CAN DESIGN HELP IMPROVE THE PROVISION OF CARE?

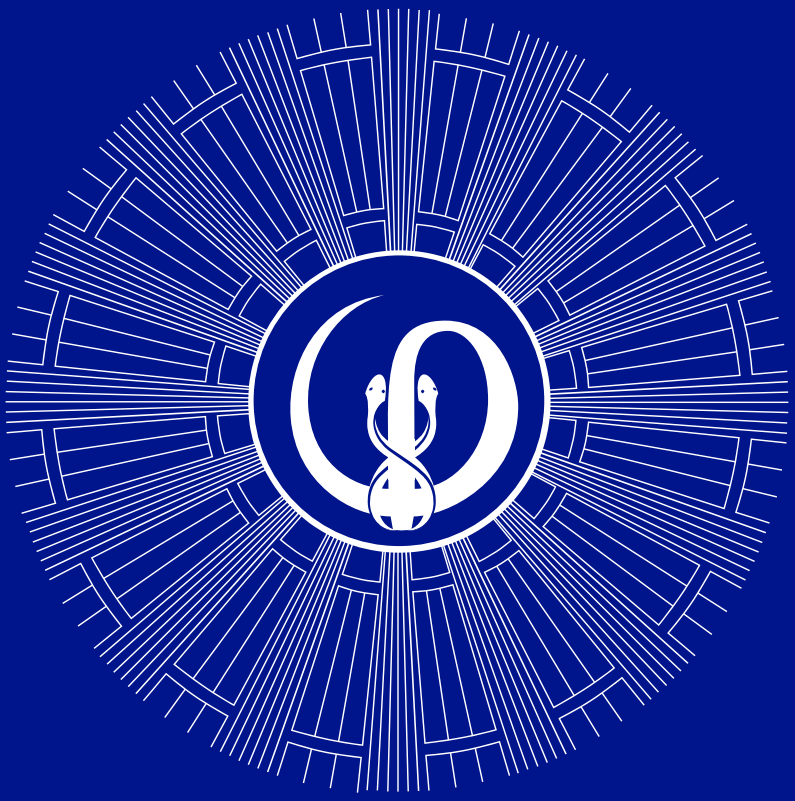
THE CONCEPT OF PROOF OF CARE

• Human and social sciences can no longer be defined by solely theoretical approaches. □Proof of concept is a demonstration of feasibility, a type of experimental implementation.

• The purpose is to humanize proof concepts, rediscover design historiography and methodologies, and integrate experiments into hospital infrastructures.

• What are the ethics of design?

Keywords: design; ethics; experiment; methodology; proof of care; vulnerability



In 2016, the Chair of Philosophy at the Hospital (University Hospital Group – GHU – Paris Psychiatry and Neurosciences – Conservatoire des Arts et Métiers – CNAM) created a socio-therapeutic mechanism bringing together the scientific humanities and the world of health and healthcare, called French Care. This ecosystem is built around three dynamics: the first two stem from the classic environment of university chairs: teaching and research, or training and diploma delivery. The third aspect refers to creation and experimentation. Today, human and social sciences can no longer be defined by solely theoretical approaches. It is important to co-create solutions and prove their relevance using in situ prototyping, proofs of concept (POC) or even proofs of care® to test observations generated by teaching and research activities and deploy them at more significant levels in direct collaboration with care teams.

HUMANIZING THE PROOF OF CONCEPT

• **A proof of concept is a demonstration of feasibility**, a form of experimental achievement. It is frugal, agile, short-lived, and created in situ with stakeholders of the experiment in order to test a technical, organizational, ergonomic, aesthetic (or other) solution. It stems from a design approach (but it is also relevant to industry). It comes right after the co-creation phase, as far upstream as possible in the development process of a new prototype (for organizational services, space, etc.) or of an innovative strategy for the purposes of testing with a view to future deployment. These full-scale experiments allow us to confront ideas with reality by testing the appetence of relevant users in the environments involved. This experimental phase at level 1 provides a quick, better understanding of routine mechanisms and reveals potential essential technical, organizational, or management constraints or opportunities. Involving users in the process is meaningful since it makes them actors in the development that continues through iterations and, ultimately, facilitates their subsequent participation.

• **Based on the observation that POCs lacked a humanistic dimension**, the concept of proof of care® was defined to limit them to experiments primarily aimed at empowering concerned actors and generating positive externalities (non-financial, positive impacts) to the greatest possible extent. Materializing these proofs of care® could be achieved by specifically involving the most vulnerable actors and prioritizing the treatment of the most critical situations (human, environmental, economic, etc.) of a system that needs improvement. This is not about taking a caricatured approach; it is about putting in perspective the various ways in which such vulnerability can be expressed, and the potential outlook that we can deduce from it.

• **The ethics of care** (Donald Woods Winnicott[1], Carol Gilligan[2], Joan Tronto[3], etc.) described the impossibility of restricting care to the world of health. "Taking care" is a global action. When coupled with design, it is based on the perspective of the "vulnerable" as a pillar of its approach to conceptualization. Since the creation of design in its humanistic version (William Morris, 1877-1878), Morris never ceased to integrate into his practice the dimension of the chronic fragility of (individual, social, political, and natural) environments. Exploring design historiography and methodologies allows the scientific humanities to prototype their theoretical questioning and solutions, to take into account the agency of stakeholders, to avoid disconnecting the

1 Winnicott DW. *Psychose et soins maternels*. In: *De la pédiatrie à la psychanalyse*. Paris: Payot Rivages; 1989.
2 Gilligan C. *Une voix différente. Pour une éthique du care*. Paris: Flammarion; 1986.
3 Tronto J. *Un monde vulnérable. Pour une politique du care*. Paris: La Découverte; 2009.

"doing" from the "thinking," and to integrate the question of the body and of bodies in the understanding of a problem as well as its resolution. This proves particularly relevant in a health environment where the body (disease, disability, old-age dependency, cognitive impairment, etc.) is compromised in its obviousness.

REDISCOVERING THE HISTORIOGRAPHY AND METHODOLOGIES OF DESIGN

Within the 'Design with Care' seminar organized by CNAM in collaboration with the Chair of Humanities and Health, we must understand that this is not about writing the history of design: it is about identifying in this historiography the evidence and common threads in practices from which the notion of design with care can take inspiration.

• Therefore, we can identify three interpretations of the term design, matching three historical moments:
– **Florence, *Quattrocento* (15th century)** where design is defined as a plan or methodology of approach, while in architecture, approach and completion are split.
– **London, 1851** (World's Fair) when design is defined as industrial creation, and craftmanship and manual labor are traded for industrial production processes that represent the notion of progress.
– **United Kingdom, end of 19th century**, when design is defined through the Arts and Crafts movement as generating equality in society and resisting mass production and consumption.

• **In other words, from the 1870s until today,** design, through the great movements that marked its history (Arts and Crafts, Art Nouveau, Bauhaus, Streamline, The French Union of Modern Artists [*Union des artistes modernes – UAM*], *Formes Utiles* the Ulm School, alternative or global design, the digital revolution, ethical design, etc.) has been confronted with numerous issues that form the core of interrogation of political and moral philosophy. To name but a few examples, let us recall the questioning around the notion of experience (John Dewey[4]) and its extinction, particularly after the tragedy and traumas of the First World War (Walter Benjamin[5]; Giorgio Agamben[6]; the critique of technique and scientific progress (from Martin Heidegger[7] to Bernard Stiegler[8]), that of its sustainability (Jared Mason Diamond[9]), the question of building a common world and of the stabilizing function of objects in human life (Hannah Arendt[10]); the question of engagement, responsibility, and empowerment of the subject (from Vladimir Jankélévitch[11] to Amartya Kumar Sen[12]); the question of the manner of existence of technical objects (Gilbert Simondon[13] all the way to hyper-objects (Timothy Bloxam Morton[14]), etc.

Let us not forget the more structural questioning of design regarding innovation, its link with daily life and industrial standardization, its confrontation with the constraints of an environment, the question of nego-

4 Dewey J. *Experience and education*. New York: Touchstone; 1997.
5 Benjamin W. *Expérience et pauvreté*. Paris: Payot; 2011.
6 Agamben G. *Enfance et histoire : destruction de l'expérience et origine de l'histoire*. Paris: Payot & Rivages; 2001.
7 Heidegger M. *La question de la technique (1949)*. In: *Essais et conférences*. Paris: Gallimard: 1958.
8 Stiegler B. *La technique et le temps*. Paris: Galilée; 1994.
9 Diamond J. *Effondrement*. Paris: Folio essais; 2005.
10 Arendt H. *Condition de l'homme moderne*. Paris: Pocket; 2002.
11 Jankélévitch V. *Traité des vertus*. Paris: Flammarion; 1947.
12 Sen A. *Commodities and Capabilities*. Oxford: OUP India; 1999.
13 Simondon G. *Du mode d'existence des objets techniques*. Paris: Aubier- Montaigne; 1958.
14 Morton T. *Hyperobjects. Philosophy and Ecology After the End of the World*. Minneapolis: University Of Minnesota Press; 2013.

tiation, particularly with capitalism (Is design an accomplice of the "management of the superfluous" which creates trivial needs to dispose of overproduction, or conversely, is design part of an effort to "declutter" the world and make it more livable? Pierre-Damien Huyghe[15]), the question of creativity, the interaction between usage and ownership, the notion of forms of life, of how the world is used, allowing us to invent a quality level of presence in the world, etc.

• **The seminar tried to question the following change of paradigm**: could we replace the rationalist, commanding management style that invaded areas such as public service institutions, companies, and environment with a model of attention and caretaking? And if we did that, what would be its contribution to the institution and industrial organization and strategy? Like the ethics of care, design can focus its approach on the generativity of the vulnerable. In other words, how can we reverse the hyper-constraints of an environment that aims at ability reinforcement for concerned individuals? Design is in a position of permanent negotiation with what history imposes, by serving it (capitalism), undergoing it (wars), and trying to influence it (critical design), as well as in its daily work to reconcile convictions with constraints in order to provide for its needs.

Whatever its shortcomings and doubts, at every significant period, design returns to its roots: focus on the human being, intimacy between oneself and others, attention to the global environment, and its ability to represent "preferable," influential worlds.

A POC IN THE EMERGENCY ROOM

• **Integrating experiments into the heart of hospital structures** is a way of renewing their operations by involving stakeholders as much as possible. The Chair of Philosophy at the Hospital, the design agency Les Sismo, and the National Solidarity Fund for Autonomy (*Caisse nationale de solidarité pour l'autonomie;* CNSA) have submitted a project focusing on POC and *proof of care*® within the emergency rooms of three hospitals; this project will be launched during the first semester of 2019. A critical contact point between city and hospital, emergency rooms are facing continuous traffic increases. This growing use is a result not only of an aging population and the increase of chronic diseases, but also of the patients' need for immediate care, inadequate guidance, and the lack of alternative options. Emergency room operation is periodically the object of reports and reform proposals with respect to upstream and downstream congestion.

• **Beyond operational challenges**, we must examine the patients' specific experience in the emergency room to improve the quality of their care journey. This is even more important since some patients, such as people with disabilities and seniors who have lost their autonomy need specific care. For instance, when they come to the emergency room, the elderly undergo one-third more exams, remain in the E.R. two times longer, on average, and are 2.6 times more likely to be hospi-

Regardless of its shortcomings and doubts, at every significant period, design returns to its roots: focus on the human being.

15 Huyghe PD. *À quoi tient le design*. Saint-Vincent-de- Mercuze: De l'incidence éditeur; 2014.

talized than the rest of the population[16]. These critical issues call for an approach through design centered on users' journeys and experiences, with the aim of proposing and testing rapidly deployable solutions.

The Chair of Philosophy at the Hospital and the design agency Les Sismo intend to rethink emergency rooms for patients with disabilities and the elderly with loss of autonomy, by developing solutions pertaining to the management of waiting time, patient experience, coordination with city healthcare and hospital services, follow-up at discharge, tools available to healthcare providers, appreciation of caretakers' role, and constructive solidarity tools common to all actors in this environment, to cite some examples.

• **In view of their critical situation**, hospital emergency rooms and unscheduled care are periodically the subject of reform proposals. A report by French legislator Thomas Mesnier[17] suggests practical avenues for the upstream organization of unscheduled care: set up the unscheduled care response nationwide, extend per-day medical regulations to guide demand to the appropriate service; inform people about the care journey, make medical time available, and develop homecare to streamline the organization's operations.

• In 2017, the Senate called attention to the key issue of downstream solutions, in particular with regard to the elderly or those who have lost autonomy: "All department heads and practitioners interviewed by your surveyors indicated the issue of downstream solutions *for emergency care as the major difficulty in their daily practice. This pertains to several problems, such as accessibility to hospital technical services, shortage of beds in specialized services, and lack of space in non-hospital care facilities (primarily for seniors or persons with disabilities)."*[18]

The Senate Committee on Social Affairs had opted for a pragmatic, on-site approach allowing the implementation of a design strategy: *"Emergency room reform requires major organizational and structural choices for our healthcare system. These decisions must be made within the next few years. Considering that this aspect was beyond the scope of our work, we have chosen an on-site approach to propose twenty concrete solutions anchored in the daily practice of healthcare providers which can be implemented in the short term."*[19]

• **Three Paris hospitals are potential participants in this project**: they can open the doors of their emergency services for ethnographic observations and interviews, participate in a workshop for co-designing new mechanisms and host all or part of the POCs: Georges-Pompidou European hospital (APHP, Paris public hospitals), Hôtel-Dieu hospital (APHP), and Sainte-Anne GHU (French university hospitals). Several POCs can be implemented, including admission, links with ambulatory medicine, the role of patients in the emergency room (civic service, patient associations, volunteers, expert patients, etc.), setting up a specific application for wait time management, etc.).

16 Direction de la recherche, des études, de l'évaluation et des statistiques (Drees). *Les personnes âgées aux urgences : une patientèle au profil particulier. Études et résultats*. 2017; 1007. https:// drees.solidarites-sante.gouv.fr/ IMG/pdf/er1007.pdf

17 Drees. *Les personnes âgées aux urgences : une santé plus fragile nécessitant une prise en charge plus longue. Études et résultats*. 2017; 1008. https:// drees.solidarites-sante.gouv.fr/ IMG/pdf/er1008.pdf

18 Mesnier T. *Assurer le premier accès aux soins. Organiser les soins non programmés dans les territoires*. Mai 2018. https://solidaritessante.gouv.fr/ministere/ documentation-et-publicationsofficielles/rapports/sante/article/ rapport-assurer-le-premieracces- aux-soins-organiser-lessoins- non-programmes

19 Cohen L, Génisson C, Savary RP; *Commission des affaires sociales. Les urgences hospitalières, miroir des dysfonctionnements de notre système de santé*. Rapport d'information n° 685. Juillet 2017. https://www.senat.fr/noticerapport/ 2016/r16-685-notice. html

CONCLUSION

Creating a structured ecosystem for scientific humanities in healthcare cannot be solely defined by a theoretical approach based on teaching, research, training or delivery of diplomas. It requires a continuous exchange between theory and practice within clinical care, including through a culture of experiments allowing to verify, in real time at scale 1, any malfunctions of a system, to test alternate solutions, to generate stakeholder support, and, above all, to think based on their usage and specific profiles. In this perspective, design could prove to be a fruitful discipline in terms of creating preferable situations thanks to methodologies that are well-versed in modeling and deployment, focused on individuals and their journey and specific vulnerabilities.

The designer's responsibility expands in line with their scope of action. What are the ethics of design? The question must be asked, since design is in fashion today: sustainable design, social design, design thinking, design for organizations, institutions or public policies, service design pertaining to functional economy (e.g. not wanting a car, just mobility). These trends will allow design to address strategic and management issues in organizations more quickly, specifically those in health and healthcare. However, this will only be possible and useful if design is the object of a much more robust ethical and philosophical analysis to better survive in environments that are increasingly complex and systemic.

Statement of links of interest

Authors hereby certify having no links of interest.

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