"Let's Take Care of the Caregivers": Experience Design Strategies in Healthcare Institutions.

Géraldine Hatchuel

58—75

In this paper, we present the findings of a project "Let's take care of the caregivers", an initiative carried out during the COVID-19 health crisis. The paper highlights first, the potential of experience design to identify the empathic, emotional challenges and assaults that caregivers have to cope with, and second, its capacity to design new work solutions and strategies that improve the lives of caregivers themselves. Moreover, the project also helped to structure a research program that will be developed through an academic chair devoted to the study of experience design in relation to transdisciplinary research in the fields of ethnography, medicine and management sciences. The ambition of the chair is to change managerial practices in care institutions (hospitals, nursing homes, hospices) and its potential for performance (Borja de Mozota 2001, 2010, 2014).

#entrepreneurship

#experience design

#crisis covid-19

#organizational creativity

#double empathy

Introduction

Based on work conducted in a concrete field, this case study aims to identify the capacities of experience design to analyze, from a different perspective, the strategies and managerial practices of care institutions.

Its starting point, imposed by the crisis of COVID-19, takes place in April 2020, with the will of an experience design team led by the author to put her team and tools at the service of caregivers, through a self-given project entitled "Let's take care of the caregivers".

Experience design (Hatchuel 2018) is first and foremost a bodily, emotional and sensorial approach to lived experience. Applied to the support of strategic and managerial practices of organizations and public institutions, experience design can improve performance, relationships, products and governance.

In this paper, we analyze the findings of a project aiming to study the lived experience of caregivers in care institutions, taking into account the vectors of vision, ethics and method). Specifically, the research question of the project was: To what extent can the implementation of experience design skills, tools and culture improve managerial practices and strategies in healthcare institutions?

This study took place between March and April 2020 and involved a sample of fifteen caregivers who participated in c immersion sessions and then co-design sessions with the design team during the COVID crisis. The caregivers came from various French regions: Île-de-France, Languedoc, Auvergne Rhône-Alpes, Centre Val de Loire, and were working in different types of care institutions.

The Research Goals and Context

The global health crisis of 2020 has taken both the professional and research worlds by surprise. It challenged the capacity of design to rethink and improve work lifestyles in such challenging environments and organizations. However, the crisis impelled practitioners to commit to "knowing to do better and doing to know better" (Borja de Mozota 2014). Caregivers welcomed the idea of research-action premised upon a transdisciplinary approach, experiential solutions that they would co-construct and which would contribute to an ecosystemic and multidisciplinary redesign of care institutions. They were also willing to explore and re-design the meaning of their care mission in the midst of a pandemic. In the midst of this process, these caregivers demonstrated a great willingness to understand the sources and causes of contradictory instructions from superiors, the complex links between caregivers, their patients and their families, as well as the shocks endured in the exercise of their profession in the wake of the pandemic.

Experience Design: Focus and Hypotheses

Bodies, Emotions, And Perceptions At Work

Experience design explores, through the choreographic metaphor, the ways in which design can be a dance between several characters/stakeholders that live, feel and move in space and time, developing a perception of reality through this lived experience. By studying the situations experienced through their bodies, their sensations and their emotions, and especially in spaces like hospitals or houses for dependent seniors, we will show how experience design identifies what we call *irritants* in workspaces, sources of stimuli which are related to the organization, the flow of activity, the equipment, the modes of travel, the way back home (table 1).

Table 1: Verbatim examples focusing on body, emotions and perceptions of the caregivers and designers. *Source: author.*

Caregiver verbatim (emotional)	Caregiver verbatim (bodily)	Caregiver verbatim (perceptive)	Caregiver verbatim (emotional)	Caregiver verbatim (emotional)
I had to deal with the stress of the wave and the psychological abuse of false information when the tsunami was announced	*I am physically and verbally abused by my residents on a daily basis because they are disoriented (bitten, hit, insulted); by taking more time with them I could defuse the anxieties and the violence*	*I lose my temporal reference points, I can no longer distinguish between weekdays and weekends*	*I argue with my colleagues because no one understands the limits of each one's perimeter*	*I feel humiliated when I talk about what's wrong, I'm afraid of being seen as a wimp, of being told to change jobs*

This new perspective mobilizes a different type of empathy, in particular towards the pathologies (cognitive, physical, motor) and spatial situations that we can find in care institutions. Experience design uses also a different type of design tools: it mobilizes bodywarming /consciousness icebreakers like yoga or dance, living arts for scripting, embodiment, collective memory and to adapt and personalize solutions to the revealed environments.

Beyond Usage and Technology: Experience Design vs. Industrial Design

Experience design uses a methodological approach that moves away from standard analysis of usage, function, and efficiency as can be found in service design. Thus, it reveals new situations, unexpected problems, and opens to the discovery of new solutions (table 2).

Experience design also makes it possible to free oneself from the issues of optimization, forced digitalization and technological solutionism, traits that are common to design and innovation responses in the health sector. For example, a study[1] showed that most existing solutions are mainly technological, merely seeking to adapt to the crisis without really responding to it. Another study discussed the craze for technological responses, solutions which have little to do with the strategic and managerial issues generated by the crisis.[2]

The need to find non-technological solutions to the crisis that has been experienced and continues to be experienced by caregivers now comes to the fore. Standard innovation by design is user-oriented or focused on customer-centricity (Borja de Mozota 2007, 2012, 2015). In health fields, patient-centricity is also commonplace (Borja de Mozota 2010, 2017). In our study, we keep the *human-centricity* of innovation foregrounded by design, but we focus on the journey and experience of the caregivers themselves.

Developing Caregiver-centricity: Some Hypotheses

One of the tools proposed by experience design to forge a new approach towards care insti-

Table 2. From industrial design to experience design.
Source: author.

Type of design	Industrial design (form and function)	Experience design
Transmitter	Artist, stylist	Experience designer, facilitator of scientific and creative contributions.
Receiver	Customer	Human experiencer.
Object of embodiment of the message	Product, object	The experience, the living body, the conviviality.
Method	Design, prototyping and testing	The logic of the "gift", the double empathy, the imaginary experience scenario
Required knowledge	The style and the need	Ethnography: current experience, empathy, moments, attention span, emotional responses.
Expected results, performance	Purchasing and customer satisfaction	The surprise, the mystery, the freedom of improvisation, the imaginary stimulation, the collective.
Areas/activity	Decorative arts: furniture, tools, decoration	Pedagogy: school/museum/arts, performance/installation/device, self-engagement/body affect, city/garden, retail, jewelry, beverages, food, fragrances.

tutions is double empathy. It is based on the hypothesis that experiential care is submitted to the tension between hyper-responsibility and hyper-personalization.[3] This tension rests on the relationship between the patient or "well-treated" and the "well-treating" caregiver. Mutual empathy between both aims to change their imaginary views views towards one another and thus their practices in the process. However, in this study the designers' gaze and empathy is oriented towards the caregiver assuming that caregivers have been put under severe stress. It is this hypothesis which has led us to entitle the project "Let's Take Care of Caregivers".

Such a focus meant that we had to study the set of relationships that impact the life and activity of caregivers. The list belo describes a typology of relationships that was used as the framework for our study:

1. Caregiver - care receiver

2. Caregiver - hierarchy

3. Caregiver – patient family

4. Caregiver- caregiver family

5. Caregiver-institution

The "Let's Take Care Of Caregivers" Study: Methodology and Empirical Material

In search of caregivers' "irritating and motivating moments": an immersion method

The study was based on the immersion of the design team in care institutions, a methodology that can be seen as an ethnographic approach adopted during a severe crisis openly recognized by the institution. Our aim was to document the issues facing caregivers in such very special times. We attempted also to capture or conceive opportunities for improvement and solutions that would take advantage of this very difficult period. For us, particular attention had to be given to discovering *irritating and motivating moments*. The resulting databank of these moments was the key material for the understanding of the body, as well its emotions and perceptions that are central to experience design. The challenge of the design team was to transform these moments into creative opportunities and into change scenarios co-constructed with caregivers themselves.

Prior talks with caregivers led to a mission process that was sent to caregivers in the form of the following brief:

> We believe that empathic and immersive observation methods that have been proven in many fields to improve the experience of both field workers (handlers, counselors, researchers, biologists) and citizens who live or experience a service (patients, clients, visitors, spectators). Following the example of phenomenology, rather than prefabricated solutions, we must start from lived experiences and visualize in a synthetic and exhaustive way the list of problems that these situations generate. We wish to constitute and ennumerate the bank of motivating moments (to generate) or irritating moments (to solve) that this kind of crisis generates in the care services (institutes, hospitals, hospice, etc.) from the most macro to the most micro problems, because the devil is often hidden in the details and sometimes in the absence of observation…

> This bank of motivating and irritating moments will be synthetic, without judgement, without identification of culprits, taking into account both the functional and the emotional and in all neutrality. It will then be the basis of a collective platform for the generation of imaginative solutions.

Phase 1: Distant observation of eight to ten selected people identified and chosen on a voluntary basis, immersion and generation of a first bank structured in accordance with the moments of life or typical day of the caregiver: I welcome a patient, I provide care, I inquire about his file, I relax, I remotivate myself, I lose motivation, I feed myself...

1. Example of an irritating moment: "I cannot easily consult a patient's file because there is only one PC at the workstation"

2. Example of a motivating moment: "During my break I need to go dancing in the hospital park with my friends, at 8pm when I come back from work, I hear the applause of the city"

3. Step 1: 2h-2h30 of audio interview

4. Step 2: Compilation of photos of the situations mentioned

No violation of medical secrecy or Hippocratic oath.

Phase 2: Opening of the bank of motivating and irritating moments. Co-immersion, generalized introspection to broaden the field to the entire French caregiving population and improve the caregiving experience.

Moments are evaluated on a pain scale from zero to ten, or three stars out of five, to make a PARETO or a hierarchy of things and also to gain adhesion (in a qualitative and quantitative way)

Phase 3: A formation of a collective intelligence on a participative platform, formed to generate potential solutions to all the irritating and motivating moments of the caregiving experience,

Phase 4: Publication of a summary research report for the ARS and the director of the APHP

Due to the constrictions imposed upon us by COVID-19, we were aware of a particular methodological bias. Usually, the emergence of irritating and motivating moments is done through direct observation. Here we were obliged to ask the caregivers to describe themes. Indeed, we knew that the interviewees could have difficulties in orienting their gaze. Still the challenge was to have rich and reliable material. Thus, we developed immersion tips for the interviews adapted to special distancing conditions and pushed for highly detailed description on the part of the caregivers. The interview guide was structured as described in Table 3.

The Selected Population of Caregivers

A first discussion with several caregivers allowed us to identify the different poles, roles and panorama of healthcare institutions in the context of the COVID-19 crisis. The aim was to establish a robust and comprehensive panorama of the healthcare institutions and caregiver's situations with a limited amount of research resources. We arrived, in the selection of samples, at the necessity of taking into account at least one caregiver in each of four types: medical specialties, functional roles, type of healthcare institutions, type of care in the hospital journey of the patient. The final selected sample of caregivers that participated in the interviews are given below:

1. "The efficient emergency doctor", APHP, thirty-three years old = Baptiste

2. "The chief anesthetist", APHP, sixty years old = Jean-Do

3. "The creative pulmonologist", EPIC, thirty-one years old = Josette

4. "The clinical soldier resuscitator", sixty-five years old = Patrick

Table 3. Interview guide. *Source: author.*

Step 1: The training	How did you start being a caregiver? What is the pathway? How did it lead to the hospital?
Step 2: The job	What is his job, his function in the hospital in normal times?
Step 3: The transition	How did COVID-19 arrive? How did the transition go?
Step 4: The new positioning	#decision maker #designer #organizer #followers (it is important to detect the roles in front of us) How was the hospital redesigned? Did the person participate in this redesign? What were the moments in which important decisions were taken? => Stakes: understand the hospital redesign picture, key moments /Beware of the somewhat idyllic view in the period of the COVID-19 plateau, do not hesitate to evoke the different stages
Step 5: The steps	What is the current scenario (get into the concrete content, scan the territory sufficiently well, force them to share the mental map of the interlocutor, help them identify the corners) What service implementation? What chronological mode? Intimate mode? => Stakes: enter into the narrative, reconstruct the scenarios constituting the week's experience, the day's experience by including the intimate/personal parts, the transition with the house, the days of rest and the return from daycare. Get into the hard stuff, the concrete.
Step 6: The motivating and irritating moments	They can be organizational, emotional, relational, functional, material, ergonomic, spiritual, bodily … What was the experience as a whole? => Stakes: redesigning an experience, therefore imagining potential solutions (space design, product, service...), giving substance and flesh to the "I" type database
Step 7: Their ideal experience	Their ideal experience (get them to participate in the construction/creative posture) What is your vision of a more livable experience?
Step 8: Why Choregraphy?	Reminder of our commitment, method, our daily missions
Step 9: Ask for documentation	Interesting photos to take to document, encourage them to put their "observer / detective" magnifying glasses on by sharing other interesting photos for the study.

5. "The nurse warrior", Hôpital Mans, thirty-nine years old = Marie H

6. "The coordinating anesthetist", APHP, thirty-one years old = Élodie

7. "The benevolent trainer", EHPAD, thirty-nine years old = Marie

8. The "Infantryman Caregiver", EHPAD, forty-six years old = David

9. "The 24/24 HRD" Hospital group, thirty-nine years old = Nathalie

10. "The research intern" Emergency room APHP, twenty-four years old = Olivier

Experience Design Brief to Volunteer Designers: Data Bank on Moments of "Tension" And Moments of "Grace"

Based on the data bank that emerged we called for volunteer designers to participate during two creative days to transform this data into new opportunities and solution scenarios[4]. A few synthetic tools were developed to help designers in charge of the projects to familiarize themselves with the subject, the context and the issues at stake.

« Je m'appelle Patrick, j'ai 65 ans et je devais partir à la retraite en avril 2020 »

MON RÔLE :

> Seconder les chefs
> Passer entre 10 et 14 heures au bloc en chirurgie

Qui suis-je ?
Le réanimateur caporal
Clinique IDF, Paris

Figure 1. : Generating empathy towards designers: an example of Caregivers' experience script: "I am the good captain resuscitator." *Source: author.*

- I wake up.
- I cook my lunch, I must not forget my mask,
- I take my car, there is nobody in Paris at 7am.
- I arrive at the hospital, there are no more social distancing measures, the locker room is tiny, we brush up against each other, you are on your guard.
- I make the transmissions to the night team.
- I reassure the patients, the staff, everyone as we embark on surgery that we don't know, that we're scared to death.
- No break, lunch eaten at 5:30 pm.
- Very rigorous, no going from one service to another.
- Friday, Saturday, Sunday blocks.
- Back to the normal confinement atmosphere.
- It's the first time we risk our skin by saving. patients, it's not fair.
- Friday, Saturday, Sunday blocks.
- Dinner and a series on Netflix.
- Indoor cycling.
- 1 minute for a coffee and a salad
- The evening briefing.

1. *Ten profile cards* (figure 1): presenting the caregivers (making it possible to identify the types of caregivers who contributed to the project, their work contexts, their professions, but also part of their personality)

2. *A mapping of the world of caregivers before and during the crisis*. This map was constructed in such a way as to emphasize the diversity of contexts depending on the type of structure. This mapping will be a real support for proposing crisis anticipation solutions.

150 irritating and motivating moments were extracted from the thirty-five hours of interviews with the caregivers. This "bank of moments " is a real lever for innovation. It is by drawing on these moments *of tension and "grace"* that the designers would be able to propose new scenarios for the future. The bank was composed of:

a. *Forty-five motivating moments* concerning: collaboration, cohesion, design, development of skills, national solidarity, meaning & news of patients, families, human & material reinforcements, moments of joy & breathing, reassurance of caregivers, good treatment of caregivers

b. 116 *irritating moments* concerning: mental and emotional load, organizational instability, end of life & families, integration of new collaborators, physical fatigue & abuse, psychological fatigue & abuse, loss of meaning & disappointment, personal life & collateral stress, confined to the hospital, human shortages, lack of medical & therapeutic equipment, lack of space & cramped workstation, political crisis management, post-hospitalization, openings & post-pandemic.

Though the design sprint days were conducted by video conference bringing together designers from all over the country, the experience design method and training was key to the results. To familiarize the volunteer designers with the different profiles of the caregivers the caregiver's testimonies were transmitted in short theater sketches where the team (Adèle Hamelin, Jessica Séné, Erika Cupit, Géraldine Hatchuel) reenacted scenarios supplied by the caregivers, experiencing them in their own bodies. This allowed the designers to empathize with the caregivers and to integrate their issues. More than 500 ideas emerged and then, after being reworked, 120 concepts were born. After that, thirty ideas were generated to be finalized as experiential solutions.

Restitution to Caregivers and Design Jury: A Validating Feedback

In July 2020, a very special session was organized with the caregivers who had participated in the study and other guests from the field of care to enrich these proposals. A design jury was also invited to react to the solutions and gave positive feedback. Some examples:

Soizic Briand, head of content at the *Saint-Étienne Design Biennial*:

> *It is when everything is going wrong that we need to take the time to create a link, to transmit, to prevent, to get involved. Caregivers are asking for places to meet.*

Anne-Marie Sargueil, president of the *French Institute of Design*:

> *It's deep, it's real and the concepts are crystal clear to any citizen. We want it all to exist immediately.*

Brigitte Borja de Mozota, researcher in *Design Management,* University of Montreal:

It's a path of optimism and the work on covidialities [the meaing of this neologism will be elucidated later] in hospitals for dependent seniors seems essential to me. We can see the design purpose and the ethics of aesthetics.

In annex 1 we give also a sample of reactions from participant caregivers which are all positive and even enthusiastic about the relevance and creative power of the approach.

Taking Care of the Caregivers, What Have We Learned?

Four class of healthcare issues revealed by the study

This project based on a study of human caregivers' experience (body, emotions, sensations) as well as the thirty experiential solutions generated through this study have revealed new phenomena that can be synthesized through the tracing of four new axes of missing healthcare management practices.

Axis 1: Caregivers have to self-teach themselves how to manage their emotions as no human resource management is dedicated to caregiver career experience.

Axis 2: Emotional support given to patients could actually help alleviate caregivers' emotional stress.

Axis 3: Professional agility of caregivers, when needed, is helped by motion design of work practice and kinesthetic learning.

Axis 4: Kinesthetic (and not digital) animation of patients is key to support caregiver's presence.

In the following, we give a short presentation of each axis as well as a short list of new design solutions that emerged from the project.

Axis 1: New caregivers HR policy based on emotion and competencies development management

The main finding when studying the relationship between caregivers and their hierarchy or caregivers and human resources departments is that healthcare institutions show a lack of tools and support for helping caregivers cope with emotional assaults. Very little is done to prevent caregivers from stress, shock and tension, to help identify risk of burnout. Corresponding to this is the fact that little is done to valorize their competencies, to build up their motivation, self-satisfaction and self-confidence. Energy and commitment on the part of the caregivers is assumed to be vocational and constant and any consideration of management tools addressing these issues may be interpreted as a sign of disengagement and could lead to feelings of guilt. Caregivers are left alone to deal with the management of their own emotions. Let's remind ourselves of one chilling account, given verbatim "I feel humiliated when I talk about what's wrong, I'm afraid of being seen as a wimp, of being told to change jobs". Moreover, success or victory are not celebrated, nor is the evolution of one's career organized.

Such findings have led us to new design, we have selected a short list of four experiential solutions responding to this need for a reinvention of competency and emotion management practices.

1. **The prevention booklet** is a benevolent tracking book that allows us to structure the follow-up to the data, facilitating the management of the caregiver's activity and energy (individual and team). This data can be used for the caregiver and the manager to self-manage or manage the vitality of my team or a person and thus avoid consequences on the activity of the service: medical errors, loss of vigilance, illness...

2. **Who is it?** It is a puzzle in which each caregiver serves as a crucial piece. In the context of the crisis caregivers from different teams get to know each other better. This game play can start with self-assessment questionnaires and personal development workshops. Following this, to visualize complementarities, job cards specific to each caregiver, with the job description and affinity with other jobs are displayed, and a puzzle assembled from these.

3. **The path of victories** is a workspace art piece that make visible and valuable the chain of professionals who have worked with patients. Thanks to a mural, we can easily identify the caregivers who have been involved in the care of the patient, by mapping the caregivers in the various departments and by setting up joint projects.

4. **Club Med** and *Radio Blouse blanche* is a place of conviviality/meeting and service for caregivers in the midst of a crisis. This place allows them to live, unload, discuss, exchange, laugh together about their daily life and recreate the atmosphere of the on-call room. Services: Rooms, bar, decompression and relaxation workshop, radio show for caregivers. As caregiver said "I don't want to live this moment alone when I arrive at home, I would go and settle in a flat with friends)".

Axis 2: New tools to humanize the relationship between caregivers and patients

Another finding of this study is about how the emotional care given to a patient (or to the patient's family) is actually a source of emotional support for caregivers. When the patient (or the patient's fam-ily) is emotionally steady, the caregiver can spend more time on their medical care. Here, it would be salient to cite emotional account, recorded here verbatim "I am physically and verbally abused by my residents on a daily basis because they are disoriented (bitten, hit, insulted), by taking more time with them I could defuse the anxieties and the violence". In the context of isolation or facing the death of a parent (when the family could not see, feel, touch the degradation of their parent) we can observe, in a very stark and harsh fashion, the emotional and psychological load that is carried by the caregivers. The solutions imagined in this axis aim at the rehumanization of the relationship between caregivers and their patients, placing an emphasis upon on managing the emotional charge with extra-care *dispositifs*.

1. **Humanities cards** are some dedicated notes inside the medical file and integrated into the transcripts that allows any caregiver to be able to meet the patient as a human being. (This solution is especially needed in the context of COVID-19 crisis when patients are depersonalized without the contact and environment of the families). It is a complementary tool to discover the patient's personal aspirations, tastes and hobbies (favorite color, sport, music, dishes...) The objective is to restore meaning by encouraging links between the caregivers, the patient and the family through the discovery of one another's inclinations. It also promotes the caregiver-patient family relationships.

2. **Goodbyes** is a dedicated place inside the hospital to say goodbye to a loved one, meet with families in the same situation, spiritual leaders and psychologists through an untainted glass window. This place allows those grieving an impending loss to be present at the

moment of saying goodbye to a loved one, in the secure place (intermediate glass). Substitute objects allow us to recreate the "touch", the warmth, the voice in the hollow of the ear, to accompany the departure physically. As a sign of mourning and compassion, a system of luminous candles can be set up.

3. **The Hugging Room.** In the context of social distancing and the obligation to wear a mask, human contact has been rendered very difficult when it comes to supporting and expressing feelings towards loved ones. To be able to recreate the link between patient and their family and to facilitate the contact, "Hugging rooms" were designed to respect the barrier gestures, with large covers through which people can touch each other and cuddle.

Axis 3: New kinesthetic tools for caregiver training and daily management

On a day-to-day basis, caregivers' bodies are suffering a lot of tensions and stress (ventral decubitus in the rehabilitation room), going from room to room and ward to ward, their perceptions and, sensations are entirely thrust aside when doing their job. Although they have really physical tasks, they work every day without any preparation or warming up beforehand. Our solutions aim at looking at the body of the caregiver as a vulnerable resource that needs taking care of. Furthermore, some job trainings are transmitted in a very abstract way. In the case of rehabilitation nursing, practical and gestural transmission, these fields are in dire need of measures which could support massive and efficient training. Some solutions are:

1. **Motion-rea cards** are motion design tools to train quickly and *en masse* resuscitation nurses (or any occupation requiring complex gestures) in the midst of the pandemic. It illustrates and animates the most complex movements and practices to learn and get the learners to play with the motion-rea cards. On the field, some memos already exist, such as 'Fiche memo intubation', but they are very schematic and still practice is missing.

2. **Defoulart** is space available at all times to recharge one's batteries. It displays devices for bonding, introspection, encouraging spaces of pause in connection with oneself, with others, with nature/culture, using art therapy like space design, swing devices like hammock, massage. Any caregiver who feels the need for a break can escape from the coffee or smoking break to fulfill their body and mind especially in a time of crisis.

3. **Decompression system** is a space located at the exit of the hospital for caregivers to go back into the ordinary world through a ritual of decompression. They enter a transitional space when leaving the hospital that enables emotional and physical renewal. Also, sportive challenges can start there to go back home collectively, or playful challenges like a *ten minute spell of laughter laughter* or a *Gaga dance* in order to free them from the harshness of the day.

Axis 4: New kinesthetic and social animation for patients

In the context of patient isolation, due to social distancing or to lack of autonomy at the hospital or in the senior hospice, a recurrent issue is the urgent need for socialization. Long term residents

living at the hospice are therefore disconnected from their neighborhoods and communities (grocer, hairdresser, laundromat) to their family, family visits are less personalized and they have to reinvent a life. Very often digitalization (*iPad*) is seen as an ideal solution to entertain patients when all they require in actuality is a social and human bond. Kinesthetic and social animation, on the contrary, are what allows them to adhere to corporeal life and not plunge into resignation.

1. **Covidialities is the term we have given to** a playbox which can help to recreate the bond between the caregivers and the residents through creative, playful and corporal solicitation. To accompany the residents in this temporary change of lifestyle, it promotes physical and sensational activities (internal post, treasure hunt, exquisite cadavers, waking up to music, hanging coffee, thematic day, secret Santa). Thus, it improves living spaces, helps patients to communicate with their loved ones and promote a network of mutual aid between residents and caregivers.

2. **Rendezvous at home**, is a sensory room that allows patients to meet their families by reproducing dialogues and the heat of human presence. Multiple objects allow you to recreate the visit of your relatives and the warmth of your home (light, smell, touch). Here, you can have coffee with your grandson in hologram and play cards with him. In the evening, a lamp and comforter, allows family members to accompany the resident at night (live chat, pre-recorded messages, sharing the comforter) and consolidate family bonds.

Annex 1 gives a sample of reactions from participant caregivers to our proposals.

Discussion and conclusion: The manifesto of experience design for healthcare institutions

A few months after the "Let's take care of the caregivers" project had begun, a special meeting called *Alternative Segur* was held. In France, "Segur" is the name given to important public hearings and discussions about health policy that are organized by the government. The idea of an Alternative Segur meant that designers and caregivers involved in our study decided to put forward a new political agenda for health. This public meeting ended with the creation of a new manifesto that took the form of a poster[5] listing a series of statements (see below) about the benefits of experience design for a better future for hospitals and other health care institutions.

A commitment committee was also appointed to monitor new actions and to provide expert viewpoints to enable the team to always keep these objectives in mind.

The findings and proposals of the project "Let's take care of the caregivers", as well as the encounters held during the Alternative Health Segur was widely shared among designers and caregivers, affirming that experience design has a key role to play in rethinking our healthcare system.

1. It creates a new perspective on the care world that is open to hospitality and to mutual empathy

2. It reveals hidden deficiencies of our health institutions and calls for urgent solutions that can help professionals to improve their emotional and sensitive experience at work.

For sure, our project offers only small steps that indicate the direction for innovation and change.

There is a clear need to launch larger studies as well as testing several new solutions with caregivers. This has led us to launch a research chair with Paris-Saclay University devoted to the study of caregivers' experience on a large scale and scope. The findings of our project have become the ground for further research and healthcare policy.

The benefits of an experience design Segur for a real hospital future

1. Seeing a creative assembly made up of 80% female designers (not consultants)

2. Not having to wonder if caregivers were consulted

3. Not having to look for the concrete life solution behind a directive

4. To have the hope that double empathy will enter the hospital and infuse its policies in our lifetime

5. Not to have to promote yet another technological platform

6. To be able to shout a loud and clear "no" to technological solutionism

7. Not to be the tree that hides the forest of equipment and remuneration

8. To try to stop the hemorrhage and the exodus of nurses

9. To address the fact that the only emotional support that caregivers can hope to receive is applause

10. To finally experience care and coexistence with the caregivers

Annex 1: Reactions and feedback from participant caregivers

Bravo and thank you in any case for this beautiful work! Your ideas are very interesting, especially the one about Radio Blues Blanches which dematerializes the on-call room. Also, having experienced it, identifying old and new collaborators in the ICU room is essential, your colored scrubs on which we can display our names, it's great.

Elodie, the anesthesiologist/resuscitator coordinator.

It was exciting! Thank you very much, thank you all for this work. The proposals appeal to the sensibility, we feel that each one of them touches something important. The crisis reporter is essential to make the human link during the crisis. The big General Assembly of the Hospitals is great! We will have to foresee a substrate of the State and the managers of the health structures, to invite them to look at the situation from the other side…

Patrick, the good captain resuscitator.

You did an amazing job! Thank you for giving your time to health… I loved the idea of the candles. Instead of counting the dead daily, a candle in the windows out of respect for the families and the people they were seems so much sweeter and dignified to me… The idea of the sound badge, the color code, the decompression lock, the apartment I think it's great, it's humane ideas, and it's exactly what the hospital needs… THANKS! I really hope that all your work will come to fruition.

Marie, the caring trainer.

The decompression chamber, we have all experienced it, and it is indispensable. The Great General Assembly of Hospitals, allowing caregivers to get together and make a unified return to the DGS and ARS, is great. Your concepts are touchingly accurate.

Myriam, pediatrician at Cochin Hospital

As an HRD, I gave a testimonial on administrative issues. In this regard, we are in a learning phase to capitalize and learn from everything that has happened during this period. Your work is very timely, it is very interesting thanks to your study to take this step aside and to model relational issues that are of the order of feeling. I noted the notion of crisis reporter: it's very interesting to design on information sharing. Internal communication is paramount, and that's one of the points you emphasize.

Nathalie, the 24-hour HRD.

I am very interested in the depth and relevance of your participative approach. It is necessary to support a process of creativity in a crisis situation, this is what you have done, and it is especially in these situations that we need to have the audacity to go further.

Delphine, head of internal communication at the University Hospital of Liege.

Bravo and thank you for this very innovative project.

Sophie, neurologist

Notes

1. "Start-ups facing the health crisis: Necessary mobilization or market opportunity? 400 disruptive initiatives in Italy, France, China and South Korea". https://www.labsante-idf.fr/focuslab-special-covid19/

2. The emergence of a critique of "band-aid" technological innovation: The Conversation article "Making handmade masks, collecting donations... Can we really call them social innovations?" https://theconversation.com/fabrication-de-masques-artisanaux-collecte-de-dons-peut-on-vraiment-parler-dinnovations-sociales-137635

3. Article by Choregraphy on Medium "Experiential care", hyper-responsibility or hyper-personalization" https://medium.com/@hello_66502/experiential-care-hyper-responsibility-or-hyper-personalization-57f6d51424c6

4. Twelve designers attended (Thaïs Dol, Marjorie Colin, Aude Omerin, Morgane Amorin, Linda Acosta, Marianne Franclet, Clara Lanthiez, Bernadette Kalaj), all of them female designers. On Tuesday 2 and Thursday 4 June 2020, they mobilized for two very intense days, during which they produced numerous ideas.

5. Poster inspired by the artists "Guerrilla girls".

Bibliography

Acklin, Claudia. *Design management absorption model: a framework to describe and measure the absorption process of design knowledge by SMEs with little or no prior design experience*. Creativity and Innovation Management, 22(2), (2013): 147-160. https://doi.org/10.1111/caim.12022.

Baxter, Helen, Mark Mugglestone, and Lynne Maher. *The EBD Approach: experience-based design: using patient and staff experience to design better healthcare services.* Adridge: Institute for Innovation and improvement National Health Service /UK, (2009).

Blum, Arina, Giselle S. A. D. Merino, and Eugenio A. D. Merino. *Design strategies in hospital pharmacy department: mapping a medication system*. Strategic Design Research Journal, 11(1), (2018): 15-20. https://doi.org/10.4013/sdrj.2018.111.03.

Borja de Mozota, Brigitte, and Bo Young Kim. *Managing design as a core competency: Lessons from Korea.* Design Management Review, 20(2), (2009): 66-76. https://doi.org/10.1111/j.1948-7169.2009.00009.x.

Borja de Mozota, Brigitte. *The Four Powers of Design: A Value Model in Design Management.* Design Management Review, 17(2), (2006-reprint 2010): 44–53. https://doi.org/10.1111/j.1948-7169.2006.tb00038.x.

Boyd, Hilary, Stephen McKernon, and Andrew Old. *Health service co-design working with patients to improve healthcare service*s. Auckland Waitemata District Health board*,* 2010.

Buchanan, Richard. *Worlds in the making: design, management, and the reform of organizational culture*. She Ji: The Journal of Design, Economics, and Innovation, 1(1), (2015): 5-21. https://doi.org/10.1016/j.sheji.2015.09.003.

Candi, Marina, and Gerda Gemser. *An agenda for research on the relationships between industrial design and performance*, International Journal of Design, 4(3), (2010): 67-77.

Coté, Valérie, Lynda Bélanger, and Caroline Gagnon. *Le design au service de l'expérience du patient*. Sciences du design, 6, (2017): 54-64. https://doi.org/10.3917/sdd.006.0054.

Cross, Nigel. *Designerly ways of knowing*. Bale Boston Berlin Birkhauser, 2007.

Dorst, Kees. *Design research: A revolution-waiting-to-happen.* Design Studies n°29, (2008): 4-11. https://doi.org/10.1016/j.destud.2007.12.001.

Dumez, Hervé, and Étienne Minvielle. *Comment le système hospitalier français a-t-il géré la crise Covid 19? Une contribution des sciences de gestion*. Palaiseau, École polytechnique, *i3-CRG-CNRS,* (2020).

Fraser, Heather M. A. *The Practice of Breakthrough Strategies by Design*. Journal of Business Strategy, 28(4), (2007): 66–74. https://doi.org/10.1108/02756660710760962.

Hatchuel, Géraldine. *Le design d'expérience : scénariser pour innover*. FYP Éditions, 2018.

Kouprie, Merlijn, and Froukje S. Visser. *A framework for empathy in design: stepping into and out of the user's life*, Journal of Engineering Design, 20(5), (2009): 437-448. https://doi.org/10.1080/09544820902875033.

Manzini, Ezio. *Design when everybody designs: an introduction to design for social innovation*. Cambridge, MA, USA. MIT Press, 2015.

Martin, Roger. *The Innovation Catalysts*. Harvard Business Review, 89, (2011): 82–87.

Micheli, Pietro, Joe Jaina, Keith Goffin, Fred Lemke, and Roberto Verganti. *Perceptions of Industrial Design: The 'Means' and the 'Ends'*. Journal of Product Innovation Management, 29(5), (2012): 687–704. Gower. https://doi.org/10.1111/j.1540-5885.2012.00937.x.

Moultrie, James, and Finbarr Livesey. *Measuring design investment in firms: conceptual foundations and exploratory*. UK survey Research Policy, 43(3), (2014): 570-587. https://doi.org/10.1016/j.respol.2013.08.005.

Moura, Mônica, Iana U. Perez, Lucas F. Melara, and José C. Magro Júnior. *Contemporary Design in Quarantine: A Critical Review of Design Responses to Covid-19 Crisis*. Strategic Design Research Journal. 13(3), (2020): 327- 341. https://doi.org/10.4013/sdrj.2020.133.03.

Veryzer, Robert W., and Brigitte Borja de Mozota. *The impact of user-oriented design on new product development: an examination of fundamental relationships.* Journal of Product Innovation Management, 22(2), (2005): 128-143. https://doi.org/10.1111/j.0737-6782.2005.00110.x.

Wrigley, Cara. *Principles and practices of a design-led approach to innovation*. International Journal of Design Creativity and Innovation, 5(3-4), (2017): 235-255. https://doi.org/10.1080/21650349.2017.1292152.

Bio

Géraldine Hatchuel is a designer and a pioneer in the field of experience design (FYP Editions 2018). She is a teacher-researcher at AgroParisTech and ENSCi where she created the first course in France on experience design originally entitled "Choregraphic storyboarding", where she develops her thinking and method involving the design of the body and emotions. Combining her background in performing arts, business/management and design, she theorizes Experience Design as a discipline for transversal practices to design narratives and business models of organizations, companies and communities using tools such as double empathy, co-immersion and co-scripting. She is also CEO at Choregraphy (1st mission-driven company) and founder of La Story Room based in Paris-Montmartre.