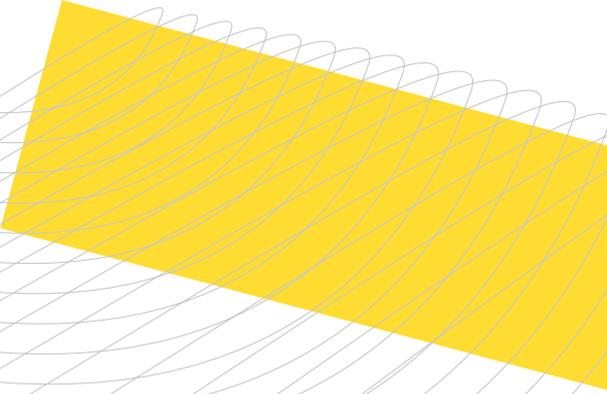




ServDes.2020
Tensions
Paradoxes
Plurality

Conference
Proceedings



2-5th February 2021
Melbourne, Australia

Editors: Yoko Akama, Liam Fennessy, Sara Harrington & Anna Farago

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We also acknowledge the Traditional Custodians and their Ancestors of the lands and waters across Australia and around the world where this conference was attended.

ServDes.2020

Tensions / Paradoxes / Plurality

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Liam Fennessy
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Anna Farago

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Design performativity in cultural service for creating social impact

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Abstract

In the increasingly complex social context, service design shows its advantage in dealing with wicked problems and provoking social innovation through systematic thinking and public participation. Besides the innovation in the dimension of problem-solving, service design has the potential to play an essential role in creating social impact to lead a larger scale of social change. If we regard cultural service design as a sense-making activity, performativity is important in trying to magnify the sensitivity of visitors' experience. This paper adopts an interdisciplinary approach to transfer the knowledge from performance studies to enhance the ability of cultural service in sense-making and impact-creating. This paper conducts a preliminary review in order to understand service design as a sense-making activity, whilst exploring the potential of performativity in achieving social impact. After structure analogy and case analysis, an initial meta-design framework is proposed, enlightening a set of critical stages and elements in potential applied projects.

Keywords: design performativity, cultural service, social impact, performative cultural service

Introduction

In the increasingly complex social context, service design shows its advantage in dealing with wicked problems with systematic thinking. Meanwhile, it's becoming one of the main methods in social innovation, used to solve increasingly complex social issues. In *Design, when everybody designs*, Manzini (2015) divided design activity into two dimensions: problem-solving and sense-making. Besides innovative solutions, design for social innovation also requires social impact, which can lead to a larger scale of reflection, innovation and social change, thereby promoting the development of design culture. As a sense-making activity, cultural service design demonstrates its potential by fostering open participation, dialogue triggering, and relationship rebuilding. Cultural services could be a strategic approach in leading and promoting social communication, as well as the exploration of new possibilities from paradoxes in social reality.

If we regard cultural service design as a sense-making activity, the role of performativity is to magnify sensitivity for visitors to understand through interactive narratives (Figure 1), or making them become either witnesses or participants in the process of change. For example, Dialogue in the Dark is one of the world's most exciting life-changing experiences, where visitors are guided by blind guides in absolute darkness. Visitors are pushed out of their comfort zone into a world without pictures. Thus, a role reversal is created, whereby the sighted become blind and the blind gain sight. This experience generates empathy and advances social inclusion.



Figure 1: The relationship between cultural service and performative strategies

The nature of performance indicates its potential to achieve empathy, foster psychological cure, and provoke reflection through changing the role and perspective of spectators. It also suggests an intuitive way to communicate and demonstrate the tension between different elements

and stakeholders. Meanwhile cultural services like museums, serve as a medium to connect people and communities. This ensures innovation in terms of time continuity, and thus generates a more significant impact. This paper presents an attempt to introduce knowledge from performance studies into the field of service design, and propose “performative cultural service” as a new concept.

The research question that arises is how to improve performativity and achieve optimal social impacts in cultural services, when informing the process with sense-making? Through analogy and case analysis, this paper attempts to propose a meta-design framework, underlining the aspects and steps to increase performativity, to support research and projects in related fields.

This paper is structured as followed. First, the authors give an overview of sense-making and explore the possibility that service can be viewed as a meaning bearer or transmission channel. The second part is about the potential of performativity in producing social impact. Third, the structure of a performative cultural service will be proposed through analogy. Finally, the meta-design framework will be established through case study, together with directions to develop relevant design strategies.

Service design as a sense-making activity

Service design could be regarded as a sense-making activity from two perspectives. The first relies on the function of systematic coordination to achieve common shared recognition; the second refers to services aiming to create a meaningful experience, like relational services and cultural services.

From the lens of service design, sense-making is "a motivated, continuous effort to understand connections, to anticipate users' trajectories and act effectively" (Klein et al., 2006). As stated by Mager & Sung (2011), service design coordinates processes, systems, and practices through a holistic understanding of the system and different actors and influential factors within the system. According to Meroni & Sangiorgi (2016), service design is a co-creation process aimed at achieving better experience or mobilizing energies for change through involving different actors and integrating their expertise, with the user as a resource, and the designer as facilitator or provoker. Therefore, service designers also play the role of coordinator in systematic sense-making.

Meanwhile, services for creating meaningful experiences are pervasive, like relational service (Cipolla & Manzini, 2009), service design for collaborative communities (Jegou & Manzini, 2009), and cultural services like service in a museum. Maines (2000) stated that sense-making in service design is a social construction of meaning, that developed during social interactions, especially face-to-face service encounters. According to Kolko (2010), sense-making in design synthesis is "an action-oriented process that people automatically go through to integrate experiences into their understanding of the world around them."

Dennington (2017) states that service design could serve as a cultural intermediary, translating socio-cultural phenomena into a meaningful experience through "Triple Semantic Transformation". This entails translating and giving meaning to the identified socio-cultural trend, then transforming it into a service concept, and finally into details of the service. However, the particulars are lost in transmission, making the framework impractical.

According to De Jaegher & Di Paolo (2007), meaning is generated through social interaction and enactive experiences which matter to the subject. They defined participatory sense-making as "the coordination of intentional activity in interaction, whereby individual sense-making processes are affected and new domains of social sense-making can be generated that were not available to each individual on her own".

The definition indicates that it is not the lack of expressiveness that undermines sense-making, but the ongoing engagement that has unhinged the process. So they introduced the concept "coordination" - patterned behavior such as synchronization, mirroring, anticipation and imitation, to connect temporal aspects of interaction and their consequences for joint and individual sense-making. Therefore, sense-making in service design is mainly addressed in shared meaning and value individually and collaboratively through coordinating the expressiveness and temporal aspects.

As an interactive and intuitive language, performativity coordinates all the elements systematically, from the physical environment to human senses, from the narrative to emotional resonance, to achieve an optimized and impactful experience. Therefore, the transformation of performance knowledge into cultural service design deserves our concern.

Performativity as a design strategy to create social impact

Performativity, as first defined by Austin (1975) in his book *How to do Things With Words*, is the capacity of communication to act or to consummate an action, a language that effects change in the world and functions as a form of social action.

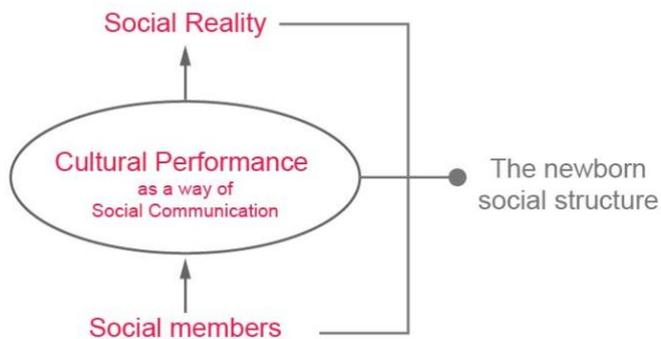


Figure 2: The social function of performance

The social function of performativity has been widely discussed (Bauman, 1984; Phillipson, 1972; Singe, 1955), suggesting that social reality can be constructed and communicated among social members through social communication (Figure 2). As a way of social communication, according to Bauman (1984), performance has a quality of reflexivity, as it can provide a situation that enables one to enter the other's attitude and experience and start to look at itself from the other's perspective. Therefore performativity could enhance one's self-awareness and social identity.

The performative experience is a process-based approach, where enhancing performativity may not necessarily mean increased functionality, but aims to create more meaningful and memorable experiences (Van Doorn et al., 2005). Dixon (1999) stated that performance could involve audiences in virtual world experiences that they can't have but which can be simulated. The magic of a performative experience is that we may not change the social reality by individual effort, but it can provide space for us to explore, discuss, or even try alternatives. Thus, when we come back to reality, we may start to think in a new perspective, to reflect and gain more inspiration and strength to change.

These experiences increase the possibility of applying the knowledge of performance study to service design, and proposing the concept of "performative cultural service." Cultural service experience could be

designed in a more performative and immersive way, to create social impact and to promote social inclusion and social innovation.

Kester (2014) pointed out that the performative approach is a context provider rather than a content provider. With the symbolic context, as Singer (1955) stated, the focus of the performative experience is role-playing, which creates an expressive concept and an interpretable interpretation of performance. Csikszentmihalyi (1991) noted that an optimal experience is not so much the result of finishing a task but more about being immersed and engaged in the process of performing the task. While Davis (1995) argued that the experience is like performing in an interactive drama, immersing in self-reflection through performing, rather than just watching. To conclude, the performative experience could be regarded as a co-produced process, where designers strive to create a context where users' thoughts and attempts could be amplified and integrate harmoniously with those experiences. Users could have their own interpretations as an echo during the encounter, and achieve multiple narratives, associations, and meanings during the interactions.

To design a performative experience, Van Doorn et al. (2005) proposed a feasible direction that connected behaviour and environment. In *The presentation of self in everyday life*, Goffman (1978) metaphorized daily life behaviour into performance, and stated that people follow culturally specified social scripts that influence each other. While Van Doorn et al. (2005) argued that if people behave according to social scripts, we may succeed in codifying the environment to support people in carrying out these scripts or performing their daily life. In this research, the authors attempt to include more diverse elements to formulate a comprehensive view of performative services.

Methodology: framing the structure of performative service

To understand in which aspects can service design intervene to achieve performativity, this research starts with identifying the structure of performative services. Service and performance are closely associated and service itself has been widely described as "performance". Fisk & Grove (1992) proposed a theatre framework for service experience with metaphor, in which service personnel as actors, the service setting as the stage, products as props, and the business process as the script. So we may formulate the structure of performative service through analogizing it to a performance structure, with questioning how to coordinate all the

different elements in cultural services to generate performative experience. Therefore, the sense-making mechanism of performance is required to identify.

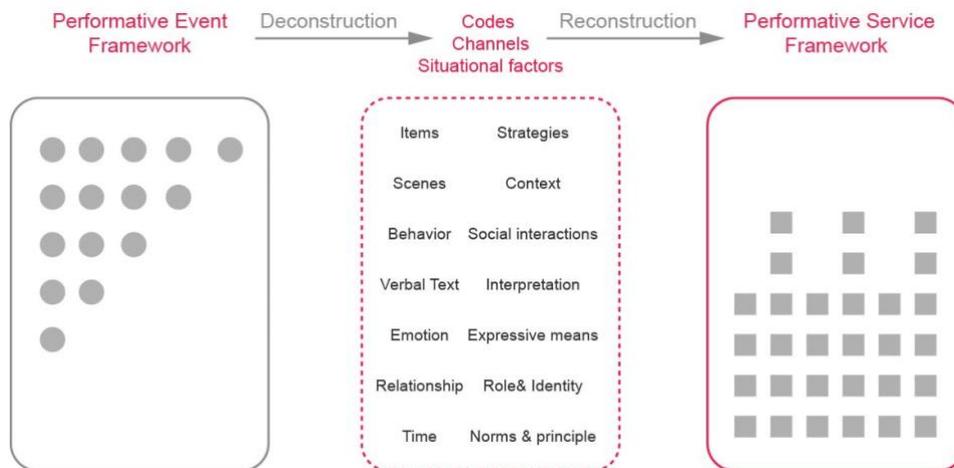


Figure 3: Hypothesis: analogy to frame the structure of performative service

According to Bauman (1984), performative events are used to accomplish large-scale communication through a variety of codes and channels, in which the shared part is called "shin in the frame of experience." The structure of a performance is the product of a systematic interaction of various situational factors, including but not limited to: the identity and role of the participants; the expressive means used in the performance; the basic principles of social interaction, norms, strategies for performance, and standards for interpreting and evaluating performance; and a series of actions that form the context of the incident. If we regard performance as a framework of social communication among specific communities, we may reconstruct the communicative framework of a service through analogy, so as to enhance its ability in sense-making (Figure 3).

In *The structure and the deconstruction of drama*, Huizhu (2006) divided the structure of drama into two layers: Theatrical layer with physical setting and Narrative layer for story-telling. In this research, the concept of performative culture service is proposed to produce social impact. Therefore, the third layer Social Impact is added to the primary analogy structure (Figure 4). The performative experience is co-created, where writers (designers and institutions) create a context to support readers' own sense-making and provide different storylines or possibilities for

readers to explore, while readers (users or visitors) interact with narrative to create their personal experience and story.

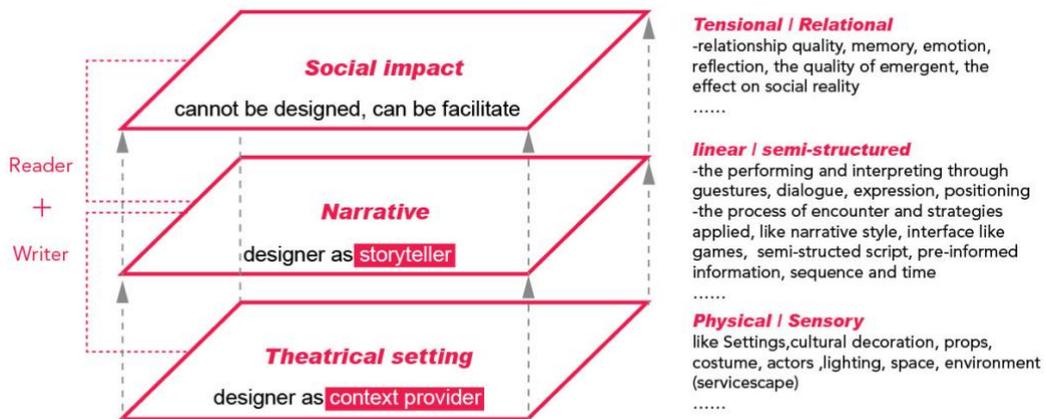


Figure 4: The structure of performative service for social impact

Since services are processual, the various performative elements blend throughout a service delivery to create its performance. According to the time sequence, a performative experience could be divided into three stages: Context, Process, and Catharsis (Figure 5). With this in mind, we could build a matrix dominated by three layers and three stages, so as to figure out the elements or factors that could be the carrier of performativity, as well as the corresponding design strategies.

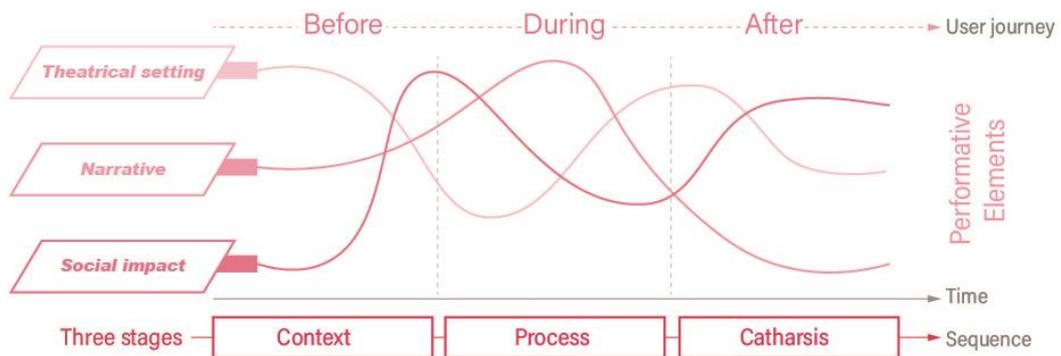


Figure 5: Three stages of performative cultural service

In order to identify potential parameters in performative experience, this research analyzed 23 relevant cases to refine the framework. including :

- Four cultural services for social innovation: Conflict Kitchen, Far-Near, Pragulic, Lodge a Student at Home;
- Two performative exhibitions: “sensitive environment” series curated by Studio Azzurro, Tra 100 anni al museo;
- Three performative events/workshops: Essere Storie, Avatar Tales, Biblioteca Vivente;
- Nine performative museums: Tenement Museum, Billy Graham Museum, Head-Smashed-In Buffalo Jump, Chinatown History Museum, Museum of Tolerance, Skansen Museum, Wali Local Museum, Casa Batllo, Palace Museum
- Two applied theatre productions: Forum Theater, “Impression” series directed by Yimou Zhang
- Three performative experiences: Heineken Experience, Hamburg Dungeon, Dialogue in the Dark

All these cases are related to performativity, and most of them could be regarded as an attempt at social innovation. Through analyzing these cases (Figure 6) in the first step, the authors listed the performative parameters in each case and the corresponding performative strategies. In the second step, the elements or parameters for design intervention were identified through abstraction and synthesis. In the third step, all the elements were sorted by the three layers, theatrical setting, narrative and social impact. After mapping all the elements, a matrix was built as the initial meta-design framework.

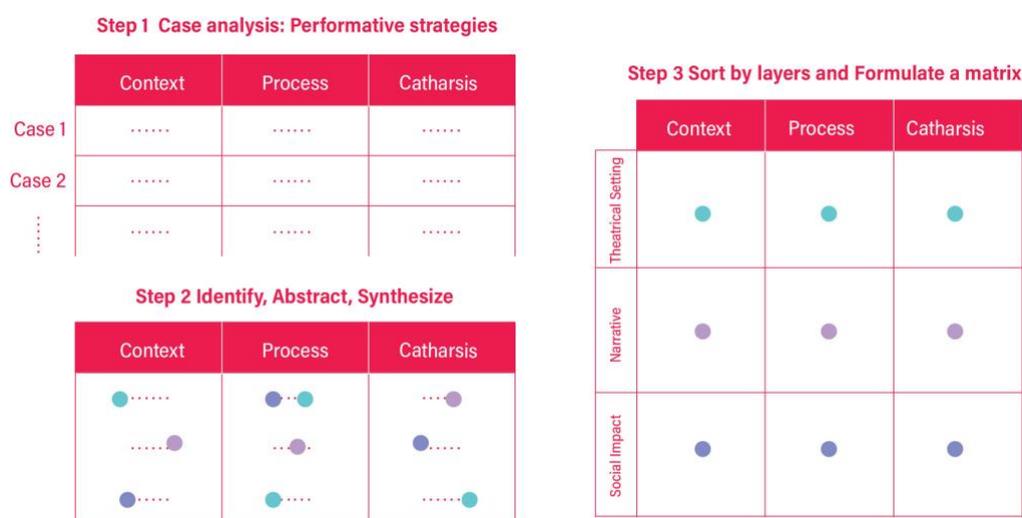


Figure 6: Case study to develop the initial meta-design framework

Proposing an initial meta-design framework

The initial meta-design framework was proposed to provide an overall perspective on the design of performative cultural service for social innovation, through illustrating the aspects and elements that need to be concerned in practice. Through literature review, structure analogy was conceived as a hypothetical direction to bridge two disciplines: performance studies and service design. Based on analogy and case study, this paper presents a theoretical framework (Figure 7) with three layers and three stages, to enhance the performativity and social impact of cultural service.

However, as we mentioned before, a performative experience is a co-produced process, so it can't and shouldn't be designed fully. It would be a process of losing control or letting it go, when the design material becomes more abstract while time moves forward. Just as Murray (2017) stated, to create natural and memorable experiences, a balance is required between the freedom to interact when we perform and the structure that is imposed on us by our environment. Well-designed interactive narratives carefully balance these two views, to leave room for users own imagination, reinterpretation, and contribution.

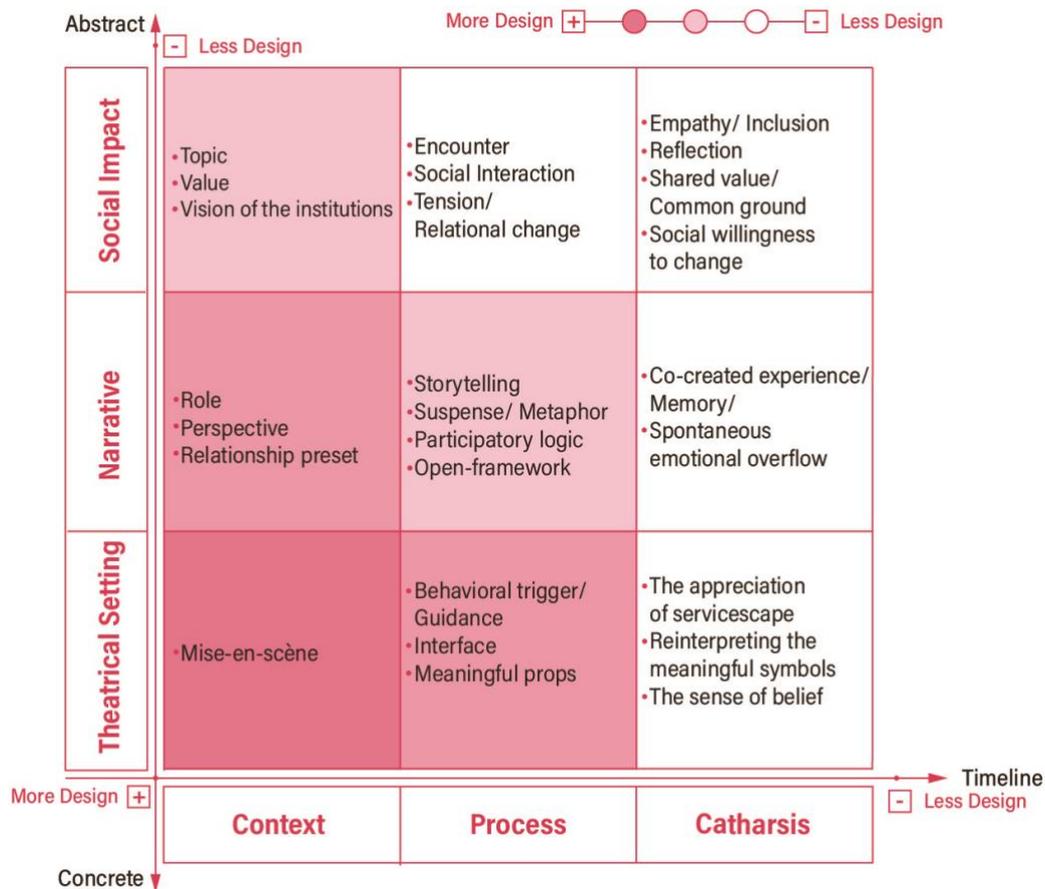


Figure 7: initial meta-design framework

In the initial meta-design framework, there are three stages if we deconstruct a performative experience: Context, Process, and Catharsis (Figure 7).

- **Context:** It serves as the base for the performative interpretation, including mise-en-scène, like settings, time and space, sound and lights and atmosphere, which could provoke emotion and lead users into the scene. In the layer of context, the role and perspective of visitors will also provide the starting point of narratives. With the same scene, but with different roles or perspectives highlighted, a drama would achieve different effects, focuses, and interpretations. For example, in "The Holocaust Section" of The Museum of Tolerance (Figure 8), visitors receive tickets with different pictures of Jewish children on them as a passport. The condition of the child will be updated throughout the museum tour, until at the end of the tour, whether the child survived

or died will be revealed. The technique from the third perspective to the first perspective has been used to turn visitors into witnesses or one part of history, which creates empathy and emotional impact. In this layer, the designer is a context provider who creates a context that supports story making and will create a lasting and memorable experience in the minds of the people who visit it.



Figure 8: The Museum of Tolerance

- Process: The storyline slowly unfolds in the second layer, leading visitors to become immersed in the whole process gradually with suspense and hints, and this sense is co-created by designers and visitors. The core purpose of this layer is to reconcile "narrative" and "interactive," that is, the contradiction between the linearity of reconciling narrative and the nonlinearity of participants. Narrative meaning is the product of top-down planning by designers, and interactivity requires user input from the bottom up. To achieve this reconciliation, a balance is required between an imposed structure and the freedom to perform.
- Catharsis: The first two stages can be designed in advance, while the relation, reflection and emotion in the third layer are improvised and cannot be designed but must be facilitated through controllable parameters in the first two stages. As a successful performance is co-created by designer and visitor, the emotion and the "performance" of an audience becomes spontaneous overflow, something that designers cannot design or control. They can only facilitate the process and let it unfold.

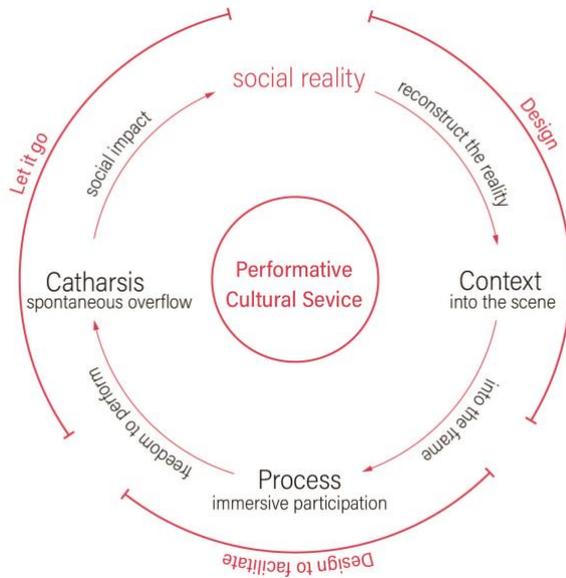


Figure 9: How performative cultural service promotes social change

The three stages could also be organized circularly (Figure 9), to demonstrate how could a cultural performative service smooth the process of social cohesion: reconstruct reality, lead visitors into the frame, give freedom to perform, and create social impact.

Discussion

The initial framework for this approach hasn't been tested, and could benefit from further refining with a more elaborated case study and expert interview. Moreover, performative strategies summed up during the case study are not present in this paper due to word limits. For example, regarding to the parameter "role and perspective" in Context layer, The Museum of Tolerance used a strategy called "from the third to the first perspective". Besides that, we summarized more strategies about "role and perspective" from other cases, including: "mutual conversion between macro and micro"(from community to individual, from history to this moment), "from reality to imagination", "from the perspective of living to the perspective of watching drama". All the strategies are redesigned and transformed into a toolkit, which will be tested together with the framework in co-creation workshops and in a real project.

Two issues could be explored further in the future. The first is how to design digital performativity with ICT, while the second is the issue of authenticity and ethics when performative cultural services are applied to museums.

Conclusion

The aim of this research was to investigate the possibility of applying the knowledge from performance studies to service design, so as to improve its ability in sense-making and social impact-creating. This research attempted to contribute an initial meta-framework, with a set of key stages and elements enlightened, to promote the relevant research, and bring inspiration to the actual design activities.

References

- Austin, J. L. (1975). *How to do things with words*. Oxford, UK: Oxford University Press.
- Bauman, R. (1984). *Verbal art as performance*. Long Grove, US: Waveland Press.
- Cipolla, C., & Manzini, E. (2009). Relational services. *Knowledge, technology & policy*, 22(1), 45-50.
- Csikszentmihalyi, M. (1991). *Flow: The psychology of optimal experience* (Vol. 41). New York, US: HarperPerennial.
- Davis, T. C. (1995). Performing and the real thing in the postmodern museum. *The Drama Review* (1988-), 39(3), 15-40.
- De Jaegher, H., & Di Paolo, E. (2007). Participatory sense-making. *Phenomenology and the cognitive sciences*, 6(4), 485-507. DOI: 10.1007/s11097-007-9076-9
- Dennington, C. (2017). Service design as a cultural intermediary. *Translating cultural phenomena into services*. *The Design Journal*, 20(sup1), S600-S613. DOI: 10.1080/14606925.2017.1353008
- Dixon, S. (1999). Digits, discourse, and documentation: performance research and hypermedia. *The Drama Review*, 43(1), 152-175. <https://doi.org/10.1162/105420499320582213>

- Goffman, E. (1978). *The presentation of self in everyday life*. London: Harmondsworth.
- Bochner, S. (1996, November). *Mentoring in higher education: Issues to be addressed in developing a mentoring program*.
- Grove, S. J., & Fisk, R. P. (1992, October). *The service experience as theater*. Paper presented at the 19th Annual Conference of The Association for Consumer Research, America. Retrieved from <http://www.acrwebsite.org/search/view-conference-proceedings.aspx?Id=7341>
- Huizhu, S. (2006). *The structure and deconstruction of drama: Narrative Structure and Theater Structure (Vol. 5)*. Taiwan: Shulin Publishing Co. Ltd.
- Jégou, F., & Manzini, E. (2008). *Collaborative services. Social Innovation and Design for Sustainability (Vol. 1)*. Milan, Italy: Polidesign.
- Kester, G. H. (2004). *Conversation pieces: Community and Communication in Modern Art*. Berkeley, US: University of California Press.
- Klein, G., Moon, B., & Hoffman, R. (2006). *Making Sense of Sensemaking 1: Alternative Perspectives*. *Intelligent Systems* , 21(4), 71. DOI: 10.1109/MIS.2006.75
- Kolko, J. (2010). *Sensemaking and framing: A theoretical reflection on perspective in design synthesis*. Paper presented at the Design Research Society (DRS) international conference *Design & Complexity*, Canada. Retrieved from <http://www.drs2010.umontreal.ca/data/PDF/067.pdf>
- Mager, B., & Sung, T. J. D. (2011). *Special issue editorial: Designing for services*. *International Journal of Design*, 5(2), 1-3.
- Maines, D.R. (2000). *The social construction of meaning*. *Contemporary Sociology*, 29(4), 577-584. DOI: 10.2307/2654557
- Manzini, E. (2015). *Design, when everybody designs: An Introduction to Design for Social Innovation*. Cambridge, US: MIT press.
- Meroni, A., & Sangiorgi, D. (2016). *Design for services*. London, UK: Routledge. <https://doi.org/10.4324/9781315576657>

- Murray, J. H. (2017). *Hamlet on the holodeck: The future of narrative in cyberspace*. Cambridge, US: MIT press.
- Phillipson, M. (1972). Phenomenological philosophy and sociology. *New directions in sociological inquiry*, 119-164.
- Singer, M. (1955). The cultural pattern of Indian civilization: A preliminary report of a methodological field study. *The Journal of Asian Studies*, 15(1), 23-36. <https://doi.org/10.2307/2942100>
- Van Doorn, M., van Loenen, E., & de Vries, A. (2007). Performing in ambient narratives: supporting everyday life performances with technology. *The Drama Review*, 51(4), 68-79