day-to-day action could be used as a means to measure time (Ho and Koh 2015).

Fig. 12. Set-up of Your Rhythm *exhibition at The Substation, Singapore, 2015, image courtesy of Atelier HOKO*

Fig. 13. Close-up of the automated page-turning machine at Your Rhythm *exhibition, 2015, image courtesy of Atelier HOKO.*

To launch the *Egg* issue, the exhibition *A Dozen Eggs* was presented via a semi-fictional setting to make the conversation about what is "imaginable" rather than what is real, ethical and preferable (Ho and Koh 2016). Based on their observations of human behaviour concerning the handling of eggs, the exhibits were presented as the speculated outcomes of how people's interactions with eggs might change their nature eventually (Ho and Koh 2016). The exhibition was first presented at Objectifs (Singapore) as part of the programme for *FoodCine.ma*, a film festival on food, and recreated at UTRECHT/NOW IDeA, Tokyo in the same year.

Fig. 14. Set-up of A Dozen Eggs *exhibition At Objectifs, Singapore, 2016, image courtesy of Atelier HOKO.*

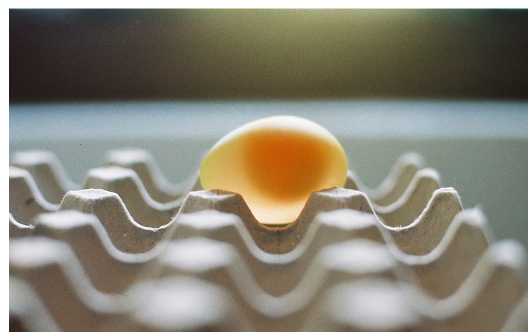

Fig. 15. Close-up of an exhibit at A Dozen Eggs *exhibition, 2016, image courtesy of Atelier HOKO.*

As for *Cup*, an exhibition that took the form of a "drinking laboratory" named "Café CUP" (2017) was set up to pique the audience's curiosity about the sensations of a simple gesture, drinking from a cup (Ho and Koh 2017). Visitors were invited to select a cup from a collection of seventeen different prototypes and then to drink from it. These prototypes were created with help from HOKO's former students from the School of the Arts Singapore (SOTA), and based on the findings of HOKO's research on the theme (Ho 2020). By inviting the audience to demonstrate various types of drinking behaviour, the exhibition aimed to show how a beverage can be savoured beyond just for its taste (Ho 2020). After being first executed in Tokyo, Japan, this installation was brought back to Singapore before traveling to

Taiwan and Hong Kong (SABF 2021). When making comparisons between the reactions of audiences from various parts of Asia, HOKO observed that Singaporeans were not accustomed to such cultural events as they did not know how to behave or respond to what they are asked to do (SABF 2021). This was unlike the Japanese, who understood what was expected of them and could grasp the installation's concept immediately without having to receive much explanation (SABF 2021).

Fig. 16. Set-up of Café CUP *exhibition at BANK Gallery, Toyo, 2017, image courtesy of Atelier HOKO*

Fig.17. Audiences interacting with the exhibits at Café CUP exhibition, 2017, image courtesy of Atelier HOKO

Perhaps this was why HOKO organised another exhibition, *What is Your Way?*, in Tokyo when launching their tenth book, *Toilet Paper*. Just as the title suggests, the idea was derived from the personal habit of forming the toilet paper pad in a certain way for cleaning after each bowel movement (Ho and Koh 2019). With some subtle humour mixed in, the purpose of the installation was to make an inquiry into a simple but intimate gesture we make on a daily basis by inviting the visitors to not only to share their personal method, but also to try out new ways of folding the toilet tissue (Ho and Koh 2019). Before the COVID-19 pandemic in 2020, HOKO had their last physical exhibition set up at Book B, Hong Kong, and this time, *Café Cup* (fourth instalment) and *What is Your Way?* (second instalment) were presented side by side (Ho and Koh 2019). Besides setting up the exhibition, the collective was also invited to give a talk about the research process and the inquiries they made to produce the books (Book B 2019).

Fig. 18. Set-up of What is Your Way? + Café CUP *exhibition at Book B, Hong Kong, 2019, image courtesy of Atelier HOKO.*

Fig. 19. Cup exhibits of What is Your Way? + Café CUP *exhibition, 2019, image Courtesy of Atelier HOKO.*

Figure 20. An Appendix of Sorts (Poster), 2019, image courtesy of Atelier HOKO.

From *Apple* to *Toilet Paper*, a total of ten books were produced for the *Science of the Secondary* project, and ten was a good number to have them "summarised" and re-introduced as a box-set (Ho 2021). That said, this idea of summarising is not about packing all ten volumes into a grey-board slipcase to fulfil a re-marketing purpose, but rather, it facilitates documentation and reflection on what the collective has done over the span of six years, as

embodied by a large poster, “An Appendix of Sorts”, which was also included in the box-set (Ho 2021). Calling it an “eclectic and fragmented selection of research ephemera from the physical archives of Atelier HOKO”, the large printed poster contains written notes, photos and sketches that the couple had created during the rigorous process of researching on simple everyday objects (Ho and Koh 2019). With neither colour nor design principles to organise the visual elements (refer to Figure 20), it was unusual that the graphic designers would create and give out a poster insert merely for the sake of exposing their research process. When Ho was asked about the rationale for it, he shared that they believed the readers might find their process of discovery more interesting than the project’s final outcomes (Ho 2021). It is this very focus on process, rather than the outcomes, that marks the difference between a designer and a designer-curator. That said, some may see HOKO as artist-curators and *Science of the Secondary* as art and not design, since the project’s outcomes were not commercially useful or commissioned for a specific purpose. Thus, the next section will clarify the difference between the role of an artist-curator and designer-curator through the examination of two zine-as-exhibition projects.

Artist-curators versus Designer-curators

Today, despite advancements in technology and the internet, exhibitions that come in the form of printed books or zines to showcase art and to communicate ideas conceptually are still embraced by some Singaporean artist-curators. Two of such examples are *Notions* and *Space & Time*.

Fig. 21. Printed Copies of Notions*, June – December 2016 issue, image courtesy of Ju-lyn Lee.*

Fig. 22. Inside pages of Notions*, June – December 2016 issue, image courtesy of Ju-lyn Lee.*

Started by artist-curator Ju-lyn Lee, *Notions* is a downloadable and reproducible zine made available to the public on her website. The aim of the project is to "share ideas and get people thinking", and also to "provoke snobbish people to reconsider the relevance of 'international recognition,' brand names, institutions, etc" (Lee 2016). Following the pattern of many conventional exhibitions, Lee's curatorial process begins with her coming up with a theme and write-up to make an open call to artists on social media (Lee 2020). After which, works would be selected, then placed into an A5 size (double-page) booklet format, and finally uploaded onto Lee's website as a pdf file (Lee 2016). Besides having some copies printed with a home printer and distributed for free at random locations, the artist-curator allows the public to download the file to consume it as an e-book or with the instructions provided at the website, they could also have it printed at home and bound into a booklet (Lee 2016). Through these means, both the contributors as well as the audience, who also act as distributors, could come from any part of the world.

As an artist and author, Lee (2020) sees her body of work as "absurdist introspective reflections" that question the purpose of art and life, as well as other concerns relating to existentialism. By fusing ink arts, installations and writings, the hybridised outcomes are meant to be consumed as "points of amusement" or viewed as "aspirational optimism" amid an existential vacuum filled with uncertainty (Lee 2020). Consciously, she wanted her role as a curator to be an extension of what she desires to achieve as an artist-author, but paradoxically, it is done so by presenting "extrospective speculations on inter-relatedness and pluralism" (Lee 2020). Her curatorial projects are conceptualised as "social experiments" to explore inclusive as well as discursive propositions on collaborations that are characterised by constant change (Lee 2020). With the overlapping role of being an artist, Lee made an effort to contribute an artwork to each of the curatorial projects she initiated, which includes all three issues of *Notions*.

Similarly, for the zine project *Space & Time* initiated by the artist-curator collective known as No Ceiling ø Wall, two of its members have also acted as both curators and artists (No Ceiling Paper Wall 2018). The collective came into being because of Cally Tan, a young art student who was given a grant of $5000 by the National Arts Council when she won the NOISE Mentorship Award in 2017 (Tan et al. 2020). With the grant money, Tan was obliged to conceptualise and execute a project that was aligned with the institution's goal to aid young people (below the age of 35) in expressing, developing and showcasing their creativity (Cally et al. 2020). Inspired by the book *Inside the White Cube* by Brain O'Doherty (1986) as well as the Instagram account, The White Pube, and Tan wanted to gather like-minded people to form a collective that questioned "the way artists and creatives choose to represent their works in spaces in Singapore" (Tan 2018). As the founder of the collective, Tan recruited Hanae Gomez and Farizi Noorfauzi to form No Ceiling ø Wall in 2018, and the fourth member, Marcus Cheong, joined after *Space & Time* was launched (Tan et al. 2020). As a relatively young and experimental curatorial collective, all its members (except Gomez) were in the midst of receiving formal training in visual art-making and had little experience with curation (Tan et al. 2020).

When the collective was first established, they identified themselves as No Ceiling Paper Wall as the first exhibition format they had explored was a printed zine (Tan et al. 2020). Feeling unsettled with the limited notion of art being shown primarily within white cubes, which would include sites that are branded as "alternative spaces", the collective wanted "to tear through these white ceilings and punch holes through these white walls" to explore how an "alternative alternative" space could be created (Tan 2018). By questioning how one could make an exhibition something that was mobile or last longer than a few weeks, and that could be passed on to another person when one was done viewing it, the collective came up with the idea of using paper to replace the concrete walls of a tangible space for their first curatorial project (Tan et al. 2020).

For the collective, the process started with the members agreeing on the medium first, which was paper. As soon as it struck them that the idea of making the exhibition in the

format of a limited zine meant "immortalising" it, the word "time" became an essential part of the theme (Tan et al. 2020). Disagreeing with the notion that audiences could only appreciate and talk about art when the works were being experienced in an immersive context, the collective decided to present their idea of an "alternative alternative space" as an "imaginary scape" and hence, the word "space" completed the theme that they wished to explore (Tan et al. 2020). As soon as they decided on the theme, an open call was made on social media platforms. The responses to the call were encouraging and after "sieving" through the submissions, the collective contacted the artists whose works were selected via Skype to talk about the concepts of their works, and collaboratively, finalised how the works would be transposed into the space of a zine so that they could correspond with the works of other artists (Tan et al. 2020).

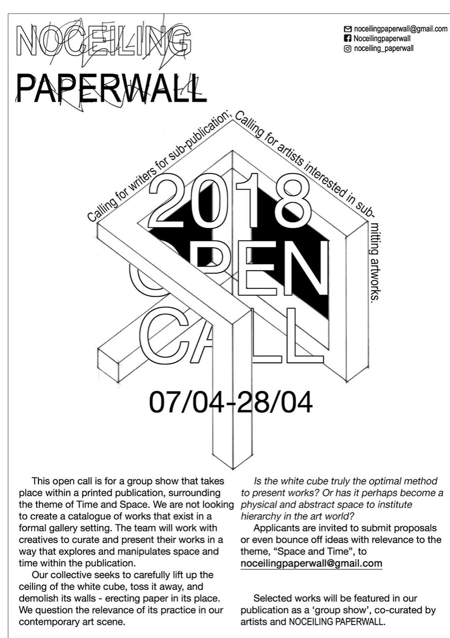

Fig. 23. Open call post for Space & Time *zine, 2019, image courtesy of Cally Tan.*

Figure 24. Cover of Space & Time *zine, 2019, image courtesy of Cally Tan.*

Not all the works selected were new and created specifically for the context of a zine format; some of the works featured in *Space & Time* were originally created for a physical space or have even been exhibited conventionally (Tan et al. 2020). To the collective, the process of transposing these works onto an alternative space is not only a curatorial one but

also a creative one. For example, Yeyoon Avis Ann's work, *One and Many*, was originally presented on a wall with an image of a large crowd, along with a video of an avatar's face zoomed in to micro-level so that the audience could see how the image was constructed digitally. To show the same work within the pages of a zine without changing its meaning, the curatorial collective decided to combine both aspects and expanded the artist's idea of "micro on the macro" by progressively moving closer to the subject, a body part of the avatar (Tan et al. 2020).

Fig. 25. Cover of Space & Time *sub-publication, 2019, image courtesy of Cally Tan.*

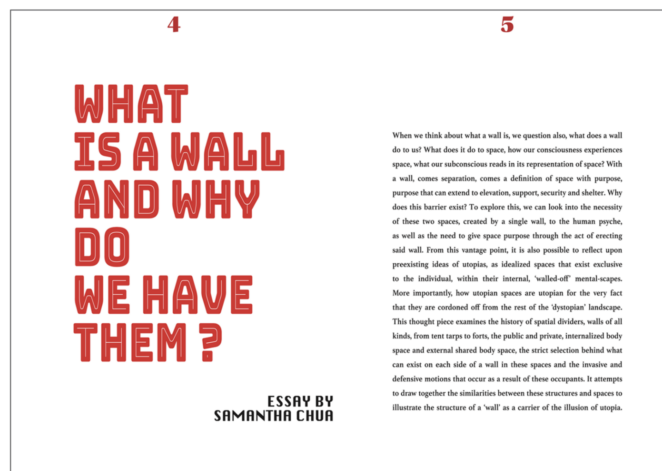

Fig. 26. Page 4 – 5 of Space & Time *sub-publication, 2019, image courtesy of Cally Tan.*

Even though none of the members of NCøW was formally trained to create page layouts for a publication, Farizi (2020) tried to establish a "designer-clientele" type of relationship with the artists as he did not want their work to be misrepresented, or to lose the trust that the artists had placed in the collective. Hence, the year-long process involved showing the work-in-progress layout to the participating artists to solicit feedback and gain their approval before finalising it for print production (Tan et al. 2020). Also packed together in a clear plastic bag and distributed with the zine was an accompanying sub-publication that bore the same name (Chua et al. 2019). To complement the exhibition, this sub-publication contained essays, articles and photographs by invited contributors, and was published to

"analyse and breakdown the current conceptions of the white cube and re-imagine future possible forms of alternative exhibition spaces" (Tan 2018).

What sets *Space & Time* apart is that, unlike Lee's curatorial project *Notions*, which is an on-going project, No Ceiling ø Wall has no intention of permanently keeping the exhibitions that they have curated in the zine format; and likewise, the symbol "ø" in the collective's name is replaceable by the medium or space in which the exhibition is presented (Tan et al. 2020). Coincidentally, Lee and NCøP became interested in exploring the idea of exhibition-making via online platforms such as setting up a website and social media account amid the COVID-19 pandemic. Lee organised and hosted an online exhibition, *Better Late Than Never* (2020) on the website *Wide Open Space*, with the open calls made not just to artists for artwork submissions, but also to curators for curatorial collaborations (Lee 2020). On the other hand, NCøP renamed themselves No Ceiling Cyber Walls when the collective was invited to take over the Instagram account, CITIZEN.proj, to showcase random snapshots (taken via Google Maps) of people found resting to examine the theme of "hiatus" (Tan et al. 2020).

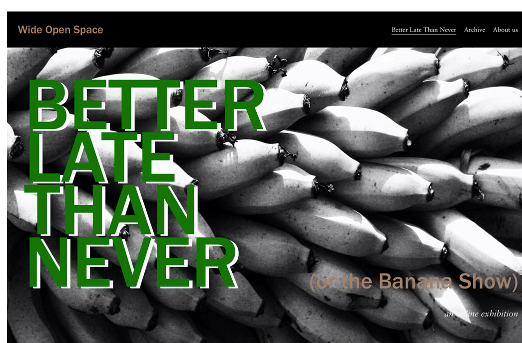

Fig. 27. Better Late Than Never *online exhibition home page, 2020, image courtesy of Ju-lyn Lee.*

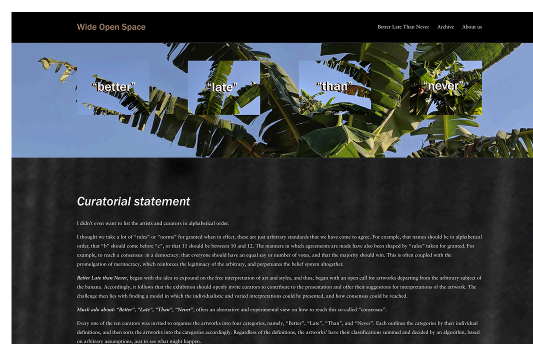

Fig. 28. Better Late Than Never *online exhibition Curatorial Statement page, 2020, image courtesy of Ju-lyn Lee.*

For both zine projects, Lee and members of NCøP invested their time and resources while switching between the roles of curators, designers and artists with the purpose of democratising art by questioning the way it is being presented and consumed by the public. Since most of these artist-curators did not necessarily possess professional skills and

knowledge in curation and graphic design, their decision to explore the idea of an "alternative alternative space" to showcase art through a print medium was largely driven by their primary concerns in the discourse as artists, which they have also expressed by seizing the opportunity to present their artworks in the zines. This finding is aligned with Filipovic's article about how an artist-curated exhibition becomes "an articulation form" which the artist-curators would use to "disown or dismantle" the definition of what the term "exhibition" means conventionally (Filipovic 2014, 5). Essentially, the purpose of these attempts was to highlight the critical activities and effects undertaken by artists, even if the form does not appear to be artistic intrinsically (Filipovic 2014, 20).

In the case of Atelier HOKO's *Science of the Secondary* book project, their starting point and approach was always design-centric. The motivation behind the design duo's decision to embark on this journey of making critical inquiries and gaining insights about mundane objects was based on observations they made about their immediate environments, where designers and people in general lacked the "sensibility" and "awareness" to put "the right tools, the right materials" together in order to create a better experience for themselves and others (Ho 2021).

Fig. 29. Science of the Secondary: Boxed Set 1 (Vol. 1–10)*, 2019, image courtesy of Atelier HOKO.*

Although certain phrases used on HOKO's website suggest that the collective would categorise their practice as "critical", where they acknowledge that they have adopted conceptual and speculative approaches in producing publications and exhibitions, in an interview, Ho revealed that HOKO does not categorise their work as Critical Design. They also do not describe their practice as "critical" because they strive to simplify their in-depth findings into humble and approachable content that the general public can understand. To avoid making *Science of the Secondary* a "self-indulgence" project for themselves, the design duo wrote the editorial content and designed the publications with the general public in mind, and hence, the process involved conducting sufficient experiments to clarify their findings while making sure that the findings were presented in a manner that the readers could understand (Ho 2020). With the aim of heightening the level of sensibility and awareness in people, additional events like exhibitions, workshops and talks have been organised both to launch the books as well as to enhance the audience's experience with the subject matter featured in each issue (Ho 2021).

Although *Science of the Secondary* was not created with the intention to showcase the works of selected artists and designers, HOKO's rigorous process of conducting research, deciding on the distribution format as well as working with illustrators and artists to visualise some of their ideas was not very different from what curators do professionally. Besides making critical inquiries into everyday objects to improve people's sensibilities and awareness of the world, HOKO has also demonstrated that they are problematisers, and that they have been playing the role of graphic designer-curators through their commitment in sustaining the project since 2013. From the very first issue that was created and launched, HOKO knew they would keep the research project going by moving from one subject to another without changing its philosophy or their research method (Ho 2021).

By the time the tenth book was published in 2019, the idea of consolidating all ten books into a box-set solidified the concept of a printed exhibition, whereby the poster provided the context of the show, and each booklet became an individual section of the exhibition to showcase the findings that the design duo had gathered on each everyday object.

Furthermore, the box-set, as a whole, can be viewed as a collection of visual stories made accessible to a larger group of audiences, just like in a tangible exhibition. Although it was never the intention of HOKO to create the *Science of the Secondary* box-set as a printed exhibition, when asked in an interview, Ho did not disagree that the project could also be interpreted this way. While acknowledging that it was not a wise business decision to produce the box-set, the design duo still believed that it made sense for them to consolidate all their findings as a form of reflection about their past practice, as only then could they think about their next step (Ho 2021).

Many may think that the idea of demystifying human relationships and interactions with mundane objects would not relate to any intricate social problems, but with HOKO's unique research method and idiosyncratic ways of presenting findings to enhance the audience's experience, there is much potential in applying their findings to understand more complex social conditions. For example, it is not incidental that Atelier HOKO was invited to curate the Enabling Room at the National Design Centre during the Enabling Festival in 2018. Titled *Little Difference*, the exhibition consists of an interactive installation to help the public understand how making small adjustments within everyday living environments can help people with dementia improve their quality of life (Enable Asia 2018).

As mentioned in an interview, while Ho did not agree that HOKO's research into everyday objects was necessarily trivial, he did acknowledge that *Science of the Secondary* might not have addressed any particularly "wicked" world problems. However, in light of the COVID-19 pandemic situation, the collective has certainly begun to ask more difficult questions about the purpose of their work, and hope to apply their research approach in ways they have not explored (Ho 2021). Notably, this self-reflective quality has certainly also reinforced their role as problematisers.

5.3 Supernormal

Founded in 2017 by graphic designer-artists Ong Kian Peng and Ivan Lee, Supernormal was first introduced as a complementary project of Modular Unit (SABF 2018), a design studio

that works towards creating immersive sensory experiences and different forms of visual communication (Ong and Lee 209). Lee and Ong first came together in 2009 to form PMP, an audio-visual collective that produced electronic music by mixing sound generated from acoustic instruments and computers, and at the same time, accompanied with generative visuals that either responded or were controlled by the sound (Seet 2018). It was PMP's interest in synaesthetic experience and the connection between technology and aesthetics that helped build the foundation of Modular Unit (Seet 2018). Like many creative studios, Modular Unit produces commercialised work including prints, motion graphics and website design, but what sets them apart from other studios is their specialisation in exhibition design and interactive installations, which fuses their interests from PMP (SABF 2018). Also playing the role of artist, each co-founder has his own artistic practice: Lee is a ceramist and is also part of the ceramics collective known as Weekend Worker, and with a focus on new media and media art, Ong's personal art practice overlaps with the work produced through Modular Unit and Supernormal (SABF 2018).

Supernormal as a Curatorial Project

Branded as an independent and alternative arts space in Singapore, Supernormal's vision is to present "experimental and offbeat works and projects, ranging from design to artistic practices, and the in-betweens" (Ong and Lee 2017). Lee and Ong admitted that prior to their visit to an available commercial space located at 333 Kreta Ayer Road, there was no initial impetus to set up an independent art space (SABF 2018). After realising that it could be challenging for the landlord to find potential tenants for the space, the idea of running a series of pop-up exhibitions was initiated merely as a suggestion to help drive traffic to the place (SABF 2018). Making a "normal-looking" space more exciting and inviting, the first show organised at the site, which they named Supernormal, was not a mere exhibition of artefacts produced via an art project. Besides having an opening event, the programme included a sharing session where the artist and the three participating designers spoke about the motivations behind the project and their experience throughout the art-making process (Ong

2017). Having gained some valuable experiences from this, Lee and Ong soon realised that operating Supernormal as a side project, with its current concept, was something they could continue to do (SABF 2018). Another reason why Ong has been motivated to carry on with the curatorial work is the lack of the spaces in Singapore to showcase works that are categorised as experimental or as new design genres (SABF 2018).

The next few shows continued with the same format of an exhibition accompanied with an artist or a designer's talk, and this became a signature feature of Supernormal's events. By the time the third event was launched, the art space had received sufficient attention from the creative community and the exhibition was included in the *1KM* project organised by Industry+. Featuring a total of twenty-one operatives from various disciplines, *1KM* was conceptualised as an exhibition where visitors are encouraged to visit the listed venues found within the radius of one kilometre in the same neighbourhood. Described as a curated "creativity discovery", *1KM* was conceived to celebrate and promote passionate individuals and entities that have contributed to the transformation of Singapore from a cultural desert to a creative hub for art and design (Ng 2017).

Supernormal's efforts in promoting unconventional design work and practices have also included the presentation of Atelier HOKO's *Café CUP* exhibition as a drinking laboratory, which allowed visitors to select and drink from a cup from among a collection seventeen prototypes that HOKO produced based on their findings in the research publication, *Science of the Secondary: Cup* (Ong 2017). Ong believes that designers like Atelier HOKO are valuable and need to be recognised for their in-depth research from a design point of view (SABF 2018). When Supernormal started to make open calls for artistic proposals, they were fulfilling their purpose of providing a platform for young emerging artists to develop and present works that are experimental and technology-based. Through open calls, any creative individual can submit a proposal of any discipline and medium, and the selected project would get showcased at Supernormal (Seet 2018). Having received his first big break when he was approached by The Substation to submit to the Sound Art Open

Call in 2011, Ong believes that making open calls is an effective way to discover people who have been regarded as the “in-betweens” (Seet 2018).

After their final exhibition at 333 Kreta Ayer Road, which was also an event to celebrate their first anniversary and to raise funds for Supernormal’s new space at 101 Desker Road, Supernormal’s in-house programme was temporarily placed on hold while the renovation works were in progress (Seet 2018). In conjunction with the fundraising event, Supernormal initiated a discussion panel titled “Independent Art Spaces in Singapore: A Conversation”, to talk about how independent art spaces play a part in shaping the art landscape in Singapore. Held at the space known as Edens (by Zarch Collaboratives) and moderated by artist-curator Berny Tan, the panel was made up of Alan Oei (the former artistic director of The Substation), Woon Tien Wei and Jennifer Teo (founders of Post Museum), Jeremy Hiah (owner of Your Mother Gallery), Seelan Palay (founder of Coda Culture), the art collective Soft/WALL/studs, and Ong himself representing Supernormal (Ong 2018).

With Modular Unit being the main source of funding for Supernormal’s new shophouse space at 101 Desker Road, it made sense to have both entities housed under the same roof; the exhibition space occupied the shopfront while the design studio was set up at the back. In order to sustain part of the extended space’s operational and rental costs, the Supernormal space has also been made available for artists and designers who are keen to showcase their works with a short-term rental fee, particularly when Supernormal is not hosting their own in-house programmes. Besides using the space to present works that are deemed as experimental or “the in-betweens” and to nurture young emerging artists or designers, Supernormal’s unique interest in the intersections between Art and Technology can be clearly seen in the programmes and curatorial projects (hosted in-house or otherwise) they have undertaken so far.

Problematising Arts and Technology via Supernormal

After Supernormal's group show organised in collaboration with *SAND* magazine in 2018, *Technology in Arts* was the second exhibition that featured participating artists who were selected through an open call. Aiming to encourage works in the forms of new media art, device art, video art and hybrid practices, the open call sought to understand the role that technology plays in the context of contemporary art-making (Ong 2018). In the following year, Supernormal organised *Adaptation* as part of the Singapore Art Week to showcase artists who used technology in various ways to produce their works (Ong 2019). From high-tech Artificial Intelligence to low-tech automated devices, the show featured local artists like Melissa Tan and Debbie Ding as well as Australia-based art duo Murasaki Penguin, whose works demonstrated the poetics of adapting technology as an artistic medium (Ong 2019). Even though the event was not held at Supernormal's own space, it retained the signature format of many of Supernormal's exhibitions: the showcase of artworks, artists' talks and workshops. Additionally, live performances by the artists were integrated as part of the programmes for both events.

Fig. 30. Brand identity of Adaptation *exhibition, 2019, image courtesy of Ong Kian Peng.*

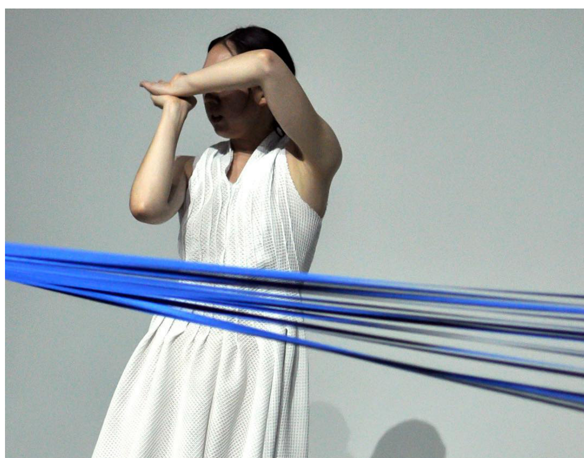

Fig. 31. Anna Kuroda of Murasaki Penguin performing at Adaptation*'s opening night, 2019, image courtesy of Ong Kian Peng.*

Fig. 32. Processing Community Day *workshop organised by Supernormal, 2019, image courtesy of Ong Kian Peng.*

The recurring theme of art and technology in Supernormal's projects had originated from Modular Unit's, or more specifically, Ong's interest in exploring the intersections between technology, art and design (SABF 2018). Formerly an audio-visual performative collective that used technology in the production of live music and audio-visuals, the design duo extended that interest into design with Modular Unit, and then into art with Supernormal. Lee and Ong's approach of using technology as a medium, in the same way paints are used in art-making, has set the direction for several of their self-initiated curatorial projects (SABF 2018). This concept of using technology as a medium for art is not as simple as using hardware such as "gimmicky" and expensive electronic devices or gadgets in installations, but rather it is a software approach that allows the public to think about technology beyond its functionality (Ong 2020). This so-called "soft approach" is driven by the phenomenon where technology becomes more intertwined with society, and more people are using it without understanding the implications it brings to our daily lives (Ong 2020).

Ong thinks that it is essential to talk about technology today because by being ignorant about how technology works could lead to issues concerning privacy or fake news on social media platforms, which could in turn have a significant impact on our lives (Ong 2020). To Ong, there is no better way to talk about technological problems than using technology itself, and to understand how technology affects our ability to perceive the world and to better control our lives, art and artists could then play an essential role in offering alternative

perspectives onto the issues raised (Ong 2020). Hence, by presenting artefacts that fuse art with technology, the public could better understand the issues that come about because of technology and even other urgent problems, such as climate change. Such exhibitions would also provide a sense of immediacy, unlike the experience of reading articles or newspaper reports, which we tend to dissociate ourselves from very quickly (Ong 2020).

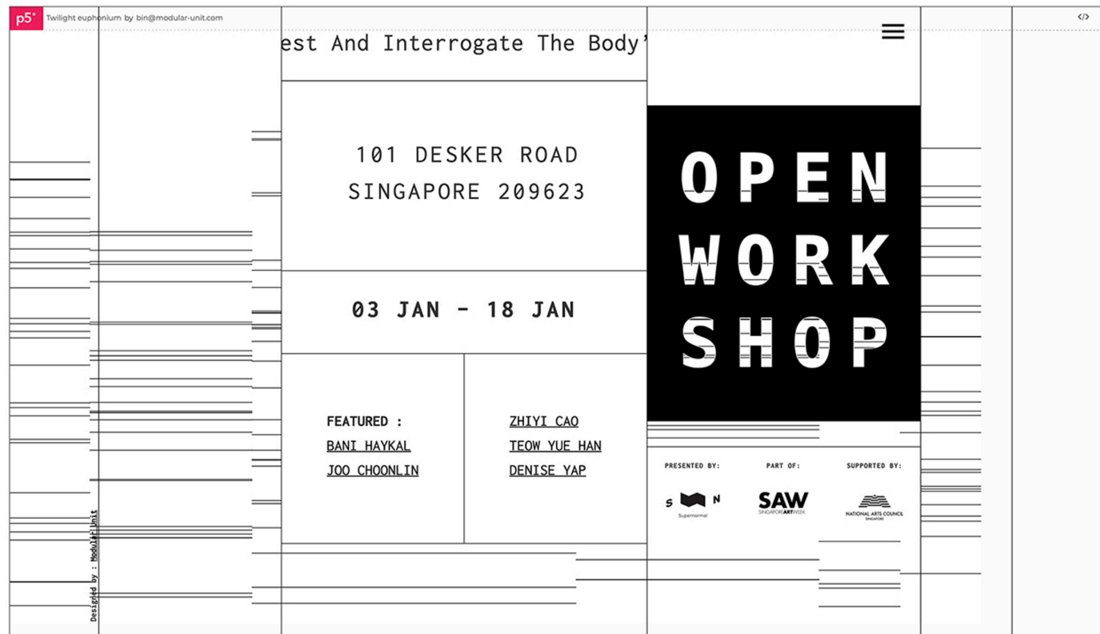

Fig. 33. Brand identity of The Open Workshop*, 2019, image courtesy of Ong Kian Peng.*

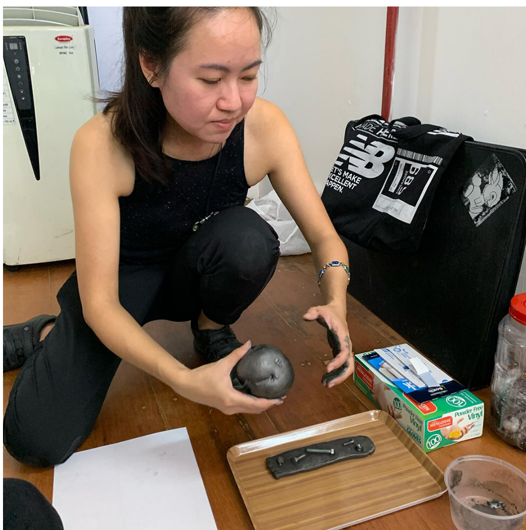

Fig. 34. Artist Joo Choon Lin facilitating at The Open Workshop*, 2020, image courtesy of Ong Kian Peng.*

Fig. 35. Joo Choon Lin with participants at The Open Workshop*, 2020, image courtesy of Ong Kian Peng.*

To help the public understand the social implications that technology has in our lives, and to instil a sense of urgency about these issues, Supernormal presented *The Open*

Workshop as part of the Singapore Art Week in 2020 (SAW 2020). Instead of setting up a conventional exhibition that displays finished artworks, Supernormal referenced Umberto Eco's book, *The Open Work*, and had each work presented at the show accompanied with a workshop facilitated by the artist (Ong 2020). Eco's idea of an "open work" is one that allows some elements of the work itself to be altered by chance or by the audience, creating opportunities of "multiplicity, plurality and polysemy in art" (Robey 1989). As written in Supernormal's curatorial text, it is this principle (or perhaps sensibility) of openness that steered their approach towards "soft technological determinism", which suggests that the extent of technology's impact on us is relative to the extent of our interactions with it (Ong 2020). While "soft technological determinism" is similar to "hard technological determinism" in arguing that cultural values and social systems are shaped by a society's technologies, unlike the latter which sees technology as an obsessive influence which can take over our daily lives to an extent that is beyond our control, the former believes there is still room for chance and different choices to be made about the future (Ong 2020). Aiming "to narrow the frame to form an entryway [other] than a sprawling panorama", the exhibition-workshop-talks event, accompanied with a publication (which included both printed and digital copies), was an invitation for the audience to "engage, make sense, rewire, remap, [and] reconnect" to the world (Ong 2020).

In reality, the idea of creating room for the participants to interact with the works could not be executed well through the workshops, and hence, Supernormal offered participants the experience of making art with the artists instead (Ong 2020). As the curator of the show, Ong reflected that the participants had not interacted with the work as much as he would have liked. Even though a participatory component was highly encouraged, the artists had concerns about the logistics as well as their quality of works (Ong 2020). Furthermore, Ong also believed that the local participants were not ready to be involved in a participatory art-making process for two reasons: first, they might have been reluctant to alter an open work as they had been taught to respect the artwork, and second, they might have felt that they were not good enough to make any substantial contributions or to add any meaning to the work.

However, *The Open Workshop* did meet some of its objectives, as the participants had the opportunity to learn something through hands-on art-making in addition to visiting the art exhibition and listening to the talks (Ong 2020).

When the COVID-19 pandemic led to venue restrictions in March 2020, Supernormal's programmes came to a complete halt, even though Ong had been invited as the co-founder of Supernormal to moderate a panel discussion titled "Demystifying Art and Technology" organised by Gillman Barracks as part of the programme for the event, *Art After Dark.* By the time Supernormal resumed their programmes in January 2021, many changes had already taken place. The gallery cum studio space at Desker Road was no longer the home of Supernormal and the business partnership between Ong and Lee for Modular Unit had also come to an end (Ong 2021). Taking over the operations of Supernormal, Ong organised *Networked Bodies* for SAW 2021, and the event was presented at Gillman Barracks for a little over two weeks (Ong 2021). Meanwhile the creation of a new gallery space at 21 Moonstone Lane was underway, and a new creative entity, Cipher Industry was set up to serve as a supporting arm for Supernormal's future projects (Ong 2021).

Concretising the role of Graphic Designer-curator

Stemming from Ong's long-term research interest in art and technology, *Networked Bodies* was conceptualised with reference to the use of technology during the pandemic; a situation where physical touch was no longer welcome, and the body relied on interfaces to build communities, maintain contact with people, and to find intimacy (Ong 2021). Gathering a mix of media installations, digital works, social media-mediated works by local as well as international artists, the exhibition asked relevant questions like, "How does technology mediate new forms of intimacy and care by transposing the body through space and time?" and "How does communication look and feel through these new appendages and organs?" (Ong 2021). Together with a line-up of online and physical programmes ranging from live performances, workshops to artist talks, the project tried to help the audience find out how

they could "reach beyond the screen to create new sensory experiences" when their bodies were trapped, but their minds longed for real and tangible interactions (Ong 2021).

Fig. 36 & 37. Ong setting up the exhibition, Networked Bodies*, 2021, photos taken by Junie Tang.*

Having to organise the event without a creative partner might have been exhausting, but Ong shared in an interview (2021) that he enjoyed having the all-rounded control and the level of participation required when playing the role of a design-curator to conceptualise, plan and set up the exhibition according to his artistic, design and curatorial visions. Recalling his general process for his curatorial project, Ong shared that he would always begin by coming up with a theme or subject that he wants to investigate; one which he admits may not be necessarily triggered from an academic perspective, and may not even be well-formulated at first, but would always come from concerns related to the world we live in, or to things that he is personally invested in or curious about as a member of society (Ong 2021). This big idea would then be funnelled down to something less abstract with the help of one or several more questions to be asked through the exhibition (Ong 2021).

With the drafted questions in mind, Ong would then start researching on artists whose works or practices are aligned with this direction, and then he would contact them and initiate conversations. Ong explains that these conversations are essential, as they help him to gain different perspectives or alternative ways of understanding the inquiries that he, as a curator, is trying to make (Ong 2021). For each project, Ong prefers to commission the artists to create new works that are specific to the issue they are dealing with, but if there are budget or

time limitations, he would then look into the artists' existing works that could best contribute to the discourse. As soon as the theme is concretised and the selection of artists and works are finalised, Ong then starts to think about design (Ong 2021). His work as the graphic designer involves coming up with the branding and the promotional materials for the exhibition as well as thinking about how the space can be best designed to present the works. Being able to play both roles, Ong is especially content with the feedback he has received from the local art and design community about the way the curatorial narrative and spatial design of *Networked Bodies* were woven together to complement each other.

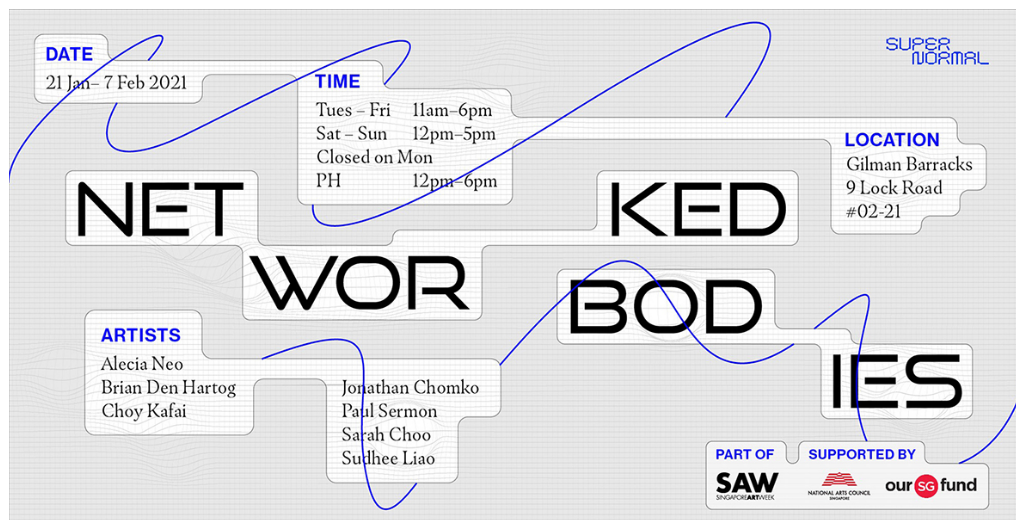

Fig. 38. Brand identity of Networked Bodies *exhibition as shown on social media, 2021, image courtesy of Ong Kian Peng.*

Fig. 39 & 40. Brand identity of Networked Bodies *exhibition installed on-site, 2021, photos taken by Junie Tang.*

Grounding the theme of the exhibition was British artist Paul Sermon's *Telematic Dreaming* (1993), a live telematic video work that linked two different sites (Ong 2021). The installation was made up of two double beds: one placed in a blacked-out space and the other in a brightly-lit space. A video image of a person lying on the bed in the lit space was projected onto the one in the blacked-out space, and a camera captured and sent the projected image back to the monitors that surrounded the first bed. Completing the connection of the relayed video allowed the audience to communicate with the other person projected as an image. In Sermon's view, what made the work technological at its core was not the live projection, but the bed itself (Ang 2021, 10). Describing the bed as "the most psychological, charged and complex piece of technology" in the work, he sees it as "an interface that functions…as a portal between human avatars we control inside the matrix and ourselves" (Ang 2021, 10). Comprised of this "assemblage" of intangible yet vivid transmissions via a "body-soaked" bed, *Telematic Dreaming* was set up as the anchoring point of the curatorial narrative, which the other participating artists could reflect on for their own work (Ang 2021, 10).

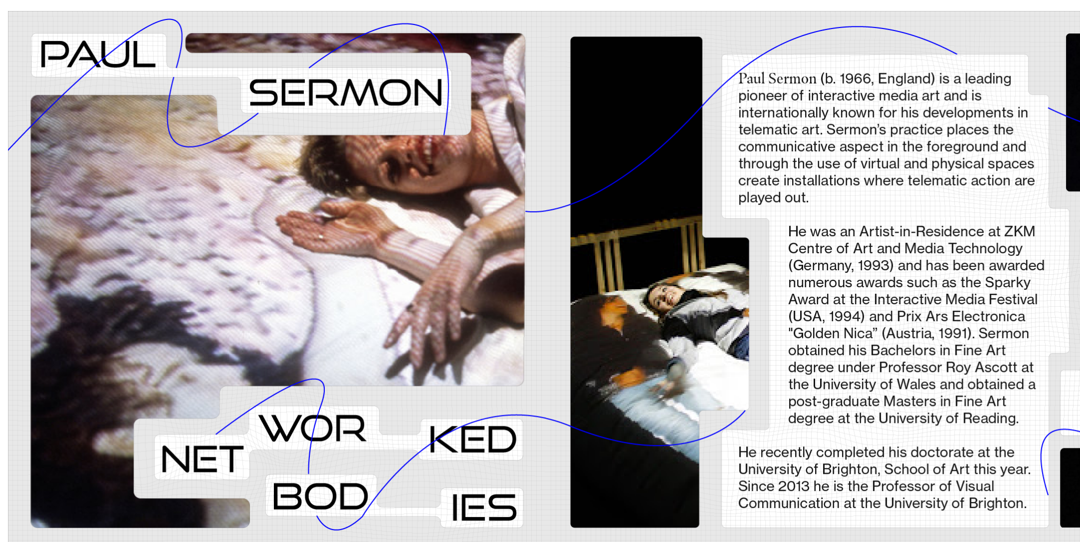

Fig. 41. Paul Sermon's Telematic Dreaming *at* Networked Bodies*, 2021, image courtesy of Ong Kian Peng.*

Another artwork that demonstrates how the use of technology can impact or control our lives was presented by Jonathan Chomko (b. 1988, Canada), titled

www.grindruberairbnb.exposed (2020). By leading a group of participants to deliver a choreographed performance, the work explored how networks are capable of guiding human movement by having the participants follow a set of instructions as shown on smartphones while they were accessing the URL (Ang 2021, 12). As each participant focused on his or her part in executing the pre-choreographed gestures and movements, a well-synchronised group performance was being played out for others who were watching as spectators (Ang 2021, 12). By using a mobile phone, a device around which our lives revolve, the performance mimicked how we normally interact with it; the participants' eyes remained drawn to their phone screens, while only becoming conscious of others' bodies occasionally (Ang 2021, 12). While the message was disturbingly clear, being about how we are implicitly allowing technology to manipulate or control our actions, the way that the collective actions were being facilitated for the group performance also invited the audience to reflect on how networks can be used to devise new ways to meet and foster intimacy (Ang 2021, 13). In a positive way, the work became a prototype for choreographing socio-political movements as collective actions among people to create social change (Ang 2021, 13).

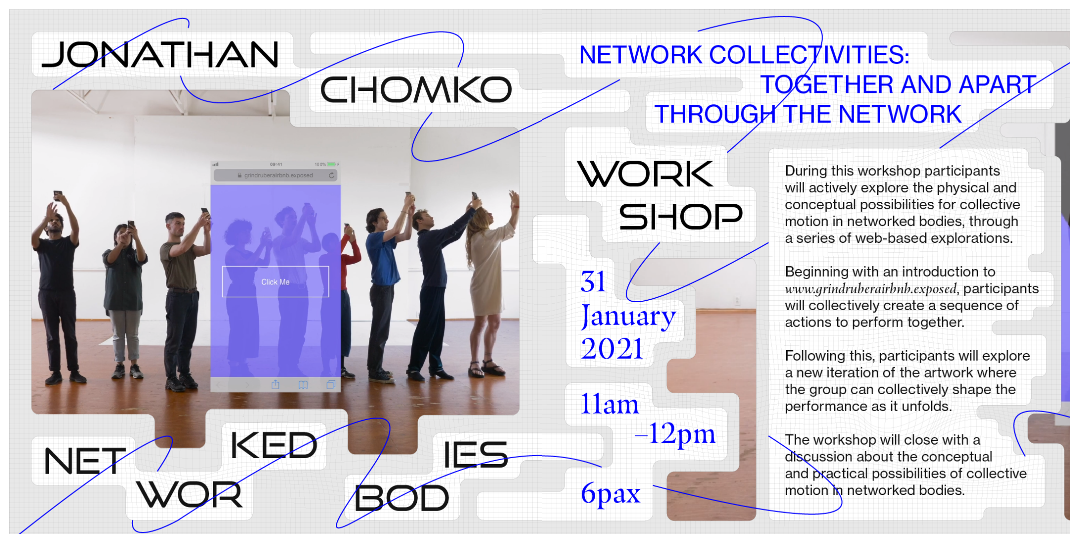

Fig. 42. Jonathan Chomko's www.grindruberairbnb.exposed *at* Networked Bodies*, 2021, image courtesy of Ong Kian Peng.*

The exhibition also included a work that directly addressed issues concerning the well-being of people, with a focus on building collaborative working relationships between

individuals and communities: the year-long project *Between Earth and Sky* (2018) by Singaporean artist Alecia Neo (b. 1986, Singapore). In response to stigma associated with mental illness and the lack of support for caregivers who provide long-term care for those suffering with mental illness, Neo's work aimed to reveal the needs as well as the contributions of these caregivers by making inquiries into the connection between the "futurities" of caregivers and the "realities" of their love ones with mental illness (Neo 2018). The project asked questions like "What does the weight of caregiving look like?", "Whose weight do we bear?" and "Can we share it?", and a total of fourteen kites were made using materials on which photographs of clothing, which had been provided by each caregiver, were printed (Neo 2018). As kites symbolise freedom and vulnerability, the caregivers, as well as members of the public, were metaphorically sharing the weight of their stress and responsibilities when both parties were asked to fly the collective body of kites (Neo 2018).

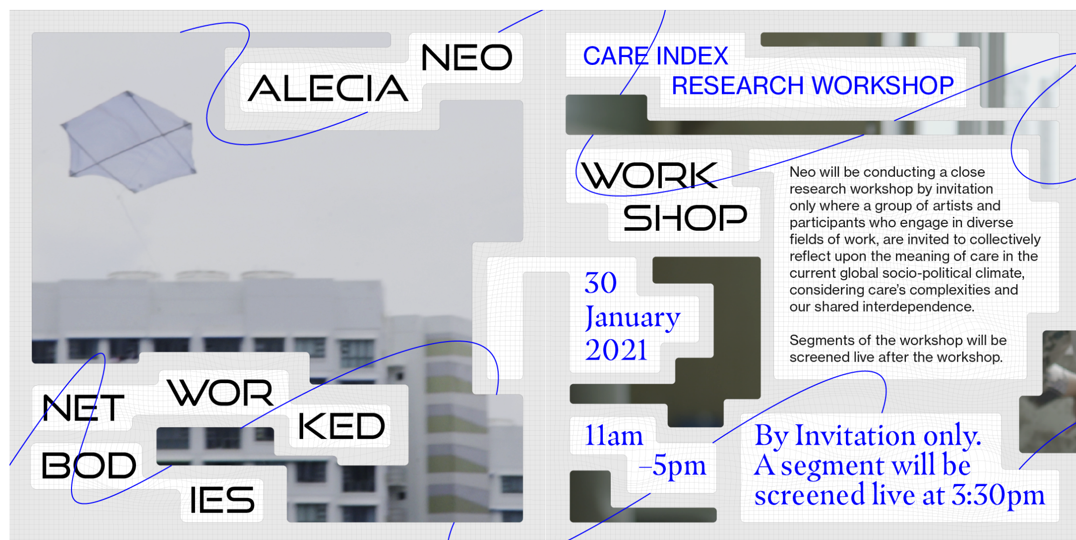

Fig. 43. Alecia Neo's Between Earth and Sky *at* Networked Bodies*, 2021, image courtesy of Ong Kian Peng.*

Fig. 44 & 45. Exhibits of Alecia Neo's Between Earth and Sky *at* Networked Bodies*, 2021, photos taken by Junie Tang.*

Additionally, the caregivers were invited to go through a series of movement workshops facilitated by collaborating artists Ajuntha Anwari and Sharda Harrison, so that each caregiver could deliver a personal performance that was based on their caregiving journey (Neo 2018). The expressive performances were recorded and played as part of the installation when presented in a physical exhibition (Neo 2018). As an on-going research project, it made sense that an invitation was also extended to artists and participants of diverse backgrounds to attend a session titled "The Care Index Research Workshop", conducted by Neo as part of the *Networked Bodies'* programme. The main intention of the workshop was to have the participants think deeper about the meaning of care with reference to the current global socio-political ethos (Ong 2021). On one hand, the documented workshop further supported Neo's long-term interest in developing projects around the idea of caregiving, and on the other hand, the project's outcome (a performance by the participants) was live-streamed and uploaded onto Supernormal's social media platforms to engage online audiences (Ong 2021). Hence, Neo's work did not only fulfil its purpose to attempt to "restore faith in times of profound loss, within ourselves and in society"; it also fit the exhibition's overall curatorial direction, which was to help the audience meditate on "new forms of intimacy and care by transposing the body through space and time" through technology (Ong 2021).

Fig. 46. Artists and cultural practitioners at "The Care Index Research Workshop", 2021, image courtesy of Ong Kian Peng.

Networked Bodies may have taken place during a time when organising a physical art event was extremely challenging, but with the aid of technology and relevant funding entities, the kind of engagement it had with the audience was multi-faceted and multi-sensorial. Even though some of the overseas artists could not be in Singapore physically due to the strict travelling restrictions in place at that time, this did not stop them from discussing their works, delivering live performances and facilitating participatory workshops via various online tools and platforms. However, Ong also noted that setting up an exhibition-event about technology that was made accessible both online and offline for members of the public did require multiple hard and soft wares, and thus, a lot improvision was needed (Ong 2021). Ong shared that he believes that there is no "waterfall approach" to a curatorial process, which is the same mindset he has for a design process; both are in constant state of evaluation.

Ong's work and curatorial interest in art and technology also seems to have built him a reputation online as a creative practitioner and expert in this area. In June 2021, he was invited by BeFantastic to join an international online Fellowship programme (CoLab) and Supernormal was appointed to collaborate as one of the official partners for the project titled, "Together: Tech Art for Climate Action (BeFantastic 2021)". Based in Bangalore, India,

BeFantastic is branded as a techart platform that "envisions a positive, sustainable future leveraging creative tech" (BeFantastic n.d.). Through the Fellowship programme, Ong is able to mentor various artists, designers and technologists who had been identified through an open call, which called for the development of works that fuse art and technology to amplify the urgency of climate change issues (Ong 2021).

Hitherto, it is clear that Ong has quintessentially played the dual roles of designer and curator at Supernormal: from conceptualising to setting up exhibitions, from visualising the branding to designing the spaces, and from organising participatory programmes to working with creative collaborators. Many of Supernormal's projects fit Mura's idea of how curatorial projects can become "a way of working that may incorporate more discursive and performative, and less object-orientated formats of mediation, such as lectures and seminars, critique, editing and education" (Mura 2018, 38). And by adopting collaborative and collective approaches, Ong's curating also fits the contemporary curatorial framework where the lines between "art creation/production and presentation", "authorship and authority", as well as "artists and curators" are all blurred (Mura 2018, 38).

Furthermore, Ong's continuing interest and curiosity in understanding the relationship between art and technology, and how they can be used to talk about the world we live in, display the qualities of a problematiser. Disturbed by how we are being bombarded by a massive amount of information, news and messages on a daily basis, which causes us to become increasingly "desensitised" by the media and "cold" towards pressing issues like climate change, he believes that to make a person become convinced enough to care and take personal action would require more than learning about the situation from the various media sources (Ong 2021). For one to become emotionally attached to a certain societal or global problem, he or she would need to be involved or immersed in an environment that elicits "very raw emotional responses" and evokes "sensorial" human experiences (Ong 2021).

That said, Ong is also aware that it is not practical to believe that a global awareness could be raised simply by doing just one show or creating one particular work. Thus, by using exhibitions as a medium and Supernormal as a sustainable curatorial project in itself,

Ong strives to create more room for dialogue that discusses or debates various pressing issues that he cares about as a designer-curator (Ong 2021). Despite the challenges posed by the current pandemic situation, what drives Ong to keep Supernormal going are the ripple effects created when members of the public begin to change the way they think about a certain issue upon visiting a show or participating in the workshops; this would lead to them sharing their new ways of thinking with others, and in turn generate more interest in the issue (Ong 2021).

Conclusive Notes

Covering a wide range of forms and media spaces, Metahaven's works, namely *Uncorporate Identity*, *Facestate*, *Black Transparency*, *The Sprawl*, and so on, demonstrate their critical approach towards pressing political and social issues in relation to the use of technology. With the adoption of Critical Design as an approach, they have played the dual roles of graphic designers and curators to pose questions relentlessly without the rush to find answers, which is also aligned with the qualities of a problematiser.

In the case of Atelier HOKO, they have dedicated time and resources into their long-term research on how people interact with everyday objects and their environment, with the aim of heightening audiences' sensibilities and awareness of these objects. Calling the project *Science of the Secondary*, they reported their findings by publishing light-weight booklets filled with easy-to-understand content, with a layout designed for greater accessibility. These publications were then gathered as a box-set accompanied by a poster insert. The project's emphasis on sharing the collective's findings shows that as designer-curators, Ho and Koh have always been more interested in the process and not in producing specific outcomes. Nonetheless, their unique research method and approach to presenting their findings, which focus on enhancing how people experience everyday objects, can be potentially useful in dealing with problems that are related to ageing population.

Finally, through Supernormal's exhibitions *Technology in Arts*, *Adaptation*, *The Open Workshop*, *Networked Bodies* and their additional programmes like talks, workshops and interactive performances, Ong has been able to pursue his enduring interest in studying the

relationship between art and technology, and how they can help us understand the world we live in. Despite the challenges faced thus far, Ong continues to operate Supernormal beyond the concept of an alternative art space, by continually creating room for dialogue that engages people to understand and talk about wicked world problems, such as climate change.

The participants' experiences presented in this chapter reflect the essential characteristics of a new generation of graphic designer-curators, demonstrating the feasibility of using Critical Design to problematise complex problems today. The intentions, processes and methods of these creative practitioners clearly differ from those of Willem Sandberg who applied design principles to connect art and the public in a well-established art institution, Steven McCarthy who promotes meta design-authorship via the means of curating design-authored works, and finally, Peter Bil'ak who uses "white-cubes" as a platform to showcase self-initiated projects and to expand graphic design practice. Some of the distinct qualities that are not found in the graphic designer-curators discussed in chapter 4.3 include, having a strong desire to address complex social and/or political problems (e.g. data privacy, climate change and dementia) through self-initiated curatorial projects, the ability to pose difficult questions and facilitate dialogues with others, and being relentlessly unselfconscious in cycling back to the problem at hand. Even though these findings reveal that the idea of an interdisciplinary approach is not novel, the adoption of transdisciplinarity among a new generation of graphic designer-curators, who approach curatorial projects through Critical Design — which involves integrating viewpoints and knowledge from others to gather a shared understanding of the problem, building communicative relationships to transform, re-define and extend theories, ideas and methods, and promoting co-creation in re-working and executing solutions that fit better — has certainly presented a feasible approach, filling the gaps identified by this study.

6. CONCLUSION

In May 2015, the Design Masterplan Committee was formed to develop a series of strategies that can help Singapore advance towards becoming a place where design is the catalyst for innovation and growth and helps to improve the quality of people's lives (MCI 2015, 8). The five recommended strategies put out in the *Design 2025* report then formed the foundation for how design, in the next ten years, will be nurtured among the young, promoted within businesses and the public sector, grown to enhance designers and design entities' capabilities, brought closer to local people and communities, and finally, strengthened to build the Singapore Design brand, both locally and internationally (MCI 2015, 8).

Zooming into the fourth strategic thrust that focuses on making Singapore a "lovable city" and an "endearing home" that is filled with people-centric services for the local communities, some of recommendations call for creative practitioners to help citizens appreciate design through outreach programmes executed within the community, to facilitate the co-creation of improved living experiences through design, and also to educate them with the know-how (MCI 2015, 38). Such responsibilities seem to fall outside of a typical graphic designer's role, which is often developed and fulfilled within the practical contexts of consumer capitalism (Poynor 2010,115). As the report is expiring in 2025, now is an appropriate time to reflect on what could be the next direction for contemporary design, and to start planning the next steps to help practitioners to focus more on people in their work. With this in mind, this research has aimed to propose an alternative role and a more viable approach that can allow graphic designers to create self-initiated projects that confront persisting problems sustainably, such as problems related to ageing populations and climate change.

The urgency and relevance of this research also been affirmed in recent years – in fact, when the research work for this research first began in 2018, the future of our world did not appear to be as bleak as it seems today. While global climate change is a known problem to many, the effects that were predicted by the scientists decades ago are certainly occurring more intensely today, and we are warned that the worst has yet to come (NASA 2020). Some

of the long-term effects of this global crisis include raising temperatures, changing precipitation patterns, stronger hurricanes and more (NASA 2020). Making the situation worse was the outbreak of COVID-19 in Wuhan, China, in late 2019 that went on within a short span of time to become a global pandemic that has threatened the lives and livelihoods of people around the world (WHO 2020). In early 2022, at the start of the third year of the pandemic, the Global Market Research and Public Opinion Specialist (Ipsos) released research data revealing that the spread of the Omicron variant had brought COVID-19 back to the top of the list as the world's biggest worry after taking a small dip to the third position in November 2021(Bateman 2022). Conducted across twenty-eight countries, the survey found that 35% of respondents rated COVID-19 as the most pressing social and political issue faced by the people today. Astonishingly, as many as 63% of those who participated in the survey believed that their countries were heading in the wrong direction with their efforts to tackle these world problems (Bateman 2022). This pessimistic outlook for the future is aligned with the 89% of respondents' negative short-term views of the world, which were compiled in the *Global Risks Report 2022* by the World Economic Forum (Bateman 2022). In the same report, other areas of great concern include "social cohesion, livelihood crises and mental health deterioration", and these are listed as some of the top threats that the world will face in the coming two years (Bateman 2022).

In light of the concerns surrounding environmental disasters and the problems brought about by the pandemic, design would then be a necessary part of any discussion or discourse about the future, especially since the meaning of the term itself is attached to the concept of "planning" (Saval 2020). Decades ago, design was referred to as the profession that is most concerned with the future, and as a "futuristic medium", the claim still holds true today, though the future that we are designing for seems much murkier due to the present dire circumstances (Saval 2020). The desire to understand how design can play a part in helping the increasingly troubled world has driven many designers to ponder and reflect upon their own place in the world, and their responsibilities as designers. Some designers acknowledge that the pandemic has "sounded an alarm", and some recognise that disasters are "the

catalysts" for creating revolutionary changes in design, specifically in architecture; many have the positive view that the dire situation "will lead to change, with more focus placed on people" (Ravenscroft 2021). Notably, it is this desire for betterment that has become the driving force for more investigations into how graphic designers can contribute to society beyond generating economic value.

Thus, to help graphic designers find an alternative role and approach that would allow them to effect social change sustainably, this research has first laid out the background on why it might be inadequate for graphic designers to fall back on their traditional role as problem-solvers, where they would use Design Thinking as a problem-solving methodology to address ill-structured social problems. These graphic designers belong to a category of creative practitioners who yearn to take a front seat in fulfilling their role in society sustainably and critically through long-term, self-initiated projects and not short-term solutions. Although non-design industries and educators at large have been embracing Design Thinking as a methodology to solve problems, this research has considered Western transdisciplinary approaches to tackling complex problems, and looked into a different discipline (curation) in search of an alternative role for graphic designers. Following this, the central and sub-questions that would outline the scope of this research were crafted, and accordingly, the aims and objectives have also been set to establish a fitting research framework.

To recap, the central question that has driven this entire research project is: How can Singapore's graphic designers interrogate their conventional role as problem-solvers and go beyond the use of Design Thinking, which is a problem-solving approach, to address challenging social problems that are deemed as wicked? To answer this central question, this research has broken its central question down to five sub-questions, and the following paragraphs will summarise how each sub-question has been answered by the findings compiled in Chapters 4 and 5 of this thesis.

1) How are social problems "wicked", and why is the conventional role of a problem-

solver and the adoption of Design Thinking inadequate to address them?

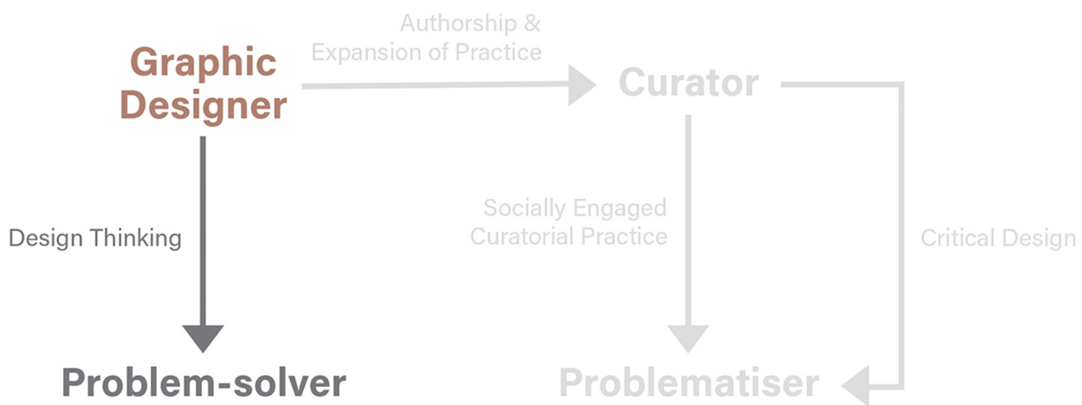

Fig. 2. Research Framework – Graphic Designer as Problem Solver, by Junie Tang

Sullivan was one of the earliest to draw a connection between design and problem-solving when he saw the towering constructions of modern office building as design problems that required a solution. As an engineer who received training in psychology, Arnold also recognised that human behaviour and thought could be the primary cause of problems, and he has called them "creative problems" because they need to be addressed creatively. Employing the idea of Creative Engineering, Arnold writes that designers can generate creative solutions to meet human needs by synthetising social and physical sciences with art. In *The Sciences of the Artificial*, Simon theorises that thinking and problem-solving behaviours are artificial because they can be learned and refined through memory storage and the invention of new designs.

Design methods were initially embraced by many designers and academics, but they eventually fell out favour when many realised that the application of a scientific approach to design failed to solve problems and to produce the desired outcomes; and this was likely due to what Rittel and Webber call "wicked" social problems. The two design theorists believe that the kinds of problems that engineers and scientists deal with are tame because they can be defined and resolved with derivable solutions. But for social planners, societal problems are wicked and ill-defined because they implicate issues related to public policy and have no recognisable traits. Using the concept of "wicked" problems, Buchan wrote about the limitations of the traditional linear models of Design Thinking in the field of graphic design

and proposed to overcome them with an updated version. Brown reinvigorated the application of Design Thinking for the betterment of businesses, markets, and society when he launched his book *Change by Design*. Liedtka, also an advocate of Design Thinking like Brown, writes that the adoption of the problem-solving methodology in business, healthcare and social services could help overcome some human tendencies that hinder the progress of innovation. While many have embraced Design Thinking as a methodology to solve creative problems, the methodology is also not without criticism. Poynor thinks that Design Thinking does not offer anything new to the way designers work, and Vinsel Lee opines that it is too commercialised and does not create significant social change.

Using the examples of the I Sea app and the Life Saving Dot project, Section 4.1 has explained why the generation of creative but temporary solutions to address wicked social problems is not helpful, since any implementation of such solutions will create more problematic consequences continuously over an unlimited span of time. In the context of Singapore, the inter-related problems brought about by the ageing population and climate change, as well as the implications of their implemented technological solutions, are complex and thereby, "wicked", and local creative practitioners would need to deal with these wicked problems to fulfil their role as citizen-designers in the social realm. So, as long as Design Thinking remains a linear and step-by-step methodology to generate short-term solutions, it will likely be inadequate as an approach. In other words, if local graphic designers wish to create self-initiated projects that can sustainably address wicked problems, they would be less likely to succeed if they rely on Design Thinking as a methodology and their conventional role as problem-solvers.

By clarifying what "wicked problems" are and tracing the genealogy of the designer's role as a problem-solver and Design Thinking as a step-by-step methodology to justify why it is inadequate to rely on traditional roles and approaches in addressing contemporary complex societal problems, the first sub-question is answered accordingly.

2) How have some curators acted as problematisers and used curatorial projects to

problematise social problems sustainably?

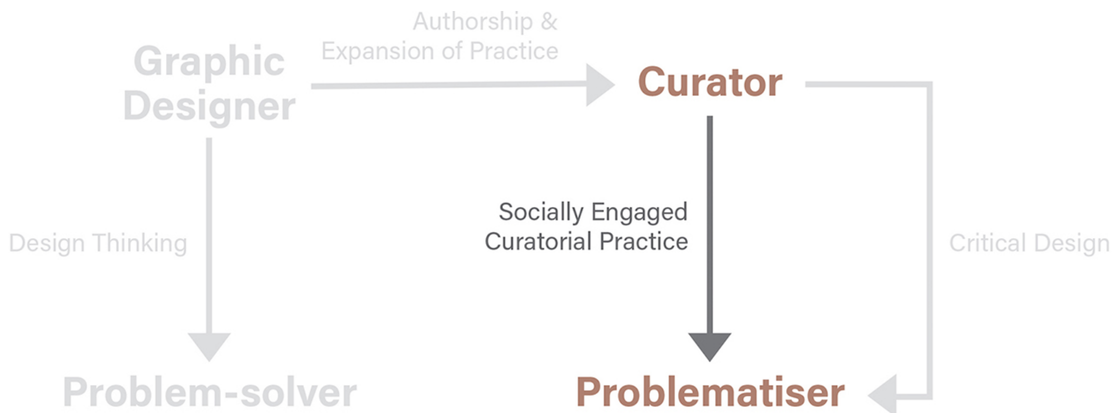

Fig. 3: Research Framework – Graphic Designer as Problem-Solver, by Junie Tang

Section 4.2 considered two exhibitions, *C. 7,500* curated by Lucy Lippard and *Culture in Action* by Mary Jane Jacob, to understand how some curators became agents of social change when they developed curatorial projects to problematise social problems sustainably. According to Freire, the notion of problematisation is a didactic process that aims to present the real and existential situations or conditions of people (who are engaged in a dialogue) as a set of problems. A problematiser can be understood as someone who sees these problems as challenges that need to be addressed in order to effect change in the corresponding situations or conditions. Thus, for one to become a problematiser, one has to go through the three phases of: 1) emerging from a problematic situation; 2) reflecting upon it; and 3) intervening in it.

Lippard emerged from the situation where female artists were being oppressed in the art world, and became actively involved with the Art Worker's Coalition and Ad Hoc Women Artists Committee from 1969 to 1970. Thereafter, Lippard reflected upon her role as a curator in the art world and began to reorient her curatorial practice to feature more female artists, as she did with the *Numbers Shows* between 1969 and 1974. However, it was the *c.7,500* exhibition that truly showed how curatorial intervention could look like, by merging feminist issues with Conceptual art. The end of the *c. 7,500* exhibition marked the beginning

of an ongoing process of reflection and intervention in the same problematic situation, which still persists and as such, and Lippard's role as a problematiser continues to endure till today.

As a durational curatorial project, *Culture in Action* by Jacob matches Foucault's and Freire's definitions of problematisation as its process had involved asking a series of questions (problem-posing), facilitating dialogues and conscientising people. Noting the lack of clarity on what the term "public" meant in the context of art, Jacob raised several questions: "Who is the public for art? How does art address various publics? What is the role of artists today?" In light of these questions, Jacob's *Culture in Action* was labelled as a programme involving prolonged exchanges among the artists, participants and audiences, and a total of eight site-specific and community-based art projects were conceptualised and executed to facilitate dialogues and perform the function of healing. *Culture in Action* was also a process of conscientisation on two levels: first, education-related events, symposiums and forums formed the entirety of the curatorial work, which aimed to instigate reflection and action; and second, as the curator and problematiser, Jacob had also learned how to reflect and act purposefully about things she cared about through art. Besides catalysing responses to challenges, problematisation can also create the conditions in which many responses can be generated, while also identifying the elements that each suggested solution is trying to address. The findings have shown how *Culture in Action* has worked as a form of problematisation, and as a precedent, it has prepared the ground for artists and curators to make and present art in unconventional sites and to use everyday avenues to deal with day-to-day issues.

In short, the analysis and discussion of Lippard's *c. 7500* and Jacob's *Culture in Action* in relation to the theory of problematisation responds to the second sub-question by demonstrating how curators have played the role of problematisers and used durational curatorial projects to problematise social problems sustainably.

3) "What has the notion of the "graphic designers as curators" meant in the past?"

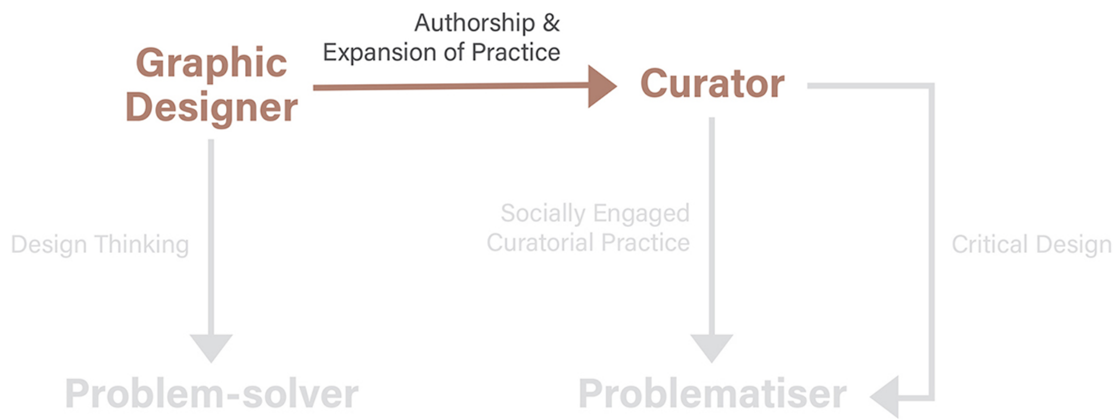

Fig. 4. Research Framework – Curator as Problematiser, by Junie Tang

To understand how the notion of "graphic designers as curators" has been explored in the past, Section 4.3 discussed how Willem Sandberg, Steven McCarthy, and Peter Bil'ak each set a precedent when they took on the additional role of curators to establish design authorship and to expand design practice respectively. From being a typographic designer and a museum curator, to becoming a member of the Resistance, and then being appointed the museum director of Stedelijk Museum from 1928 to 1962, Sandberg finally returned to his core identity of being a graphic designer till he passed in 1984. Not only did he use design as a cultural tool to fight for human rights, but he also demonstrated how it had become a personal medium for self-expression. Sandberg's work shows how the role of "graphic designer as curator" can fulfil the purpose of invigorating the connections between art and the public, sets a precedent for many graphic designer-curators who are serving in established art and design institutions today.

McCarthy explored the notion of "graphic designers as curators" while discussing his and De Almeida's role as meta-authors when they curated the exhibition titled *Designer as Author: Voices and Visions (DA:VV)* in 1995. It was through this discussion that McCarthy established the concept of meta design-authorship. Featuring design-authored works, the process of curation was itself a work of design authorship, and *DA:VV* is known as the first exhibition where this concept and guiding principle was applied. After *DA:VV*, Bil'ak's exhibition, *Graphic Design in the White Cube*, created a turning point in the relationship between galleries and graphic design. With the aim of demystifying the design process,

Bil'ak displayed items like creative briefs and sketches in the gallery, and also displayed the commissioned posters out on the street to promote the event. Although the project was contextualised within a framework that labels design practice as a commercialised activity, the real intention was to show the world that design is expanding beyond it. By studying Sandberg, McCarthy and Bil'ak, Section 4.3 has presented how the notion of "graphic designers as curators" has been explored so far, and this is essential as these examples have served as the foundation for a new generation of graphic designer-curators who are now going on to fulfil a different purpose.

By analysing how Sandberg, McCarthy and Bil'ak have played the dual roles of graphic designers and curators, connecting art and the public, establishing meta design-authorship, and expanding design practice respectively, this study has responded to the third sub-question, "What has the notion of the graphic designer as curator meant in the past?"

4) How can a new generation of graphic designer-curators act as problematisers and adopt Critical Design as an alternative approach to gain new and deeper perspectives on complex design problems?

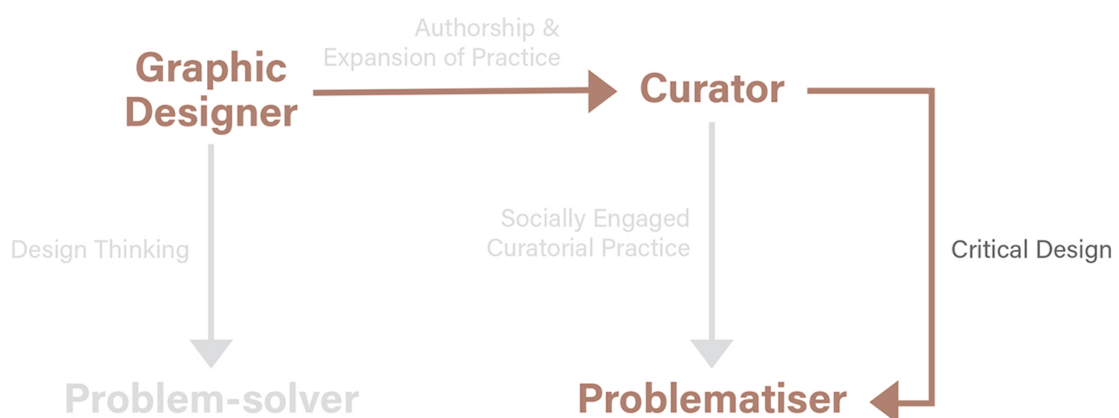

Fig. 5. Research Framework – Graphic Designer as Problematiser, by Junie Tang

To overcome the challenges posed by wicked societal problems, Rittel and Webber believe that the classical step-by-step approach is no longer adequate, and a new kind of systems-approach needs to be developed. Alexander's theory of an unselfconscious process provides

some insight into a possible alternative systems-approach that graphic designers can use to address complex design problems. Specifically, Alexander writes about how a unselfconscious process can self-adjust and make a series of small adjustments to subsystems continuously to create forms that fit. This research has shown how the unselfconscious process bears similarities to the process of problematisation, the most notable overlap being that both the unselfconscious form-maker and the problematiser share the same relentlessness, where they keep cycling back to a problem critically and take action. Thus, for a graphic designer to address challenging societal problems sustainably, he needs to play the role of a problematiser and adopt an unselfconscious process to make small adjustments continuously to create forms that fit. However, it is still not clear how this unselfconscious process can be applied as an approach by graphic designers to problematise social problems critically through design.

According to Poynor, Critical Design (as opposed to Design Thinking) is a more suitable approach for designers who wish to contribute to society meaningfully, since it is investigative and functional beyond the conventional framework of meeting commercialised needs. Coined by Dunne and Raby, the term Critical Design is an attitude more than a methodology, and since it is about critical thinking, it involves developing the mindset of being sceptical, not taking things for granted, and always questioning what is presented. When design becomes a form of critique in social research, graphic designers are given the opportunity to materialise speculative ideas into physical forms that can be useful for the facilitation of debates and dialogues on their social implications. Critical Design involves: 1) challenging narrow-minded assumptions and prejudice; 2) embracing critical thinking; 3) presenting alternatives that spotlight shortcomings embedded in our lives; 4) creating space for dialogue that can lead to changes; 5) posing questions rather than solving problems; and 6) making the consequences of our actions known. These characteristics make Critical Design the appropriate alternative approach for graphic designers to problematise social problems.

Critical Design can also involve exhibition-making, and while some may find it hard to associate exhibition-making with graphic design, Section 4.4 has shown how critical graphic

designers can indeed take on the additional role of curator and use exhibitions as a medium to communicate ideas, which graphic design already does intrinsically. Section 4.4 has also demonstrated through the examples of Kyes' *Form of Inquiry* and Sueda's *Wide White Space* how exhibition-making can allow graphic designer-curators to make critical inquiries into their own design practice. Even though these graphic designer-curators did not create their curatorial projects to probe into social problems explicitly, their involvement in exhibition-making can be read as an invitation to participate in criticism. This is relevant to the new generation of "graphic designers as curators" as they cannot become critical until they continually exercise critical thinking to understand how design can function as insightful criticism.

The findings gathered here may be helpful in clarifying how graphic designer-curators have acted as problematisers who possess critical attitudes and develop curatorial projects as Critical Design to gain new knowledge and deeper perspectives of complex design problems, but they are not sufficient to define the characteristics of a new generation of graphic designer-curators who problematise complex social problems with Critical Design sustainably. Thus, the next sub-question is raised to gather empirical data that fills the gap.

5) What would be the characteristics of a new generation of graphic designer-curators, and how do they adopt Critical Design to develop self-initiated curatorial projects that sustainably problematise challenging social problems, such as an ageing population and climate change?

To define the characteristics of the new generation of critical graphic designer-curators who problematise challenging social problems, this research has identified three case studies and examined empirical data collected via both secondary and primary methods. Formally trained in the field of graphic design, Vinca Kruk and Daniel van der Velden of Metahaven developed a critical voice in the fields of geopolitics, networks, and institutional transparency issues, which they expressed through graphic design, writing, exhibitions and filmmaking. This thesis's discussion of their projects such as *Uncorporate Identity, Stadtstaat: A Scenario*

for Merging Cities, Facestate, *Black Transparency* and more, has sought to bring clarity on how graphic designers could take up the additional roles of researchers, writers, and curators to address political and social problems through Critical Design. This case study has shown how Metahaven has helped to lay the ground for the reinvigoration of the notion of "graphic designers as curators", who problematise wicked political and social problems.

As there is currently little information available on how the notion of "graphic designers as curators", through the adoption of Critical Design as an approach, has been explored to problematise social related problems in Singapore, this research has gathered primary data from Singaporean graphic designer-curators to understand the phenomenon in a local context. The first local example was Atelier HOKO, known as a research and design lab that focuses on studying the growing disconnection between people, things and their environment. Clara Koh and Alvin Ho of Atelier HOKO were prompted by how local audiences lacked sensibilities for design, and they started a long-term book project (as printed exhibition) known as *Science of the Secondary*. Although they did not embark on the project with a desire to change the world, when the COVID-19 pandemic struck, they later came to realise the potential to do more with the project and how their approach could be used for the good of the local community.

The second local example was Supernormal, which evolved from a two-person creative partnership to a project run single-handedly by Ong Kian Peng. Through Supernormal, Ong pursues his long-term interest in understanding the connection between art and technology (alongside with its social implications) via the forms of exhibitions, workshops, talks and publications. Branded as an alternative arts space in Singapore, Supernormal was initially conceptualised to present design and art works that were categorised as experimental or unconventional. But as more exhibitions like *Technology in Arts*, *Adaption*, *The Open Workshop* and *Networked Bodies* were organised at Supernormal, it became a durational curatorial project through which Ong would continuously problematise the relationship between art and technology. Supernormal also became a means for Ong to explore how design can be used to pose questions and create room for dialogues on wicked

problems such as climate change.

Having examined the critical practices and curatorial projects conceptualised and developed by Metahaven, Atelier HOKO and Supernormal, the common characteristics of a new generation of "graphic designers as curators" who adopt Critical Design as an approach to problematise challenging social problems can be identified and summarised as follows:

- Possess strong desires to contribute to society or a community beyond their conventional role as creative problem-solvers within the designer-client framework;
- Have emerged from, reflected upon and actively intervenes in problematic human situations or conditions that they are concerned about;
- Adopt Critical Design as an approach or attitude, and create self-initiated exhibitions or curatorial projects as a medium to pose questions and create room for dialogues with collaborators as well as the public;
- Embrace both concepts of interdisciplinarity and transdisciplinarity in their creative practices;
- Focus on the process rather than on the outcome, and do not rush to find answers or solutions; and
- Are unselfconscious and relentless enough to keep cycling back to the problems critically to create sustainable social changes.

Despite having these overlapping traits, the key difference between the Dutch and the local graphic designer-curators is that the latter do not recognise their work or approach as Critical Design; however, they also do not resist or reject this association. Therefore, this finding shows that the phenomenon of graphic designers taking on the additional role of curators, and the adoption of Critical Design as an approach or attitude to problematise challenging social problems, is only at its infant stage within the Singapore design community. Nonetheless, these graphic designer-curators have demonstrated that graphic designers, by embracing both interdisciplinary and transdisciplinary approaches, can interrogate their conventional role as problem-solvers and the uncritical use of Design Thinking, and to also problematise complex social issues sustainably.

The last sub-question has generated findings which produced new knowledge, defining the traits of a new generation of graphic designer-curators, while contributing to the field of graphic design by demonstrating the feasibility of fusing interdisciplinarity (as proposed by Singapore policymakers) and transdisciplinarity (as advocated by Western thinkers) in proposing an alternative role and approach for local graphic designers to address some of the more pressing social problems within a local context, and possibly, far more "wicked" problems that cannot be easily defined.

The Prospect of a New Generation of "Graphic Designers as Curators"

Since the introduction of the "citizen designer" in the early 2000s, designers have become more conscious about how they are serving and creating in the social, cultural, and political realms (Heller and Vienna 2003). Hence, it is no surprise to see reports on how artists and designers are spending time and effort to create something useful to help vulnerable communities during trying times such as the COVID-19 pandemic. For example, graphic designer Christoph Niemann created playful and ironic illustrations to remind his Instagram followers to maintain good personal hygiene habits and to stay safe at home (Hitti 2020). Creative director Juan Declan and artist Valentina Izaguirre helped others to see the positive result of social distancing through a video that shows a row of matchsticks setting one after another on fire (Hitti 2020). From simple but effective postcards to newsletters and flyers, graphic designers are recognised for their role as problem-solvers who produce creative solutions (Wong 2020).

In the context of generating environmental solutions, graphic designers have focused on logo making, advertising campaigns and prints to raise awareness or to serve as call to action for various environmental causes in past decades (Schwarz 2020). With the shift from recycling and anti-littering to climate change issues in general, many companies' environmental communications have been criticised for "greenwashing" to make the companies or brands look good (Schwarz 2020). Another challenge faced by many graphic designers today is the uninventive and repetitive use of images related to climate change, like

polar bears on melting icebergs and smokestacks, which has led to fatigue and cynicism (Schwarz 2020). Furthermore, images that have been staged or digitally edited are also deemed as “gimmicky or manipulative” (Schwarz 2020). Be it an animated video that gathers millions of views or a website that presents statistics in real time, the approach needs to be more than the mere creation of beautiful visuals that attract attention within the design community or that win awards but show no evidence of having any impact on people (Schwarz 2020).

Amid all of these existential world problems, designers are inevitably confronted by the difficult question: “How do you design for the future when the future you are designing for will not exist?” (Saval 2021). Interestingly, besides designers, many museums had already also begun to think about the future of design months before the pandemic was shutting their operations down (Saval 2021). Before the COVID-19 pandemic, the Art Institute of Chicago, the Philadelphia Museum of Art, as well as the Walker Art Centre organised the exhibition *Designs for Different Futures* that speculated on what the future held for design (Saval 2021). One of the works featured in the show, “Resurrecting the Sublime” (2019), presented a paradox of how a work of contemporary design can be created to improve the quality of living for people while at the same time destroying the environment in which it is situated (Saval 2021). The exhibits showcased a range of ideas, from speculative proposals based on a high-tech imagination to the revival of ancient practices, and the exhibition demonstrated how contemporary design can be a distinctly pertinent practice for projecting the future in a positive manner, while at the same time, exposing how such proposals could also be lacking in professional, long-term thinking (Saval 2021). If designers are expected to envisage how the future world might be, design should no longer be limited to the mere production of consumer products or the planning of space; and furthermore, the persisting trend of the design world professing “green” or socially good ambitions without an in-depth understanding of the wicked problem of climate change should no longer be ignored.

As claimed by Billy Fleming, a professor of landscape architecture at the University of Pennsylvania: “We don’t need playful design proposals.” Instead, we need “high-impact built

projects – prototypes for the resilient futures we’ve been promised” (Saval 2021). With more museums becoming interested in the role that design will play in the future world, and in consideration of the current crisis, which is also filled with uncertainty, it is a good time for gallery spaces to be also availed for prototypes to be built, tested, and experienced. Notably, the series of developments catalysed by the pandemic, as well as the pressing global environmental disasters and how museums and designers have been responding to them, have corresponded with the findings of this research.

Even though the local graphic designer-curators who have been interviewed for this research have not necessarily categorised their practice as “critical” or their approach as a form of problematisation, they all agree that the notion of “graphic designers as problem-solvers” and the straightforward adoption of Design Thinking as methodology are both limiting or even outdated (Ho and Ong 2020). When discussing the future role of designers, Van der Velden (of Metahaven) expressed that “if there is something that needs to be designed, it is the designer himself”, and this involves “throwing himself into his own personal, independent production of knowledge” (Magyar 2020). Even the advocate for Design Thinking, Brown (2020), acknowledges that a change is urgently needed in the way designers “shape, or design” the world we live in. Believing that design must no longer be about “desire and profitability” but on “sustainability and equitability”, Brown suggests that the future role of a designer is to “imagine how it could be” (Magyar 2020).

In light of the world’s pressing healthcare and environmental problems, many graphic designers have evidently emerged from and reflected upon their places in this problematic world. How, they have wondered, can graphic designers intervene as problematisers, and how can they focus their design practice on people, and to join the global movement of imagining a world that is COVID-free and independent of fossil fuels as the primary source of energy? In response to this question, the conceptual and empirical findings gathered via a qualitative phenomenological approach in this study have made clear that Singapore graphic designers can strip off their conventional role as problem-solvers and avoid over-relying on Design Thinking when addressing wicked societal problems. With the proposed alternative

role and approach, they can develop self-initiated curatorial projects that promote collaborations and create space for dialogues; and through research, exhibitions, publications (design and writing), and various forms of educational programmes, graphic designers can problematise by making relentless critical inquiries into challenging social problems close to their hearts. While this study adds value to existing knowledge concerning the role of graphic designers in society, specifically in Singapore's context, where the idea of transdisciplinarity is relatively new, more studies are needed to understand whether this alternative role and approach is applicable to graphic designers within a different socio-political context. Nonetheless, this thesis has accomplished its aim — to arrive at a feasible alternative role and approach that allows local graphic designers to fulfil their civic role, beyond the consumer capitalism, as they develop self-initiated projects to address some of the most pressing social problems on, and potentially, beyond a national level.

A Reflective Conclusion

Reflecting upon the entire process of finding out whether graphic designers can contribute to society more meaningfully by first confronting their conventional role of generating solutions through standard design processes within the client-graphic designer framework, the qualitative researcher acknowledges that much understanding is gained and valuable knowledge is also acquired. While the research achieved its aim of expanding the role of a graphic designer beyond traditional problem-solving and argued the feasibility of using Critical Design to problematise complex societal problems in Singapore in a more sustainable way, it is necessary to clarify that its intention is neither to offer graphic designers an easy way out of generating solutions when confronted by complex social problems nor to infer that the problem-solving approach (Design Thinking) is no longer relevant in design practice or the troubled world no longer need good design solutions. Instead, it offers graphic designers an alternative way of thinking about problems, and essentially, only by problematising existing solutions that may be inadequate to rectify problems that get ever more complex with time, then can new ones arrive.

Another gratifying fulfilment of this research is the empirical evidence of graphic designers in Singapore who possess a critical attitude and engage in critical design practice. From a cultural desert to a global city for the arts, the development of Singapore's creative industry has always depended heavily on the local authority's direction and policies, yet the findings reveal that some creative individuals would go against the tide to develop their design attitude and approach differently when dealing with problems they are concerned with. The local graphic designers-curators studied in this research, namely Ong Kian Peng, Alvin Ho and Clara Koh, are quintessential in demonstrating how graphic designers could bypass the well-accepted role of problem solvers and adopt Critical Design as a means to help the public to become aware, think and debate about complex human problems.

This quality is amplified in Ong when he picked up the interdisciplinary role of graphic designer-curators and adopted the approach of transdisciplinary to create *The Open Workshop.* This project offers the public an opportunity to co-create works of speculative nature and interact with other participants and designers-artists via the format of an exhibition-workshop-talks with publication event. As a strong believer that the mainstream notion of graphic design as problem-solving is not the only way to deal with or relate to visual design, Ong has proven to be a problematiser who has developed a critical practice as he continued to raise awareness on the impact and implications of technology has on people and spark discussions on the use of technology to fight climate change through the exhibition *Networked Bodies* and a fellowship with BeFantasia, which were all executed in the name of Supernormal–a durational curatorial project in itself.

In the case of Atelier HOKO, the design duo challenged the presumed role of a problem solver by resisting the idea that designers have the power to save the world with design solutions and by refraining to start a design process with a problem. Identifying themselves as an independent research lab, not only did they switch between the roles of designers-researchers and graphic designer-curators, but they have also developed a unique research approach while producing design and curatorial projects, more specifically with *The Science of the Secondary*. Liken their design process to a journey of discovery, Ho and Koh

are still persevering with the book project and its accompanying exhibitions embedded with speculative narratives to understand how people interact and make sense of the things around them. Their strong desire to repeat the rigour process with different everyday objects to spark public interest and challenge preconceptions clarify their role as problematises and their practice as critical.

Notably, these creative practitioners do not explicitly label themselves as critical designers or their creative practices as being critical even though they have used speculative proposals and executed curatorial and design projects that raise rather than answer difficult questions. These creative practitioners do not see the need to do so not because they are unaware or are unfamiliar with the Western canon of Critical or Speculative Design, as they have all received their training in the United States and the Netherlands. But rather, it is because they have displayed an unselfconscious attitude and prefer to place their focus on the process rather than the outcome. Additionally, without the influence of a client or direct financial benefits, the label becomes less significant, and they are not in a rush to churn out short-term solutions or anxious about measuring success.

Arguably, the trait of being unselfconscious or unaware of individuality allow them to undertake self-initiative projects that encourage dialogues and collaboration to understand challenging problems collectively. Their unpretentious attitude and focus on long-term impact of their work distinguished their critical practice within the Singapore graphic design community, and with the uniquely developed characteristics of these graphic designers-curators and given the state where it takes place offered a more diverse understanding of Critical Design. All things considered, besides answering the research questions, and meeting the research aims, the success of this qualitative research is made explicit by two specific features. First, the expanded definition of Critical Design as a transdisciplinary approach proves to be best presented in the medium of an exhibition because it allows a wider audience to come together to be educated, engaged in dialogues, and understand the problems presented, and this broadens the understanding of what a critical practice entails in the context of graphic design. This understanding will benefit graphic designers who have

emerged, reflected, and desire to intervene with creative projects that engage the audience to look into complex human problems collectively. Second, the distinctive characteristics of critical graphic-designers curators based in Singapore contribute to the existing knowledge of Critical Design that is predominantly directed by the Western canon, and this diversity in knowledge is beneficial in enhancing creativity with new perspectives and encouraging more researchers to look into the same subject differently in time to come.

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Appendix A

Interview questions for graphic designer-curators – Alvin Ho and Clare Koh (Founders of Atelier HOKO), Part 1

Question 1: How do you feel about the notion of "graphic designer as a problem-solver" and "graphic design as problem-solving"?

Question 2: It is stated in the website that HOKO is "an independent research lab that focuses on the study of the growing disengagement between people, things and space", and that it "hopes to cultivate in people, an openness and ability to unknow, bringing about a heightened curiosity towards all phenomena by taking a fresh look at reality". Can you share what has driven you to have this vision?

Question 3: As a research lab, HOKO has done some research works that were presented in the forms of exhibitions and publications. Can you share your thoughts and experiences playing the dual role of graphic designers and curators for these projects?

Question 4: How do your graphic design knowledge and skills inform your curatorial practice and vice versa?

Question 5: Based on your experience, what are the values you have found and the difficulties you experienced when playing the dual role of a graphic designer and a curator?

Question 6: Specific to the projects, namely, the "Arrangement" series of exhibitions and "Science of the Secondary", can you share what were/are your motivations and goals for these projects?

Question 7: Why do you think exhibitions and publications were the best media to meet the objectives or to communicate the messages?

Question 8: By using speculative design in your works, do you categorise what you are doing as Critical Design practice?

Question 9: Can you describe your methodology and the design process (planning, research and execution) for these projects?

Question 10: Are the methodology and process different from what you would adopt for commercialised projects?

Question 11: Do you encourage local graphic designers to have a Critical Design practice through research and exhibition-making? If yes, how do you suggest that they go about doing it?

Appendix B

Interview questions for graphic designer-curators – Alvin Ho and Clare Koh (Founders of Atelier HOKO), Part 2

Question 1: The last time we spoke, you had started researching on “dustbin” for the upcoming issue of the *Science of the Secondary* publication series. So, are you coming close to completing the project and has your research methodology changed for this particular issue?

Question 2: Will there be an exhibition or event to launch this “dustbin” issue? If yes, can you share some information about it?

Question 3**:** After we spoke last year, I noticed you came up with the idea of creating a slipcase to pack volumes 1-10 into a boxed set. What has inspired you to do this? Will there be a second box set when you produce another ten volumes?

Question 4: You have included a poster that documents your notes, sketches and research process in the box set. Why do you think it is essential for your readers to see or understand this?

Question 5: Has there been any change in Atelier HOKO’s research interests since we last spoke? Or is there a particular (complex) social issue that you may be interested in working on in the future?

Appendix C

Interview questions for graphic designer-curator – Ong Kian Peng (Co-founder of Modular Unit and Supernormal), Part 1

Question 1: How do you feel about the notion of "graphic designer as problem-solver" and "graphic design as problem-solving"?

Question 2: Besides playing multiple roles as a graphic designer and media artist, you have self-initiated a curatorial project known as Supernormal. Can you share some of your experiences playing the dual role of a graphic designer and curator for the space?

Question 3: It is stated in the website that Supernormal is "an independent art space that strives to present experimental and offbeat works and projects, ranging from design to artistic practices, and the in-betweens". Can you share what has driven you to initiate and run this curatorial space?

Question 4: In recent years, you have organised and curated several shows with talks and workshops, such as "Technology in Arts", "Adaptions" and "The Open Workshop", that revolve around the idea of using technology in design and art-making as well as its social implications. Can you share what your motivations and goals for these projects are?

Question 5: Can you describe your methodology and the design process (planning, research and execution) for these curatorial projects?

Question 6: Are the methodology and process different from what you would adopt for commercialised projects?

Question 7: Why do you think exhibitions were the best medium to meet the objectives or to communicate the messages?

Question 8: How do your graphic design knowledge and skills inform your curatorial practice and vice versa?

Question 9: Based on your experience, what are the values you have found and the difficulties you experienced in playing the dual role of a graphic designer and a curator?

Question 10: Do you encourage local graphic designers to have a Critical Design practice through exhibition-making? If yes, how do you suggest that they go about doing it?

Appendix D

Interview questions for graphic designer-curator – Ong Kian Peng (Co-founder of Modular Unit and Supernormal), Part 2

Question 1: When we last spoke in January this year, you were busy with the exhibition *Networked Bodies* at Gillman Barracks for SAW 2021. Can you share your thoughts and reflection about the project as a designer-curator? Did it meet, not meet, or exceed your objectives and expectations?

Question 2: I would like to learn more about your new design studio, Cipher Industries. Does it have a specific vision, mission, or design direction, and how is it aligned to Supernormal's?

Question 3: Can you describe your methodology and process (planning, research, and execution) for the curatorial projects you have done so far?

Question 4: Are the methodology and process different from what you would adopt for commissioned design projects?

Question 5: After completing the *Networked Bodies* project, I noticed you were involved in BeFantastic Together, an online fellowship programme. How has this fellowship contributed to your long-term research on Technology and Art?

Question 6: Now that you have a new space and are operating under a new design entity, what kind of curatorial projects will you be working on in the future? Will you still be focusing on Tech and Art, or is there any specific (complex) social issue you are interested in investigating through curatorial projects?

Appendix E

Interview questions for members of the curatorial collective – *No Ceiling ø Wall*

Question 1: Can you each introduce yourself, then share a little more about the curatorial collective and what is the role of each member?

Question 2: On *No Ceiling Paper Wall*'s Facebook and Instagram, I read that the collective wants to question "the representation of works in spaces across Singapore and considers the possibilities of an alternative alternative space." What has driven you to come together and make an investigation about the idea of alternative space?

Question 3: The first curatorial project the collective did was a printed zine based on the theme "Space and Time". Can you share how did you come up with the theme, and what were your goals and motivations behind it?

Question 4: Based on that theme, why did you think a printed publication is the best medium/format to create a discourse about the idea of alternative space?

Question 5: Can you describe your methodology and the process (conceptualising, planning and executing) when working on this curatorial project as a collective?

Question 6: Based on this zine project, did you find any value and/or face any challenges when playing multiple roles of being artists, graphic designers and curators?

Question 7: How do your art/design knowledge and skills inform your curatorial practice, and vice versa?

Question 8: I noticed that the name of your collective has recently changed. Does this imply that the format/medium of your future curatorial presentations will be flexible or ambiguous?

Question 9: What is the next step/project for the collective? Can you share more about it?

Appendix F

Interview questions for artist-curator – Ju-lyn Lee

Question 1: For the record, can you talk a little about yourself and your practice?

Question 2: As an individual, you are an author, artist, a researcher and curator, but you are also involved in some collectives such as Inter-dependent Studies Group, Artist Caravan and C3 Curatorial. So, what drives you to initiate or to become part of these collectives, and what is your role in each collective?

Question 3: You have developed a series of zines, titled "Notions", as printed format of exhibitions. Can you share why you created these zines, and what are your motives and goals for them?

Question 4: Let's talk about your recent projects. In October this year, you have launched an exhibition known as "Better Late Than Never", and I understand it is a collaborative effort. What was the idea behind it, and why did you choose to do it online?

Question 5: This exhibition is hosted on a website called "Wide Open Space", and the "About Us" text describes the space as "collaborative online space for past and new art projects". So, it is acting as an archive for past projects, and yet at the same time it is also showcasing ongoing art projects? Why do you see a need to create such a space to fulfil these purposes?

Question 6: For the recent art exhibition titled "On with the Motley", can you talk about the idea behind the show and why have you chosen a traditional format this time?

Question 7: You have played the multiple roles of artist, graphic designer and curator in these curatorial projects. Were you conscious that you were playing these different roles? Did you have to think or act differently when you were playing each role?

Question 8: Did you find any value and/or face any challenge when playing the multiple roles of artist, graphic designer and curator?

Question 9: Can you describe your methodology and the process (conceptualising, planning and executing) when working on these curatorial projects as an individual as well as when you are in a collective?

Question 10: How do your art/design knowledge and skills inform your curatorial practice and vice versa?

Question 11: What is the next step/project for you or the collective(s)? Can you share more about it?