Sex after Cancer: Co-Designing Bespoke Care Technologies for Post-Cancer Bodies

Céline Offerman*
Industrial Design Engineering
Delft University of Technology
Delft, Netherlands
Surgical Oncology
Erasmus Medical Center
Rotterdam, Netherlands
c.e.offerman-1@tudelft.nl

Francesca Maria Mauri
Industrial Design Engineering
Delft University of Technology
Delft, Netherlands
f.m.mauri@tudelft.nl

Alessandro Bozzon
Industrial Design Engineering
Delft University of Technology
Delft, Netherlands
a.bozzon@tudelft.nl

Jacky Bourgeois
Industrial Design Engineering
Delft University of Technology
Delft, Netherlands
J.Bourgeois@tudelft.nl

Figure 1: This figure shows the two artefacts co-designed with contributors, placed on a drawing that communicates survivors' sexual experiences after cancer. On the left is the *Lived Experiences Archive* 'zine, which curates anonymous survivor stories; on the right is *BodyTalk*, a sensory game to support couples in rebuilding emotional and physical intimacy. In the image, both artefacts are depicted as being handed to the survivor and their partner.

Abstract

Cancer treatment leaves survivors with sexual difficulties that extend beyond physical symptoms and permeate many aspects of life, yet these concerns remain neglected in current cancer care. This paper responds to this gap by exploring how bespoke co-designed care technologies can support survivors when grounded in their lived sexual experiences. We conducted trauma-informed, generative workshops with two cancer survivors. The workshops surfaced four themes: gaps in anticipatory care, shifts from lovers to carers, unsettled bodies and selfhood, and navigating fragmented support. Through co-designing, we created *Lived Experiences Archive* (a 'zine series of anonymous survivor stories) and *BodyTalk* (a sensory couple game for rebuilding emotional and physical intimacy). Beyond the artefacts, we contribute a methodological account of co-designing as care and empirical insights into post-cancer sexuality. We demonstrate the epistemic potential of bespoke intimate health technologies to generate situated forms of care and knowledge often overlooked in conventional health technology design.

CHI '26, Barcelona, Spain

ACM ISBN 979-8-4007-2278-3/26/04
https://doi.org/10.1145/3772318.3790355

CCS Concepts

• **Human-centered computing → Empirical studies in HCI**.

Keywords

sexuality, sexual health, cancer, survivorship, bespoke care technology, intimate health technology, embodied interaction, co-design as care, trauma-informed design, crip technoscience

ACM Reference Format:

Céline Offerman, Francesca Maria Mauri, Alessandro Bozzon, and Jacky Bourgeois. 2026. Sex after Cancer: Co-Designing Bespoke Care Technologies for Post-Cancer Bodies. In *Proceedings of the 2026 CHI Conference on Human Factors in Computing Systems (CHI '26), April 13–17, 2026, Barcelona, Spain.* ACM, New York, NY, USA, 17 pages. https://doi.org/10.1145/3772318.3790355

1 Introduction

Sexuality and intimacy after cancer remain among the most private, complex, and under-addressed aspects of surviving cancer. Many survivors experience significant sexual difficulties, such as reduced desire, difficulty achieving orgasm, or pain during intercourse [6, 68]. However, these issues extend beyond physical symptoms alone. They affect survivors' body image [66], alter relational dynamics [25], and intersect with cultural taboos that discourage open discussions about sex post-cancer [83]. Survivors often describe feeling 'not quite there yet,' navigating a liminal space marked by uncertainty and loss, as they attempt to rebuild intimacy and a sense of normalcy [91].

Addressing such layered and deeply personal experiences calls for approaches that are equally nuanced and sensitive; something HCI and design research has begun to explore in other areas of intimate health. Researchers in this space argue for context-sensitive and person-centred approaches to designing care interventions (e.g., [37, 41]). Recent work, for example, has explored intimate health topics through innovative methods: Søndergaard et al. [79] designed supportive technologies for early menstruation, Ståhl et al. [76] explored pelvic floor health, and Campo Woytuk et al. [18] created designs for tracking leaky bodies through bodily sensing. These studies have foregrounded embodied interaction in the context of intimacy, and move beyond medicalised or quantified understandings of the body. They illustrate a broader trend towards addressing intimate and sensitive health issues through designs that engage individuals holistically and respectfully [3, 23].

While HCI has made important strides in designing for intimate health, foregrounding bodily knowledge and resisting medicalisation [3, 18, 23, 76, 79], the intersection of sexuality, cancer survivorship, and the process of sexual re-engagement after treatment has received little design research [55]. We argue that this intersection is not merely an extension of work on taboo [81], trauma [22], or medicalisation [23], but a context where these elements converge in ways that complicate conventional design approaches. Survivors simultaneously experience their bodies as medicalised objects, encounter silence around sexuality in healthcare, and navigate shifting partner dynamics [55]. This entanglement means that approaches HCI developed for one of these domains [22, 23, 81] cannot be directly transferred here, as the challenges compound and demand new, situated ways of designing. The resulting gap is that HCI lacks approaches for care technologies in contexts where taboo, trauma, and medicalisation intersect in such a charged and intimate way. We argue that co-design is particularly suitable here, as it enables survivors to articulate experiences and needs that cannot be anticipated from the outside. We therefore address the RQ: *how can bespoke care technologies be co-designed to respond to the sexual experiences of life after cancer?*

We draw on the Scandinavian tradition of Participatory Design (PD) (e.g., [26, 32]), which emphasises democratic engagement and shared authorship between designers and participants. Within this ethos, we situate our work in generative design research [70], a substream of PD that foregrounds participants' creative and imaginative capacities as central to early design. Generative approaches extend conventional co-design practices by surfacing latent needs and desires not easily expressed through words alone. In this framing, co-design becomes a process through which people envision futures grounded in their lived experience, which we find highly suitable to the context of post-cancer sexuality.

Our work is rooted in crip theories [33, 43, 53], which resist a curative logic and affirm non-normative experiences of bodies and pleasure [56]. This orientation guided us to design bespoke assistive technologies [27, 38, 39, 82] that respond to the situated needs of individuals rather than aiming to create a one-size-fits-all 'solution' or restore a normative standard of sexual functioning.

This paper presents the culmination of a two-year embedded design trajectory, of which we highlight its ethnographic character. Both Céline and Jacky hold positions at a design faculty and a research hospital, engaging in ongoing design work within a clinical trial context. Our close and sustained field presence enabled us to build trust with the community and adapt our methods responsively. The knowledge accumulated through this engagement informed every aspect of the study; from the recruitment of contributors, to the structuring of the workshop, to the analysis and reporting of the data. Our methodological choices arose directly from the practical and ethical challenges encountered in the field.

Within this two-year trajectory, we centred two in-depth co-design engagements with individuals who survived colorectal cancer. We co-designed bespoke care technologies that were tailored to fulfill their specific needs around post-cancer sexuality. We wove together somaesthetic exercises and generative design materials to help contributors explore and express their intimate, bodily experiences. This approach allowed us to surface rich, situated perspectives, which we together translated into design insights and early-stage care technology. The resulting artefacts are the *Lived Experiences Archive*, a 'zine series shaped by the desire to explore first-hand accounts of sexuality after cancer, and *BodyTalk*, a sensory game to support couples in rebuilding emotional and physical intimacy. They were developed through iterative prototyping and feedback between the designers/researchers and contributors.

This paper contributes to HCI by (1) offering a methodological account of how a trauma-informed and relational approach to co-design can sensitively surface intimate bodily experiences, with reflections on co-design as care in trauma-sensitive contexts; (2) presenting two bespoke care technologies co-designed with cancer survivors; and (3) providing empirical insights into the multifaceted nature of post-cancer sexuality, as articulated by survivors themselves.

2 Related Work

This section situates our work across the three levels where we make contributions: *context*, where we draw on crip theories and bespoke assistive technology design to reframe post-cancer sexuality beyond the biomedical; *content*, where we build on HCI's engagements with intimate and embodied health; and *method*, where we adapt co-design and somaesthetic approaches to support sensitive work with stigmatised experiences.

2.1 Context: Exploring Post-Cancer Sexuality Through a Crip and Bespoke Approach

Many survivors describe themselves as being in transition [91], partially due to the vigilance required for monitoring potential cancer recurrence and the slow and tumultuous return to everyday life [89]. Within this transformation, many survivors also face challenges that negatively impact their sexuality. While clinical literature recognises the prevalence of post-cancer sexual difficulties [1, 16, 29, 68], sexual concerns rarely become the focus of routine care [29]. Most existing interventions remain biomedical 'solutions'; men are often prescribed Viagra or similar medications [45, 67], while women are advised on moisturising or mechanical stretching of the vaginal tissue [20]. While these approaches may address some physiological symptoms, they neglect the broader psychological, relational, and cultural dimensions of sexuality [11, 12], leaving a gap in support that genuinely resonates with survivors' lived experiences.

Recent work in HCI has begun to map the design space for post-cancer sexuality. Offerman et al. [55] identify five entry points: bodily estrangement, the taboo in healthcare, shifts in selfhood, relational disruption, and a move away from performance-based sex; all grounded in the highly situated nature of survivors' experiences. They argue for technologies that support survivors in making sense of their altered sexual experiences on their own terms, rather than aiming to "fix" the body. Yet, this work has so far stopped short of showing how such technologies might be co-designed in practice. We position our work within this design space, extending it through the creation of bespoke co-designed care technologies.

We approach post-cancer sexuality from a crip theories perspective, which challenges normative assumptions about bodies, pleasure, and recovery [56]. Crip theory resists medicalised narratives that aim to "fix" or restore normative sexual function, and instead affirms diverse experiences of embodiment and intimacy [33, 43, 53]. This framing enables us to fully centre survivors' lived experiences without defaulting to a curative logic. Aligned with this, we draw from bespoke assistive technology designing for the *N of 1* [27, 38, 39, 82]. We create situated technologies that emerge from and respond to the particular needs, desires, and bodily experiences of one individual. This approach acknowledges that all disability is individual, and that personalised technologies can better honour the complexity of survivorship and sexuality.

2.2 Content: Designing for Embodied and Intimate Health

HCI has increasingly turned toward intimate and complex health contexts, drawing on embodied approaches that favour exploratory interactions. Much of this work is grounded in feminist design perspectives, which affirm embodied and situated ways of knowing. In related contexts, researchers have developed tactile, situated technologies that facilitate bodily awareness with stigmatised experiences.

For instance, Ciolfi Felice et al. [23] resist the medicalisation of menopause, designing instead for embodied, socially situated experiences. Their work emphasises helping individuals accept and reconnect with their bodies, offering a way to normalise change without reducing it. Similarly, Campo Woytuk et al. [18] introduce tactful feminist sensing through a finger-worn probe for cervical mucus conductivity. Their design challenges clinical paradigms with tactile, curiosity-driven materials that embrace ambiguity and bodily messiness. In parallel, Park [58] advances designing with discomfort for intimate care, treating affective and sensory discomfort as a resource to cultivate long-term, embodied relations with the body and to support plural modes of engagement.

What these approaches share is a commitment to bringing people closer to their bodies. Rather than introducing a "technical wall", these technologies support individuals to reconnect with their bodies on their own terms. Applied to post-cancer sexual health, this suggests designing artefacts that facilitate curiosity and bodily autonomy. Such artefacts may enable survivors to re-engage with pleasure at their own pace, without pressure or performance. Yet, unlike menopause, fertility tracking, or menstruation, post-cancer sexuality has not been addressed in HCI through embodied design yet, a gap this work aims to address.

2.3 Method: Co-Design for Working With Intimate Experiences

Designing in the context of sexuality and illness requires methods attuned to taboo and stigma. Within HCI, feminist and critical perspectives have increasingly challenged silence around intimate topics, advocating for approaches that stay with the trouble of discomfort and complexity rather than resolve it too quickly [77]. Work in intimate health shows that culturally silenced experiences benefit from co-design practices that cultivate a caring environment [23, 79].

To support such engagements, generative design research offers methods that enable contributors to express personal experiences on their own terms. As Sleeswijk Visser et al. [73] note, context and experience are intertwined yet distinct: context situates us in time and place, while experience is the momentary, wholly subjective event *felt in time alone* [69]. Generative methods bridge the two by inviting contributors to traverse this full temporal span; recalling memories, grounding in present sensations, and imagining possible futures. While conventional techniques such as interviews or focus groups [62] can elicit explicit knowledge of current or past situations, they often miss affective or aspirational dimensions. We argue that when working with taboo topics, relying solely on explicit knowledge may limit the depth and authenticity of insights. In contrast, generative methods can surface individuals' tacit and latent knowledge, offering a more nuanced understanding of their fears, hopes, and unspoken desires [73].

We approach the underpinnings of this work with the ethos of troubling design [77], which invites researchers to "curiously visit"

unfamiliar, marginalised, or uncomfortable territories. Such an approach foregrounds lived, bodily experiences often excluded from dominant narratives of healthcare. In this spirit, we as designers allowed ourselves to be affected by the stories shared throughout the process, for which we make space by slowing down. This responsiveness shaped the artefacts themselves as well as it deepened our commitment to care as an ethical stance. Our temporal and somaesthetic techniques thus became modes of attending to contributors' complex experiences. We understand this form of engagement as a relational and ethnographic act that embraces vulnerability and helps unsettle dominant paradigms of care in favour of more inclusive, embodied futures.

We see in generative design research a feminist potential: it values tacit, affective, and situated forms of knowledge, and creates conditions where contributors can articulate experiences that are often silenced or overlooked. This potential guides our adaptation of generative methods to post-cancer sexuality, where the vulnerability of the context requires an approach that can hold ambivalence and support contributors on their own terms.

3 Methodology

This paper takes a Research through Design (RtD) approach [31, 75], where we use design practice as a site for generating knowledge about post-cancer intimacy. We centred two remote design workshops each with a survivor of colorectal cancer, which we approach as deep, designerly engagements within a broader embedded trajectory. The workshops aimed to surface intimate, embodied experiences of post-cancer sexuality and translate them into situated design insights and early-stage care technologies. Each workshop followed a five-phase structure: (1) a somaesthetic grounding exercise, (2) a narrative-based collage activity to map lived experiences, (3) co-designing desired qualities of future care technologies, (4) discussing researcher-developed generative probes, and (5) a reflective conversation. Contributors were recruited through purposive sampling and participated from their own homes using mailed workshop kits. Data was collected through recordings, generative artefacts, and field notes, and analysed through a spiral, ethnographically inspired approach [57]. Based on the ideas developed during the workshops, we created early-stage prototypes, which were shared back with contributors for further feedback and refinement. The final designs presented in this paper are the result of this iterative, collaborative process. Contributors currently engage with the artefacts in their daily lives, and we remain in contact to informally follow how these interactions evolve over time.

3.1 Study Context and Positionality

This work was made possible through sustained dialogue with oncologists (n=2), medical sexologists (n=6), experts-by-experience (n=2, not the contributors discussed in this paper), a partner of a person with cancer (n=1), and a national patient organisation. We situate the study within a 2 year, embedded design trajectory and emphasise its ethnographic character; an approach that also informed our choice of analysis method. This paper focuses on two design workshops conducted with individuals who survived colorectal cancer and both act as spokespersons in their own right of the community they belong to. Our broader field engagement informed every aspect of the study, with notable learnings described in the Meta Methodology section (§3.2).

This work also demanded that we confront our own disciplinary boundaries. As designers, we were aware of the risk of overstepping, or of being perceived as therapeutic figures. We see ourselves as facilitators who co-design with individuals navigating complex embodied and emotional experiences which can be traumatic. We intentionally refrain from any (clinical) evaluation of the designed care technology, and focus instead on creating a space where lived experiences can be safely shared and engaged with, which we see as an act of both care and design.

Our positionality shaped both how the study was conducted and how we interpreted its outcomes. Some of the authors were already working with feminist, crip, and trauma-informed perspectives; which deepened over time as our prolonged engagement revealed their necessity for addressing the lived experiences of survivorship and sexuality. Our disciplinary backgrounds also mattered: the team brings together interaction design with HCI research, which influenced our sensitivity to embodied experiences and generative design research. Our approach was shaped partly out of discomfort with extractive/more clinical modes of research, and partly because of prior engagements with participatory and critical design. Politically, this involved resisting the urge to resolve/fix tensions too quickly. Instead, we aimed to stay with the trouble [78], creating a workshop that could hold ambivalence and approached unresolved questions as generative rather than problematic. To practice this, we draw on Lusi et al. [46, 47, 48]'s notion of matters of compassion, which understands compassion as an active, relational practice of engaging with suffering and cultivating a desire to alleviate distress without erasing its complexity. In our work, this translated into designing co-design encounters and artefacts that create spaces for connection around post-cancer sexuality. We make a case for compassion as a guiding ethic in the design of intimate care technologies, particularly in contexts where uncertainty and vulnerability must be lived with.

3.2 Meta Methodology

This section outlines the methodological adaptations that emerged from our field engagement. Together, these decisions shaped how we conducted the workshops and how we engaged with contributors.

3.2.1 Why a small-scale, trauma-informed approach. We initially planned a larger-scale co-design process involving more contributors. As our fieldwork unfolded, however, it became clear that the nature of the topic itself called for small-scale, one-to-one engagement. Sexuality after cancer was described by the experts-by-experience and oncologists as highly sensitive and often silenced, even in therapeutic or intimate relationships. Sharing such experiences in a group would have required contributors to manage their own vulnerability while witnessing others' distress, which risked inhibiting open conversation. We found that one-to-one workshops offered the privacy and control needed for contributors to speak candidly and to pause or redirect whenever needed.

In parallel, discussions with clinical experts highlighted the risks of research fatigue (the exhaustion that arises from repeated requests to participate in studies [80]), particularly among survivors

of serious illness [7, 59]. Institutional and regulatory constraints further limited who we could invite, how we could reach them, and what we could ask. Within these tensions, we reframed our approach from what co-design "should" look like to what survivors could realistically engage in. This shift led us to a trauma-informed [22], context-sensitive mode of collaboration, recognising that care in our research lies not only in its outcome but also in the ways we engage. We therefore position designing itself as an act of care.

3.2.2 Why remote workshops. Informal conversations with experts-by-experience (n=2) helped us understand the need for control and comfort when discussing sexuality after cancer. An in-person setting, especially an institutional one, was described as intimidating and overly formal, while logistical barriers such as travel distance and limited energy further constrained in-person participation. Doing the workshops remotely addressed these challenges by allowing contributors to join from a safe, familiar environment, with the option to leave the call at any time. It also allowed them to provide situated insights more naturally, as they were physically located in the environment in which their daily experiences are rooted. Additionally, it ensured more equitable access by not restricting participation to those unable or unwilling to travel to the university. At the same time, we recognise that remote settings can make it harder to build trust with a designer/researcher who remains a relative stranger, which required us to be especially attentive and deliberate in how we created safety and rapport online. These considerations directly shaped the structure and activities of our workshops (§3.3).

3.2.3 Why generative probes. Conversations with oncologists (n=2) and medical sexologists (n=6) highlighted that direct questions about sexual experiences often feel intrusive, and contributors may lack the language to articulate design needs. Generative probes provided a safer alternative: contributors could always shift the conversation to the probes themselves, and create distance from their own experiences when needed. This choice directly informed the workshop design (§3.3.1) and the creation of the probes (§3.3.2).

3.2.4 Bearing witness as an act of care. Experts-by-experience (n=2) repeatedly expressed frustration with the silence surrounding sexuality after cancer. They called for these experiences to be acknowledged more openly in research and care, hoping that visibility might catalyse change. We embraced this by approaching this whole project as an act of bearing witness [35], offering contributors the opportunity to share their stories on their own terms and have them taken seriously. This orientation directly informed our ethical stance (§3.6).

3.3 Workshop Structure and Activities

We conducted 2 remote workshops to surface lived experiences of sexuality and cancer and to translate those experiences into early-stage design ideas for care technologies. The workshop followed the five-phase structure (previously introduced in the placeholder, §3) that wove together somaesthetic [40] and generative design activities [70], sequenced from bodily grounding to storytelling to envisioning possibilities, enabling contributors to voice past memories, present sensations, and future hopes. We collected both explicit reflections and tacit, embodied knowledge. This allowed us to approach different aspects of the lived experience, which resulted in rich design insights. An overview of the workshop materials is provided in Figure 2. The data was collected via video conferencing. Contributors received kits by mail with collage materials and generative probes [70] (Figure 2), used them during the video calls, and returned them afterwards for analysis. All workshop materials were reviewed and adapted by a writer specialised in translating content into plain and accessible language.

3.3.1 Detailed Overview of the Workshop. **Phase 1: body → bodily sensitising** we began with a guided somaesthetic body scan [19] to help contributors ground themselves in the present moment and attune to their bodily awareness. **Phase 2: narrative → making sense of their lived experience and context** contributors received a timeline template and a curated collage kit to map their experiences of sexuality and care from pre-diagnosis to the present. Drawing on context-mapping methods [69, 70, 73], the timeline encouraged them to layer chronological events with the feelings, sensations and meanings attached to each moment. The kit included imagery ranging from symbolic to realistic (e.g., abstract art, medical devices, care scenes), curated and reviewed by experts-by-experience to ensure sensitivity and relevance. Contributors could add their own drawings and notes (for materials, see Figure 2, A.). **Phase 3: exploration → collaboratively translating lived experience into design** contributors moved from eliciting narratives to co-designing. Using loosely structured, design-oriented prompts, this phase focused on translating the stories and mappings from Phase 2 into unmet needs, desired qualities and directions for future care technologies (see Figure 2, B.). **Phase 4: specification → generative probe-driven dialogue** here co-design continued through direct engagement with five generative probes developed by the research team. Following Mattelmäki [52], the probes served as open-ended invitations for reflection and storytelling, allowing contributors to decide what and how much to share. Each probe represented a different aspect of post-cancer sexuality and care, and engaging with them prompted contributors to affirm, reject, or reimagine what care technologies could or should be. Details of the probes are provided in §3.3.2 and illustrated in Figure 2, C1–5. **Phase 5: reflection → wrapping up with a reflective interview** a closing conversation gave contributors room for final reflections and distilled the ideas into their preferred directions for future care technologies.

3.3.2 Workshop Materials for Phase 4: Designing Generative Probes. In this section, we focus on Phase 4 of the workshop, where generative probes were used to explore contributors' design preferences. Designed by the research team, the probes acted as tangible, evocative representations of possible care technologies. They facilitated reflection and dialogue, helping contributors express needs and desires that might otherwise remain unspoken. We created a diverse set of probes to reflect the spectrum of post-cancer sexual experiences across different modalities, ranging from practical to symbolic concepts. This range enabled contributors to engage critically with the material, so they could affirm, reject or re-imagine what care technologies could look and feel like. The probes are shown in Figure 2 C. and in the supplementary materials. They were presented to the contributors as concept cards.

Figure 2: This image shows all workshop materials included in the kit. A. Collage timeline (Phase 2): template, curated images, and drawing materials to map lived experiences of sexuality and care. B. Exploration prompts (Phase 3): co-design materials for translating narratives into desired qualities of future care technologies. C. Generative probes (Phase 4), presented to contributors as concept cards (see additional materials): C-1. *Closer Together* conversation cards for couples. C-2. *Slow-Touch Devices* encourage exploratory, non-goal-oriented touch. C-3. *Embodied Explorations App* audio-guided bodily reconnection. C-4. *Peer Support Platform* curated peer narratives. C-5. *Pre-Appointment Reflection Tool* helps prepare sensitive topic conversations for clinical visits. All items were translated from the local language.

We conducted a text analysis of online forum posts from cancer survivors and their partners, to ground our generative probes in a wide range of experiences. This is a method increasingly used in clinical design research [42, 86]. The text analysis of forum posts was approved by the human research ethics committee of Delft University of Technology, ID 5760. We systematically retrieved 121 entries from the country of study's largest cancer forum, including podcast transcripts, discussion threads, and personal blogs. For inclusion, the testimony had to be a first-hand account of a patient, survivor, or partner, and had to discuss sexuality. We viewed each post as an experiential glimpse; together, these constructed a plurality of lived experiences. The analysis followed an inductive open-coding process informed by reflexive thematic analysis [13–15]. Céline familiarised herself with the data, generated initial codes, and iteratively made sense of experiences across entries. The emerging themes were then collaboratively reviewed, refined, and named. Over a three-month period, Céline and Jacky translated these insights, together with input of related work by Offerman et al. [55], into early sketches and concept drafts, which were reviewed in weekly team discussions. Through this iterative process, each theme took shape as a generative probe:

- Cancer disrupted intimacy in both new and ongoing relationships, describing the need for honesty/openness and

dialogue; the *Closer Together card set* supports couples in gradually navigating these conversations (Figure 2, C-1.).
- Individuals described moving from performance-based sex toward slower, self-accepting forms of pleasure. This is reflected in the design of *Slow-Touch Devices* that encourage exploratory, non-goal-oriented sensory engagement (Figure 2, C-2.).
- Many described estrangement from their bodies; a loss of privacy, changing sensations, and a longing to feel at home again. We addressed this by the *Embodied Explorations App*, which offers gentle audio-guided practices for mindful bodily reconnection (Figure 2, C-3.).
- Cancer prompted deep shifts in selfhood, identity, and it induced vulnerability, highlighting the need for community and validation. This informed the design of the *Peer Support Platform* that curates relatable narratives (Figure 2, C-4.).
- Interactions with healthcare professionals were often marked by silence or fragmented care, prompting the design of a *Pre-Appointment Reflection Tool* to help surface sensitive topics and facilitate more open clinical conversations (Figure 2, C-5.).

3.4 Contributors & Recruitment

We purposively recruited [60] individuals (18+, any gender identity) who had finished curative colorectal cancer treatment at least 18 months earlier. This interval was chosen to ensure contributors had moved beyond acute recovery and could reflect on longer-term issues with sexuality and care. Active or recurrent disease was an exclusion criterion because the study was positioned as exploratory design work rather than a clinical intervention. Prospective contributors received a plain-language study description and were encouraged to discuss participation with trusted others. An optional intake call with Céline allowed them to ask questions before consenting. The national colorectal cancer patient organisation Stichting Darmkanker distributed a study call via e-mail newsletter and a private Facebook group for patients and survivors open to research. The call was open for six months. Three people contacted the team; all met the criteria. One later withdrew for undisclosed reasons, leaving two contributors. We chose to use pseudonyms for our contributors to preserve anonymity while conveying the richness of their stories (also see Figure 3):

Basuki (pseudonym) is a man aged 55–65 who was treated for rectal cancer without metastasis. His treatment included chemoradiation followed by a minor transanal surgery. Now 5 to 10 years post-treatment, he lives in a rural area with his partner and has slight to moderate digital literacy. Gijs (pseudonym) is a man aged 45–55 who underwent an experimental surgery for colon cancer, also without metastasis. He is 1.5 to 5 years post-treatment, married, lives in a small city, and is highly digitally literate.

We recognise that working closely with two contributors who are both men is a limitation, which we address in §6.5. Contributors received no monetary honorarium. Sessions lasted between 60 and 90 minutes, breaks were offered ad libitum. Sessions were scheduled at the contributors' convenience to accommodate their work and caregiving responsibilities.

Figure 3: Illustration of the two study contributors, Gijs and Basuki, included here to offer a visual sense of who they are. Gijs is depicted alone, reflecting his pragmatic nature and tendency to navigate sexual challenges independently. Basuki is shown with his partner, with whom he fully shared his journey through illness and recovery. The drawing is part of a series included in this paper to communicate the experiential themes of post-cancer sexuality. Following prior work which illustrates sensitive research insights [55], we found that drawings could materialise aspects of lived experience that words alone may not fully convey. The series was created by Joost Stokhof, an illustrator, in close collaboration with Céline, based on anonymised notes and reflections from the workshops. The collaborative making process ensured that each scene was faithful to the contributors' experiences.

3.5 Data Collection & Analysis

We collected three kinds of data: audio recordings (via Microsoft Teams[1]), contributors' generative outputs (collages, sketches, written reflections), and field notes taken during and after each session. Sessions were held in Dutch and later translated. Audio was automatically transcribed and then manually corrected.

We found that ethnographic research principles offered a clear rationale for treating our long-term engagement, and the heterogeneous data it generated with analytic rigour. We followed an *iterative–inductive spiral*, where writing-down, analysis, and writing-up continuously informed one another instead of occurring in separate, linear phases [57].

[1]https://www.microsoft.com/en-us/microsoft-teams/video-conferencing

All data sources were printed, laid out, and annotated by hand. Working analogically preserved their scale, texture, and spatial relationships that can be lost in purely digital coding, while still permitting the cross-referencing and memo-writing typical of ethnographic analysis. In short, we borrowed the ethnographer's commitment to iterative sensemaking and multiple data types, but directed it toward informing design decisions.

During fieldwork Céline recorded analytic flashes in an intellectual diary [65]. These informal notes flagged topics to probe in follow-up communication and seeded coding. All materials were openly coded. Codes were applied liberally and could overlap, as we aimed to preserve contextual detail and avoid hasty conclusions [21]. A running log recorded code definitions and emergent questions. Through constant comparison we condensed recurrent open codes into higher-order categories. These memos were iteratively refined and, where appropriate, shared with contributors for feedback. We followed Madden [49]'s notion of drawing on pre- and post-fieldwork data (ideas, policies, and theories gathered through the researchers ongoing immersion) to juxtapose the contributors' lived experiences and the wider structures they exist in. Concretely, we set contributors' accounts beside external materials such as local insurers' limits on sexual-health care reimbursements and clinical frameworks like PLISSIT [4] and Sensate Focus [50, 51]. Looking at this interplay of the workshop data with our two years of field data clarified how individual experiences are shaped, and sometimes constrained, by the local policy and clinical landscape in which they unfold. Drafts of the analysis circulated among co-authors, and were then re-annotated to check that every claim was appropriately grounded. This recursive "write–read–rewrite" loop reflects the spiral model of analysis we adopted in this work [57]. This multi-layered, spiral process allowed us to move from rich but unruly workshop materials to a coherent set of themes and design implications without losing the situated nuance of contributors' experiences.

3.6 Ethical Considerations

The workshops received approval from the human research ethics committee of Delft University of Technology, under ID 5078. From the outset, we prioritised contributor well-being over comprehensive data collection. Working with sensitive and intimate topics requires researchers to create emotionally safe conditions that centre contributors' comfort and autonomy. As such, contributors were only invited to respond to prompts they felt comfortable engaging with, and were not asked to disclose anything they preferred to keep private. We informed the contributors of the study's objectives in advance, including their right to withdraw and the confidentiality measures in place. Written consent was obtained, and all data was securely stored, with access limited to the research team.

We sought to create a space where experiences of sexuality after cancer could be voiced and witnessed. We view this act of bringing marginalised perspectives into formal academic discourse as a core element of our trauma-informed orientation. This ties to the theoretical perspective of bearing witness which describes that victims of trauma need to be given a space to have their testimony witnessed, in order to reconnect with, reconstruct, and reinterpret painful experiences on their own terms [35, 61, 90]. It supports the transformation of traumatic memory into a coherent narrative that can be integrated into one's sense of self and worldview [9]. This orientation is manifested by creating a space in which contributors could speak, be heard, and be taken seriously.

Aftercare was offered, should they wish to access it. Our continued engagement with this context deepened our empathy for both the topic and the people involved. Our commitment to compassion shaped how Céline approached contributors interpersonally. She sought to listen openly, to gently probe but never press, and approach each exchange with care. To support her own well-being, she scheduled debrief sessions after each workshop.

4 Empirical Insights: Narratives from the Co-Design Workshops

This section presents the empirical outcomes of our co-design workshops with Basuki and Gijs. By letting the contributors' stories unfold in their own words, we aim to foreground the complexities and nuances of post-cancer sexuality, and to make visible how their deeply personal perspectives can drive the creation of bespoke, responsive care technologies. After completing the paper, we shared the relevant sections with Basuki and Gijs, who confirmed they felt accurately represented.

4.1 Theme 1: The Unspoken and the Unknown

Basuki and Gijs share a central narrative of navigating silence around sexuality within their cancer care trajectory. Both were unprepared for the intimate and sexual implications of colorectal cancer treatment, revealing a gap in anticipatory guidance from healthcare professionals. While this gap in guidance was shared, each navigated and responded to it in distinct ways.

Figure 4: This illustration depicts the silence and disconnection that followed Basuki and Gijs's cancer treatment. Both were unprepared for the sexual impact of their illness and received little concrete guidance from healthcare professionals. The drawing reflects how these gaps left them to navigate intimate changes alone.

4.1.1 Basuki. For Basuki, information from professionals was provided only in broad, clinical terms: *"like 'it can affect your urinary or sexual function'"*. What those effects might mean in daily life, however, remained unspoken. He discovered the specifics only as he went along. Pain during sex came as an unexpected shock: *"During treatment, if you had sex, it just hurt. So you'd be weighing up: do we do it, or not?"* He received no guidance from his care team about what to expect or how to navigate these changes in intimacy. During active treatment, Basuki focused on simply getting through each day: *"There's so much coming at you that you eventually stop asking questions... You reach your limit. You can only handle so much misery in a day."* He described entering a survival mode, taking things *"step by step"* because the bigger picture was overwhelming. Looking back, Basuki sees that the risks to sexual function after surgery are rarely made clear to patients. At the time, he did not feel the need to ask for details, *"I didn't really want to know everything; I'd discover what I could and couldn't do later"*, but now believes patients need frank, concrete information, shared at a moment when they can actually take it in. Basuki decided to break the taboo himself by sharing his experiences, including sexuality, within the patient community: *"It's a huge topic for everyone [...] yes, fear."* Yet even at patient conferences, he rarely saw sessions or guidance on intimacy after treatment.

→ **Designerly reflection:** Basuki's experience revealed a gap between what professionals communicated and what he actually faced in daily life, leaving him to discover intimate consequences on his own. This points to his need for care technologies that deliver concrete, timely, and empathetic guidance about intimacy, grounded in real-life experiences as opposed to abstract medical information.

4.1.2 Gijs. Gijs received no information from his medical team about potential sexual challenges post-treatment. The absence of professional communication meant Gijs was unaware that sexual dysfunction might be a consequence, leaving him entirely unprepared when these issues arose. He avoided researching online to prevent unnecessary anxiety about potential side-effects, wanting to be *"unconsciously incompetent"*. This passive acceptance left him vulnerable: he initially attributed changes in his sexual functioning to personal factors: his age, a decreased attraction to his wife. Only retrospectively did he realise these difficulties were consequences of his cancer treatment. He expressed frustration at this missed opportunity for anticipatory guidance: *"Someone could have mentioned it earlier."* The lack of communication around the topic impacted his relationship. Gijs described deep sadness, amplified by his partner's distress. Their shared difficulty reconnecting was exacerbated by the lack of forewarning: *"It's very sad for me, but especially for my partner. You try to do your best, but things just don't work out when you have no idea what's coming."*

→ **Designerly reflection:** Gijs was left unprepared for the sexual consequences of cancer treatment, as a lack of communication and anticipatory guidance left him to interpret changes on his own. This silence had big implications on his marriage. It points to his need for care technologies that can create gentle and structured opportunities for couples to reconnect emotionally and physically.

4.2 Theme 2: From Lovers to Carers (and How to Go Back?)

A cancer diagnosis can affect a couple's relationship when the partner comes into the role of caregiver. This can shift the dynamics of intimacy, leaving the couple with the question whether, and how, they can return to their old roles as lovers. Both contributors described how illness forced a re-interpretation of intimacy, yet their experiences and approaches diverged.

Figure 5: This illustration depicts the shift in relational dynamics after cancer, where partners take on caregiving roles. The drawing shows the supportive touch of a partner, and how it can be difficult to shift that touch back into a romantic or sexual one.

4.2.1 Basuki. For Basuki, navigating cancer was a shared journey with his partner, grounded in open and honest conversation. This transparency enabled them to face challenges like the possibility of a stoma or changes in sexuality side by side. *"We could talk about it very openly,"* he said, a dynamic that helped them maintain intimacy and avoid falling into caregiving/receiving roles. He also recognised that partners often have just as many concerns about sexuality as patients, noting, *"you have to do it together."* Basuki believed their openness was rooted in how they communicated before cancer, making it easier to address sensitive topics during illness.

→ **Designerly reflection:** For Basuki, open and honest communication with his partner allowed them to navigate illness together, maintaining intimacy and equality rather than falling into care roles. This points to his need for care technologies that support both partners equally.

4.2.2 Gijs. For Gijs, cancer unsettled the foundation of his marriage. The shift from partners to patient and caregiver happened quickly, and reversing it proved difficult. *"Your relationship changes by definition,"* he reflected. This transition was not only logistical but also emotional. Although Gijs had told his wife in advance, *"I don't want you to become a care partner,"* the caregiving dynamic soon overshadowed their equal partnership. Even 1.5 years after

treatment, they remained stuck in those roles. *"That's not healthy,"* he noted, *"you have to find your way back to being partners again. And almost no one can do that on their own."* Attempts to rekindle intimacy often failed. When Gijs was prescribed medication to support sexual function, his wife's response *"I'm not doing it with a pill"* surfaced her fear to him that he no longer found her attractive. *"So yeah, you find yourself in an impasse."* He later reflected that if someone had explained these relational consequences earlier (how care roles could persist, how communication might falter) their recovery as a couple might have been faster, or less painful. Gijs returned often to the toll on his partner: *"In my case, I always thought: we'll get through it, stay positive. But that's not always available to your partner. They often suffer even more."* While he had come to terms with aspects of the experience, she was still working through it, even years later. The desire to reconnect remains. But for Gijs, restoring intimacy now means unravelling years of unspoken tension and entrenched care dynamics. His wife sought psychological support; he eventually turned to a sexologist. Yet the path forward remains challenging. Their story reveals that healing intimacy post-cancer is not only about sexuality; it is about learning to meet each other again, emotionally and physically, beyond the caregiver/receiver divide.

→ **Designerly reflection:** The shift from partners to a caregiving/receiving dynamic deeply strained Gijs's relationship, and attempts to reconnect were complicated by entrenched roles and unresolved tension. This points to his need for care technologies that gently interrupt fixed roles and create opportunities for couples to meet again as equals and lovers.

4.3 Theme 3: Unsettled Bodies, Unsettled Selfhood

Cancer and its treatment altered both contributors' relationships with their bodies and their sense of self. This adaptation was not straightforward; it involved navigating ambiguity, where moments of acceptance intertwined with ongoing uncertainty and the discovery of new needs. The ways in which Basuki and Gijs navigated this terrain reveal both shared and divergent experiences of resilience and struggle.

4.3.1 Basuki. For Basuki, anxiety about a stoma and loss of sexual function dominated his early treatment, closely tied to fears about his attractiveness and what intimacy would look like going forward. The threat of bodily change was, in his words, *"the dominant theme,"* especially given his relatively new relationship. He even recalled routine conversations with surgeons *"we don't know how much bladder and sexual function will be affected"* could make him faint from anxiety. Over time, however, he found ways to adapt. He described: *"The fear of a stoma is usually bigger than the actual disadvantages… People who get a stoma often end up better off than those who try to avoid it."* This reframing became central to his resilience; acceptance meant incorporating loss into a new sense of agency that made room for vulnerability and growth. Open dialogue with his partner was essential, helping them face fears and changes together. Looking back, Basuki sees intimacy after cancer as complex and individual: *"sexual needs aren't universal."* He speaks candidly about the ongoing challenges (erectile issues, changing desires) but is just as clear that positive experiences of sexuality remain possible, sometimes in new and unexpected ways. For Basuki, moving forward means accepting loss and finding pride in his body's survival: *"I still feel good in my body, I have trust in it."*

Figure 6: The illustration depicts a couple embracing by the bedside; one partner offering physical support, the other leaning into it. It conveys how cancer unsettles not only the body but also one's sense of self.

→ **Designerly reflection:** Basuki's adaptation to bodily changes and intimacy after cancer was shaped by vulnerability. He committed to reframing loss as a source of resilience. This points to his need for care technologies that support his emotional journey and bodily re-understanding, helping him reframe loss as part of his ongoing growth.

4.3.2 Gijs. Gijs describes adaptation to his new body as an ongoing struggle. He talks about becoming a different person through the experience: more reflective, softer, but also more fatigued, physically and emotionally. *"You change anyway,"* he reflects, *"as a person… your priorities shift. Things you once found important no longer matter as much."* This evolving sense of self has made it difficult to return to previous forms of intimacy, especially when his body no longer behaves as it once did. When he attempts to initiate intimacy, Gijs describes a powerful fear of failing: *"I find it all terrifying now. Terrifying both physically and emotionally. Because I think, yeah, I'm going to fail again, I won't do it right. I'm not the partner I was before."* For Gijs, agency does not come easily or automatically; it is something he is still searching for. In the wake of changed bodily sensations and emotional distance from his wife, the sexual and relational self that once came naturally now feels like something to reconstruct. His story highlights how post-cancer adaptation is often marked by vulnerability. Regaining agency is not just about restoring physical function, but about rebuilding trust in oneself and the relationship. It points to a need for support that recognises how intimacy is shaped not only by what the body can do, but by what one is willing to feel again.

→ **Designerly reflection:** Gijs's journey of adaptation was marked by vulnerability and fear of failure, with intimacy feeling

uncertain in a changed body and shifting sense of self. This points to his need for care technologies that help rebuild confidence and trust, supporting both physical and emotional aspects of intimacy after cancer.

4.4 Theme 4: Navigating Support: Where (and Whom) to Turn To / Gaps and Hopes for Care

Both Basuki and Gijs described difficult journeys in seeking support after cancer treatment. Whether from professionals, peers, or their own partners.

Figure 7: This illustration contrasts their two modes of navigating support. Gijs preferred structured, professional guidance and often processed his experience alone. Basuki imagined peer support. Both described gaps in care and a lack of timely, personalised support.

4.4.1 Basuki. For Basuki, support after cancer meant both seeking information and finding a sense of community. Traditional peer groups held little appeal for Basuki; he preferred to access information independently, and imagined a patient-driven medium. Such a resource, he argued, should offer candid, lived accounts of sexuality and intimacy. He advocated for a professionally guided medium where people can share experiences anonymously: *"You mostly want to hear from someone who's actually been through it… but things like forums need to be moderated, otherwise you get a lot of things that aren't actually right."* He also stressed the importance of individual choice in support: what works for one individual may not work for another. And above all, Basuki called for a holistic view of recovery, one that does not treat sexuality as an afterthought: *"It's not something you just check off the list. It's an integral part of who you are and what you need to come to terms with."*

→ **Designerly reflection:** For Basuki, support meant having access to peers' lived experiences, grounded in a holistic understanding of sexuality and survivorship. This points to his need for care technologies that provide a medium for sharing experiences which respects individual preferences, and recognise sexuality as an integral part of recovery.

4.4.2 Gijs. Gijs expressed little interest in peer contact, viewing it as too diffuse and emotionally taxing: *"If people just start whining and complaining, I get depressed myself if I'm not careful… and everyone's story is so different anyway."* Instead, he valued professional, targeted guidance; ideally offered at the right moment, without him needing to search for it. That moment, however, never came. It was not until two years post-surgery that Gijs (on his own initiative) sought out a medical sexologist. This lack of structured support was especially difficult given the complexity of what he and his wife were facing. *"You need help with the physical part, but also the emotional part,"* he reflected. For him, intimacy had come to feel unsafe. His fear of failing loomed, as did the emotional burden of trying to fix something without clear tools or guidance. *"It's all in your head,"* he said. *"So you actually need support on both fronts."* His wife, he noted, is sensitive and prefers intimate, open-ended communication, not mediated by a professional. Importantly, Gijs does not want abstract discussions about sexual identity or generic information. He wants practical interventions, something with a professional tone, not *"Aunt Sjaan setting up a website"*. Tools, in his view, should support constructive dialogue and shared reflection. *"I'm quite pragmatic,"* he explained. *"I prefer to look at what's possible now, and work from there."* Yet, he also recognises the cost of this self-reliance. His tendency to *"just carry on"* meant he waited too long before seeking psychosocial help: *"That's the trap of self-sufficiency… you think you can handle it all, and so you postpone the help you actually need."* For Gijs, then, future care technologies should be neither too vague nor too medicalised, and never condescending. It should create room for a pragmatic new understanding of intimacy, perhaps not through sexual function alone, but through gestures like walking hand-in-hand on the beach, as he suggested. *"Just leave the sex aside for a moment,"* he outlined, *"start with that."* For Gijs, that shift marked a more hopeful way forward.

→ **Designerly reflection:** Gijs' account highlights his need for care technologies that balance pragmatic support with space for his couple to navigate recovery on their own terms. For him, this means concrete guidance that avoids vagueness or condescension, and instead supports small, hopeful steps toward intimacy.

5 Design Outcomes: Bespoke Care Technologies from the Co-Design Workshops

This section presents the design outcomes of the workshops. We build on the empirical insights and designerly reflections discussed in §4. Together with Basuki and Gijs, we translated their personal stories into concrete design qualities. This allowed us to create care technologies closely grounded in their lived experiences. Initial concepts were designed during the workshops where we jointly conceptualised and sketched ideas. Subsequently, Céline and Francesca made these sketches into tangible prototypes, which were then shared back with Basuki and Gijs for feedback and further refinement. Basuki and Gijs currently engage with the artefacts in their daily lives, and we remain in contact to informally follow how these interactions evolve over time. Below, we present the final outcomes of this iterative co-design process.

Figure 8: This image shows some pages of a 'zine created for Basuki by Francesca and Céline. The full 'zine can be found in the supplemental materials.

5.1 Basuki: Lived Experiences Archive

Our co-design process with Basuki centred on making sense of his experiences and the kinds of support he found meaningful. Early conversations revealed his desire to access others' stories in a discreet, low-pressure manner, something he could explore privately but that also included partner perspectives so both he and his partner could find resonance. Together, we explored how intimate narratives might be shared in ways that felt emotionally safe.

What emerged was the *Lived Experiences Archive*: a growing series of small, low-cost 'zines designed to carefully curate and share the sexual experiences of life after cancer. Each 'zine features one anonymised story, paraphrased and layered with collaged visuals, drawn from our earlier analysis of online forum data (see §3.3.2). From this corpus, we selected accounts of both patients/survivors and their partners that offered a whole and rich glimpse into the lived experience of sexuality after cancer. We also aimed for diversity across narratives, to reflect the multiplicity of ways people navigate post-cancer intimacy. The 'zine format was chosen deliberately. Each narrative stands on its own and can be engaged with slowly and reflectively, allowing the reader to pause, return, or disengage as needed. Its tactile, analogue form resists the fleeting, skimming interaction often associated with digital platforms. The reliance on touch (flipping pages, encountering textured collages) also intentionally challenges the dominance of visuality in health and interaction design. As Puig De La Bellacasa [63] argues, visuality often overshadows other modes of perception, which distances individuals from the embodied and affective aspects of care and sexuality. The *Archive* instead invites a more felt engagement.

While made with Basuki's needs at the centre, the *Archive* was also designed to travel. As an active member of his local survivor network, Basuki expressed a strong desire to share the resource with others facing similar experiences. We thus made the 'zines easy and inexpensive to reproduce, to support distribution within his community. Designing with Basuki meant recognising him not only as an individual, but also as a community member whose impact extends outward. In this sense, designing for him meant also designing for them. We therefore deliberately support his capacity to give care through the 'zines as a form of quiet peer support (see Figure 8).

5.2 Gijs: BodyTalk

Gijs's co-design process centred on his expressed need for guided and expert-informed tools to support his couple in reconnecting emotionally and physically after cancer. He described a struggle with verbalising needs and a discomfort with conventional forms of intimacy. Together, we explored how a structured experience might facilitate moments of closeness with his wife. We arrived at *BodyTalk*: an intimate, sensory game designed to facilitate emotional vulnerability and bodily re-attunement within the home setting.

The game pairs conversation prompts with experiential touch exercises. Each round offers a prompt and a tactile activity, which Gijs and his wife can explore in a suggested sequence or select adaptively. The prompts range from gently reflective (*"What part of my body feels most changed to you?"*) to sensory (*"Can you surprise me with an unexpected touch pattern on a bodypart of your choosing?"*) creating opportunities for new kinds of dialogue and bodily

presence. A central component of the game is a pair of interactive gloves. Each glove contains swappable hot and cold inserts that produce contrasting tactile sensations. From gentle warmth to a playful, sharp cold bite. The gloves are intentionally designed to remain partially open, preserving direct skin-to-skin contact. This design choice responds to critiques of sexual technologies that function as barriers or gatekeepers to the body [17, 56], instead inviting a more bodily connection through deliberate touch [10, 18].

The experiential structure of BodyTalk draws on the therapeutic method of Sensate Focus, a sex therapy developed by Masters and Johnson [50, 51], which redirects attention from performance outcomes to sensory and emotional presence [2, 8]. Its core principles are attending to one's own sensations, avoiding goal-oriented behaviour, and using mindfulness to return to the body. These principles underpin both the structure of the game and the material qualities of the gloves. In consciously steering away from genital stimulation, BodyTalk makes space for gentler, slower forms of intimacy that prioritise emotional attunement over sexual functioning (see Figure 9).

Figure 9: BodyTalk, the experiential game co-designed with Gijs. Top left: the thermal glove with a removable insert that can be heated (microwave) or cooled (freezer) to facilitate playful, surprising touch. Top right: the card-driven game, designed to provide the guided experience Gijs desired, with prompts for experimental touches and reflective questions. Bottom: an example interaction illustrating how the artefact facilitates exploratory, non-goal-oriented connection between partners.

6 Discussion

Here, we discuss what constitutes a care technology from a feminist perspective, outline the epistemic potential of bespoke intimate health technologies, and reflect on co-design as a practice of care within survivorship.

6.1 What Counts as a Care Technology?

In this paper, we adopt a feminist perspective on what constitutes technology. As Wajcman argues, *"the very definition of technology is cast in terms of male activities"* [87]. In her analysis, different historical periods have recognised different forms of making as technological, and when women's activities are brought into focus, a very different lineage emerges. Women are assumed to be the first technologists through their roles as gatherers, preparers, and storers of food [28, 74, 87]. It was through this work that tools such as digging sticks, carrying slings, reaping knives were created [87]. This understanding broadens the concept of technology toward the socio-material practices through which people sustain and transform everyday life. We understand technologies as configurations of people, objects, cultural meanings, and practices; a web through which social and material worlds are co-constituted [88].

We extend this reorientation by putting it in dialogue with Puig de la Bellacasa's conceptualising care as a material, world-sustaining practice. She reminds us that *"care is a human trouble, but this does not make of care a human-only matter"* and that *"we think, therefore we touch"* [64]. Care, here, is inseparable from material engagement; it is through concrete acts of attending that relations are formed and maintained. Care, in this sense, is a mode of socio-material world-making that shapes how people relate toward one another.

Taken together, we position technologies of care as socio-material arrangements that organise relational life and enable particular modes of attention and connection. This framing guides our interpretation of the *Lived Experiences Archive* and *BodyTalk* as care technologies. They are bespoke, analogue artefacts that materially support survivors and partners in post-cancer sexuality. Their technological character lies in their capacity to mediate relational and embodied practices of recovery. In line with feminist scholarship, we therefore treat these artefacts as technologies because they shape lived experiences, facilitate caring relations, and intervene meaningfully in everyday practices of intimacy and healing.

6.2 The Epistemic Potential of Bespoke Intimate Health Technologies

This work extends existing support for post-cancer sexuality by applying a crip and bespoke design approach to the creation of care technologies. Clinical literature has critiqued the biomedical model of sexual recovery [11, 12], which centres on restoring normative function through pharmaceutical or mechanical interventions [20, 45, 67]. Recent HCI work has argued for more situated, experience-based perspectives to post-cancer sexuality [55]. We build on this by designing artefacts that resist a curative logic towards sexual functioning and affirm non-normative experiences of bodies and sexual pleasure [56].

We also extend the field of bespoke assistive technology by bringing its principles into the domain of intimate health. While prior bespoke work mainly focuses on functional independence (e.g., [27, 39]), we show how this orientation can support survivors in rediscovering sexuality after treatment. The two artefacts designed,

Lived Experiences Archive and *BodyTalk*, were shaped around each contributor's specific personal context.

This work also responds to the structural conditions that shape what kinds of care technologies are typically developed. In much of contemporary health design, there remains an implicit pressure (often internalised even by academics) to produce artefacts that are scalable and potentially profitable. These expectations reflect broader capitalist values. Technofeminist and critical design scholars such as Wajcman [87] and Costanza-Chock [24] remind us that technology is not neutral, but shaped by gendered power dynamics and capitalist ideals. To exemplify; capitalist funding steers intimate health innovation towards profitable, scalable healthcare 'solutions' while neglecting needs deemed more marginal and less lucrative [92]. In other words, if a health technology cannot promise mass-market appeal, a capitalist framework is likely to dismiss it as unviable. We argue that dominant capitalist imperatives are incompatible with the embodied complexity of post-cancer sexuality. Assistive technology discourse advocates for custom, co-designed interventions capable of responding meaningfully to individuals' situated needs and evolving bodily experiences [27, 36, 38, 39, 82], resonating with crip technoscience [33]. This foregrounds the creativity and expertise of those whose bodies and experiences fall outside normative standards.

As academics, we recognise our relative privilege to design outside the imperatives of commercial viability. This position affords us the freedom to attend to complexity rather than reduce it, and to value artefacts that attend to the whole person (staying with the trouble of taboo and intimacy [77]). In doing so, we foreground the potential of bespoke intimate health technologies: designs that are not intended to group individuals by their diagnosis as is common in health technology design, but to attend with one person, and create something that fully supports their needs. The two artefacts designed in this study build on this stance.

6.3 Co-Designing in the Borderlands of Survivorship

In our work, we approached co-design both as a way to generate care technologies and as a practice of care. It became a means of making space for intimate, stigmatised, and often traumatic experiences. We drew on feminist and crip underpinnings that value situated and embodied knowledges [33, 34]. Inspired by Anzaldúa's borderlands, *"a vague and undetermined place [...] it is in a constant state of transition"* [5], we find that survivorship is a liminal space; neither wholly in illness nor in health. Attending to this liminality required resisting technosolutionist tendencies to eliminate uncertainty [44, 54]. In our study, this meant accepting that contributors' experiences could remain unresolved, which resulted in interpersonal contact that held space for ambivalence. Within this framing, co-design shifted toward supporting survivors in exploring and articulating their ongoing experiences, and in creating designs that reflect that ongoingness. The workshops produced artefacts, as well as created a supportive space for contributors to voice and reflect on intimate experiences. We saw it as an opportunity to bear witness to survivors' testimonies and to enable them to reinterpret and reconstruct painful experiences on their own terms [35, 61, 90].

We find that the process of co-design can be as meaningful as any artefact produced. For HCI, this means treating co-design not only as a means of generating technologies but also as care work. It extends our understanding of how to design in vulnerable spaces by showing that methods can be crafted to support participants and generate knowledge through the act of engagement as much as through the artefacts that result.

6.4 Closing Remarks from the Authors

We want to close by proposing conceptual provocations that emerge from this work. We position our work in tension with curative and capitalist demands for scalable care 'solutions'. Within this, we understand care technologies as socio-material arrangements that organise relational life. We also treat bespoke care technologies as sites where alternative ways of living with illness and recovery can be articulated. Our co-design engagements suggest several critical aspects for designers, clinicians, and policymakers to consider. First, bespoke care technologies require working slow and attentively. This is because making sense of bodily experiences is a messy practice, and supporting survivors as they come to terms with their altered bodies takes time. Second, bespoke interventions can act as probes into our healthcare system. Working alongside individuals on the everyday consequences of medical treatment revealed whole-person needs and forms of support that the healthcare system struggles to accommodate. Thirdly, building on this, we suggest that bespoke care technologies can co-exist within broader care ecologies as complementary forms of care: by remaining small and responsive they are able to attend to aspects of survivorship that standardised patient care pathways are not designed to hold. We offer these points as conceptual provocations. They invite designers to treat bespoke care technologies as lenses onto the frictions and blind spots of our current healthcare system. They also suggest using these technologies as starting points for imagining more caring forms of support at scale that attend to personal and relational needs alongside medical ones, without overlooking the specificity of lived experience.

6.5 Limitations and Future Work

We initially aimed to recruit a more diverse group of contributors, including individuals of other gender identities. When we realised this was not feasible, we questioned whether to proceed, as designing care technologies solely for men felt misaligned with our values. Ultimately, we chose to continue, recognising that Basuki and Gijs also struggled with patriarchal norms; particularly cultural scripts around expected sexual behaviour and the notion of 'lost manhood' [71, 72]. These dynamics are evident in our data, and we understand their experiences as shaped by, and at times constrained by, the same systems that also marginalise others. Future work should extend this by engaging a larger and more diverse group of survivors, including women and (gender)queer individuals, and by incorporating partners' perspectives, to reflect the diverse and relational nature of post-cancer sexuality.

Our sample size is small. The goal of this study was not to produce scalable interventions, but to create bespoke care technologies rooted in the lived experiences of two individuals. We adopt a designerly ethnographic stance that values depth and contextual

sensitivity. This aligns with prior work engaging hard-to-reach care communities through small, purposefully selected contributor groups (e.g. [30, 84, 85]). While the outcomes themselves cannot be generalised, the methodological approach may inform how design is conducted with other marginalised or sensitive communities. Future work could explore how a bespoke approach might be adapted to different health contexts, or how small-scale artefacts might circulate across communities without being reduced to a standardised 'solution'.

Finally, we acknowledge the limitations of our role as designers, particularly when working within sensitive, trauma-related contexts. While we strived to approach this work with care and reflexivity, a full evaluation of the artefacts' impact requires clinical expertise beyond our professional capacities. We therefore did not conduct a formal evaluation. Still, we maintain that the act of designing, when grounded in lived experience, holds intrinsic value for both the contributors and the wider research/design community.

7 Conclusion

This paper explored how co-design can respond to the lived sexual experiences of cancer survivorship. Working with two colorectal cancer survivors, we developed two bespoke care technologies; *Lived Experiences Archive* and *BodyTalk*. Our process foregrounded co-design as care, showing how trauma-informed, generative design research methods can sensitively engage with stigmatised bodily experiences. Beyond the artefacts, we contribute empirical insights into post-cancer sexuality and methodological reflections on designing with survivors in contexts shaped by stigma and vulnerability. Taken together, these contributions show that small-scale, trauma-informed co-design can play a meaningful role in attending to the complexities of post-cancer sexuality and in shaping more caring ways of living with its ongoing effects.

Acknowledgments

We are deeply grateful to the contributors for trusting us with their intimate experiences and personal stories. We hope that the cancer survivor community may find support through their strength and openness. We sincerely thank Stichting Darmkanker Nederland and its volunteers for their belief and continued support of this work. We are also grateful to the oncologists at Erasmus Medical Center, the medical sexologists, experts-by-experience, and the partner of a person surviving cancer who generously shared their time and knowledge; their insights were essential in shaping the design of our method and materials. The visual series accompanying this work was created by Joost Stokhof, an illustrator, in close collaboration with Céline, and we thank him for his thoughtful collaboration.

We thank our colleagues who provided peer review and feedback on earlier versions of this manuscript, in particular Ariane Lucchini, Catalina Lagos Rojas, Alice Vitali, Zoë Breed, Garoa Gomez Beldarrain, Anne Arzberger, and Alexander Nieuwborg. We also express our sincere appreciation to the Associate Chairs and anonymous reviewers for their careful reading and constructive critiques. This research was funded by KWF Kankerbestrijding, a foundation dedicated to fighting cancer.

References

[1] Kristen Abbott-Anderson and Kristine L. Kwekkeboom. 2012. A systematic review of sexual concerns reported by gynecological cancer survivors. *Gynecologic Oncology* 124, 3 (March 2012), 477–489. doi:10.1016/j.ygyno.2011.11.030

[2] Jeffrey A Albaugh and Susan Kellogg-Spadt. 2002. Sensate focus and its role in treating sexual dysfunction. *Urologic Nursing* 22, 6 (2002).

[3] Teresa Almeida, Rob Comber, Gavin Wood, Dean Saraf, and Madeline Balaam. 2016. On Looking at the Vagina through Labella. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems*. ACM, San Jose California USA, 1810–1821. doi:10.1145/2858036.2858119

[4] Jack S Annon. 1976. The PLISSIT model: A proposed conceptual scheme for the behavioral treatment of sexual problems. *Journal of sex education and therapy* 2, 1 (1976), 1–15.

[5] Gloria Anzaldúa. 2021. *Borderlands/La frontera: la nueva mestiza*. Capitán Swing Libros.

[6] Neeraj K. Arora, David H. Gustafson, Robert P. Hawkins, Fiona McTavish, David F. Cella, Suzanne Pingree, John H. Mendenhall, and David M. Mahvi. 2001. Impact of surgery and chemotherapy on the quality of life of younger women with breast carcinoma: A prospective study. *Cancer* 92, 5 (Sept. 2001), 1288–1298. doi:10.1002/1097-0142(20010901)92:5<1288::AID-CNCR1450>3.0.CO;2-E

[7] Florence Ashley. 2021. Accounting for research fatigue in research ethics. *Bioethics* 35, 3 (March 2021), 270–276. doi:10.1111/bioe.12829

[8] Constance Avery-Clark, Linda Weiner, and Alexis A. Adams-Clark. 2019. Sensate Focus for Sexual Concerns: an Updated, Critical Literature Review. *Current Sexual Health Reports* 11, 2 (June 2019), 84–94. doi:10.1007/s11930-019-00197-9

[9] Mieke Bal, Jonathan V Crewe, and Leo Spitzer. 1999. *Acts of memory: Cultural recall in the present*. Upne.

[10] Karen Barad. 2012. On Touching—the Inhuman That Therefore I Am. *differences* 23, 3 (Dec. 2012), 206–223. doi:10.1215/10407391-1892943

[11] Michael D. Berry and Philip D. Berry. 2013. Contemporary Treatment of Sexual Dysfunction: Reexamining the Biopsychosocial Model. *The Journal of Sexual Medicine* 10, 11 (Nov. 2013), 2627–2643. doi:10.1111/jsm.12273

[12] Sharon L. Bober and Veronica Sanchez Varela. 2012. Sexuality in Adult Cancer Survivors: Challenges and Intervention. *Journal of Clinical Oncology* 30, 30 (Oct. 2012), 3712–3719. doi:10.1200/JCO.2012.41.7915

[13] Virginia Braun and Victoria Clarke. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology* 3, 2 (Jan. 2006), 77–101. doi:10.1191/1478088706qp063oa

[14] Virginia Braun and Victoria Clarke. 2013. *Successful Qualitative Research: A Practical Guide for Beginners*. SAGE Publications.

[15] Virginia Braun and Victoria Clarke. 2021. One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology* 18, 3 (July 2021), 328–352. doi:10.1080/14780887.2020.1769238

[16] Stephanie O. Breukink and Kristine A. Donovan. 2013. Physical and Psychological Effects of Treatment on Sexual Functioning in Colorectal Cancer Survivors. *The Journal of Sexual Medicine* 10, Supplement_1 (Feb. 2013), 74–83. doi:10.1111/jsm.12037

[17] Nadia Campo Woytuk, Joo Young Park, Marianela Ciolfi Felice, and Madeline Balaam. 2024. Insert here: Unpacking tensions in designing technologies for the vagina. doi:10.21606/drs.2024.389

[18] Nadia Campo Woytuk, Joo Young Park, Jan Maslik, Marianela Ciolfi Felice, and Madeline Balaam. 2023. Tactful Feminist Sensing: Designing for Touching Vaginal Fluids. In *Proceedings of the 2023 ACM Designing Interactive Systems Conference*. ACM, Pittsburgh PA USA, 2642–2656. doi:10.1145/3563657.3595966

[19] Nadia Campo Woytuk, Joo Young Park, Lara Reime, Marie Louise Juul Søndergaard, Deepika Yadav, Vasiliki Tsaknaki, Sarah Homewood, and Mafalda Gamboa. 2024. A Zine for Feminist Design of Reproductive Technologies. In *Adjunct Proceedings of the 2024 Nordic Conference on Human-Computer Interaction*. ACM, Uppsala Sweden, 1–1. doi:10.1145/3677045.3685497

[20] Jeanne Carter, Deborah Goldfrank, and Leslie R. Schover. 2011. Simple Strategies for Vaginal Health Promotion in Cancer Survivors. *The Journal of Sexual Medicine* 8, 2 (Feb. 2011), 549–559. doi:10.1111/j.1743-6109.2010.01988.x

[21] Kathy Charmaz. 2014. *Constructing grounded theory* (2nd edition ed.). SAGE, Los Angeles. OCLC: 892522517.

[22] Janet X. Chen, Allison McDonald, Yixin Zou, Emily Tseng, Kevin A Roundy, Acar Tamersoy, Florian Schaub, Thomas Ristenpart, and Nicola Dell. 2022. Trauma-Informed Computing: Towards Safer Technology Experiences for All. In *CHI Conference on Human Factors in Computing Systems*. ACM, New Orleans LA USA, 1–20. doi:10.1145/3491102.3517475

[23] Marianela Ciolfi Felice, Marie Louise Juul Søndergaard, and Madeline Balaam. 2021. Resisting the Medicalisation of Menopause: Reclaiming the Body through Design. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*. ACM, Yokohama Japan, 1–16. doi:10.1145/3411764.3445153

[24] Sasha Costanza-Chock. 2020. *Design justice: Community-led practices to build the worlds we need*. The MIT Press.

[25] Valentina Elisabetta Di Mattei, Gaia Perego, Paola Taranto, Martina Mazzetti, Elena Marotta, Massimo Candiani, and Stefano Salvatore. 2021. The Long-Term

Effects of Cancer Treatment on Sexuality and Couple Relationships. *Family Process* 60, 3 (Sept. 2021), 853–865. doi:10.1111/famp.12604

[26] Pelle Ehn. 1988. Work-oriented design of computer artifacts. *doctoral dissertation* (1988).

[27] Kirsten Ellis, Ross De Vent, Reuben Kirkham, and Patrick Olivier. 2020. Bespoke Reflections: Creating a One-Handed Braille Keyboard. In *Proceedings of the 22nd International ACM SIGACCESS Conference on Computers and Accessibility*. ACM, Virtual Event Greece, 1–13. doi:10.1145/3373625.3417019

[28] Elizabeth Fisher. 1979. *Woman's creation: Sexual evolution and the shaping of society*. MacGraw-Hill.

[29] Kathryn E. Flynn, Jennifer Barsky Reese, Diana D. Jeffery, Amy P. Abernethy, Li Lin, Rebecca A. Shelby, Laura S. Porter, Carrie B. Dombeck, and Kevin P. Weinfurt. 2012. Patient experiences with communication about sex during and after treatment for cancer. *Psycho-Oncology* 21, 6 (June 2012), 594–601. doi:10.1002/pon.1947

[30] Jonas Fritsch and Christopher Gad. 2024. UDREDNING: an Extended Reality Artwork for Affectively Engaging with Diagnosing Processes. In *Adjunct Proceedings of the 2024 Nordic Conference on Human-Computer Interaction*. ACM, Uppsala Sweden, 1–9. doi:10.1145/3677045.3685491

[31] William Gaver. 2012. What should we expect from research through design?. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. ACM, Austin Texas USA, 937–946. doi:10.1145/2207676.2208538

[32] Joan Greenbaum and Morten Kyng. 2020. *Design at work: Cooperative design of computer systems*. CRC Press.

[33] Aimi Hamraie, Kelly Fritsch, Gabriele Stera, Lucie Camous, Lucas Fritz, and Chosson Etienne. 2025. Crip technoscience manifesto. (2025).

[34] Donna Haraway. 2013. Situated knowledges: The science question in feminism and the privilege of partial perspective 1. In *Women, science, and technology*. Routledge, 455–472.

[35] Judith Lewis Herman. 2015. *Trauma and recovery: The aftermath of violence–from domestic abuse to political terror*. Hachette uK.

[36] Megan Hofmann, Julie Burke, Jon Pearlman, Goeran Fiedler, Andrea Hess, Jon Schull, Scott E. Hudson, and Jennifer Mankoff. 2016. Clinical and Maker Perspectives on the Design of Assistive Technology with Rapid Prototyping Technologies. In *Proceedings of the 18th International ACM SIGACCESS Conference on Computers and Accessibility*. ACM, Reno Nevada USA, 251–256. doi:10.1145/2982142.2982181

[37] Sarah Homewood, Laurens Boer, and Anna Vallgårda. 2020. Designers in White Coats: Deploying Ovum, a Fertility Tracking Device. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*. ACM, Honolulu HI USA, 1–13. doi:10.1145/3313831.3376528

[38] Jonathan Howard, Lorna H. Tasker, Zoe Fisher, and Jeremy Tree. 2024. Assessing the use of co-design to produce bespoke assistive technology solutions within a current healthcare service: a service evaluation. *Disability and Rehabilitation: Assistive Technology* 19, 1 (Jan. 2024), 42–51. doi:10.1080/17483107.2022.2060355

[39] Amy Hurst and Jasmine Tobias. 2011. Empowering individuals with do-it-yourself assistive technology. In *The proceedings of the 13th international ACM SIGACCESS conference on Computers and accessibility*. ACM, Dundee Scotland, UK, 11–18. doi:10.1145/2049536.2049541

[40] Kristina Höök. 2018. *Designing with the body: somaesthetic interaction design*. The MIT Press, Cambridge, Massachusetts.

[41] Tom Jenkins, Anna Vallgårda, Laurens Boer, Sarah Homewood, and Teresa Almeida. 2019. Careful Devices. In *Proceedings of the Halfway to the Future Symposium 2019*. ACM, Nottingham United Kingdom, 1–5. doi:10.1145/3363384.3363474

[42] Jiwon Jung, Ki-Hun Kim, Tess Peters, Dirk Snelders, and Maaike Kleinsmann. 2023. Advancing design approaches through data-driven techniques: Patient community journey mapping using online stories and machine learning. *International Journal of Design* (2023). doi:10.57698/V17I2.02

[43] Alison Kafer. 2013. *Feminist, queer, crip*. Indiana University Press, Bloomington (Ind.).

[44] Silvia Lindtner, Shaowen Bardzell, and Jeffrey Bardzell. 2016. Reconstituting the Utopian Vision of Making: HCI After Technosolutionism. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI '16)*. Association for Computing Machinery, New York, NY, USA, 1390–1402. doi:10.1145/2858036.2858506

[45] O. I. Linet and L. L. Neff. 1994. Intracavernous prostaglandin E1 in erectile dysfunction. *Journal of Molecular Medicine* 72, 2 (Jan. 1994), 139–149. doi:10.1007/BF00184593

[46] Benedetta Lusi, Armağan Karahanoğlu, Charlotte M. Van Lotringen, Randy Klaassen, Matthijs L. Noordzij, and Geke D. S. Ludden. 2025. Designing compassionate experiences for mental health and wellbeing: a scoping review. *Behaviour & Information Technology* (Sept. 2025), 1–20. doi:10.1080/0144929X.2025.2559290

[47] Benedetta Lusi, Anna Vallgårda, Safra Martinussen, and Geke D.S. Ludden. 2025. Defining Matters of Compassion: Designing Care Technology within a Care Crisis. In *Adjunct Proceedings of the Sixth Decennial Aarhus Conference: Computing X Crisis*. ACM, Aarhus N Denmark, 1–5. doi:10.1145/3737609.3747115

[48] Benedetta Lusi, Charlotte M van Lotringen, R Klaassen, Geke DS Ludden, and Matthijs L Noordzij. 2020. Design for compassion: designing robots for e-mental healthcare.

[49] Raymond Madden. 2017. *Being ethnographic: a guide to the theory and practice of ethnography* (2nd edition ed.). SAGE, Los Angeles London New Delhi Singapore Washington, DC Melbourne.

[50] W Masters and V.E. Johnson. 1966. *Human sexual response*. Little, Brown and Company, New York, NY.

[51] William H. Masters and Virginia E. Johnson. 1970. *Human sexual inadequacy*. Churchill, London.

[52] Tuuli Mattelmäki. 2006. *Design probes*. University of Art and Design, Helsinki. OCLC: 1086221371.

[53] Robert McRuer. 2008. Crip Theory. Cultural Signs of Queerness and Disability. *Scandinavian Journal of Disability Research* 10, 1 (March 2008), 67–69. doi:10.1080/15017410701880122

[54] Evgeny Morozov. 2014. *To save everything, click here: the folly of technological solutionism* (paperback 1. publ ed.). PublicAffairs, New York, NY.

[55] Céline Offerman, Jacky Bourgeois, Jules Van Beurden, and Alessandro Bozzon. 2025. (Re)discovering Sexual Pleasure after Cancer: Understanding the Design Space. In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*. ACM, Yokohama Japan, 1–17. doi:10.1145/3706598.3713535

[56] Céline Offerman, Alexander Nieuwborg, Jacky Bourgeois, and Alessandro Bozzon. 2025. From Bodily Functions to Bodily Fun: Approaching Pleasure as a Process when Designing with Sexual Experiences. In *Designing Interactive Systems Conference (DIS '25)*. ACM, New York, NY, USA, Funchal, Portugal, 15. doi:10.1145/3715336.3735747

[57] Karen O'Reilly. 2012. *Ethnographic methods* (2nd ed ed.). Routledge, London New York.

[58] Joo Young Park. 2024. Designing with Discomfort: A Feminist Approach towards Intimate Care Technologies. In *Designing Interactive Systems Conference*. ACM, IT University of Copenhagen Denmark, 30–36. doi:10.1145/3656156.3665134

[59] Sonny S. Patel, Rebecca K. Webster, Neil Greenberg, Dale Weston, and Samantha K. Brooks. 2020. Research fatigue in COVID-19 pandemic and post-disaster research: causes, consequences and recommendations. *Disaster Prevention and Management: An International Journal* 29, 4 (Nov. 2020), 445–455. doi:10.1108/DPM-05-2020-0164

[60] Michael Quinn Patton. 2015. *Qualitative research & evaluation methods: integrating theory and practice* (fourth edition ed.). SAGE Publications, Inc., Thousand Oaks, California.

[61] Amaryll Perlesz. 1999. Complex Responses to Trauma: Challenges in Bearing Witness. *Australian and New Zealand Journal of Family Therapy* 20, 1 (March 1999), 11–19. doi:10.1111/j.0814-723X.1999.00089.x

[62] Jenny Preece, Yvonne Rogers, Helen Sharp, David Benyon, Simon Holland, and Tom Carey. 1994. *Human-computer interaction*. Addison-Wesley Longman Ltd.

[63] María Puig De La Bellacasa. 2009. Touching technologies, touching visions. The reclaiming of sensorial experience and the politics of speculative thinking. *Subjectivity* 28, 1 (Sept. 2009), 297–315. doi:10.1057/sub.2009.17

[64] María Puig de la Bellacasa. 2017. *Matters of care: speculative ethics in more than human worlds*. Number 41 in Posthumanities. University of Minnesota Press, Minneapolis.

[65] Paul Rock. 2001. Symbolic interactionism and ethnography. In *Handbook of ethnography*. SAGE Publications Ltd, 26–38.

[66] P. Rossen, A.F. Pedersen, R. Zachariae, and H. Von Der Maase. 2012. Sexuality and body image in long-term survivors of testicular cancer. *European Journal of Cancer* 48, 4 (March 2012), 571–578. doi:10.1016/j.ejca.2011.11.029

[67] Richard Sadovsky, Rosemary Basson, Michael Krychman, Antonio Martin Morales, Leslie Schover, Run Wang, and Luca Incrocci. 2010. Cancer and Sexual Problems. *The Journal of Sexual Medicine* 7, 1_Part_2 (Jan. 2010), 349–373. doi:10.1111/j.1743-6109.2009.01620.x

[68] Veronica Sanchez Varela, Eric S. Zhou, and Sharon L. Bober. 2013. Management of sexual problems in cancer patients and survivors. *Current Problems in Cancer* 37, 6 (Nov. 2013), 319–352. doi:10.1016/j.currproblcancer.2013.10.009

[69] Elizabeth Sanders and Colin William. 2002. Harnessing people's creativity: Ideation and expression through visual communication. In *Focus Groups*. CRC Press, 137–148.

[70] Elizabeth B-N Sanders and Pieter Jan Stappers. 2012. *Convivial toolbox: Generative research for the front end of design*. Bis.

[71] William Simon and John H. Gagnon. 1986. Sexual scripts: Permanence and change. *Archives of Sexual Behavior* 15, 2 (April 1986), 97–120. doi:10.1007/BF01542219

[72] William Simon and John H. Gagnon. 2003. Sexual Scripts: Origins, Influences and Changes. *Qualitative Sociology* 26, 4 (2003), 491–497. doi:10.1023/B:QUAS.0000005053.99846.e5

[73] Froukje Sleeswijk Sleeswijk Visser, Pieter Jan Stappers, Remko Van Der Lugt, and Elizabeth B-N Sanders. 2005. Contextmapping: experiences from practice. *CoDesign* 1, 2 (April 2005), 119–149. doi:10.1080/15710880500135987

[74] Autumn Stanley. 1995. *Mothers and daughters of invention: Notes for a revised history of technology*. Rutgers University Press.

[75] Pieter Jan Stappers and Elisa Giaccardi. 2017. Research through Design. *The Encyclopedia of Human-Computer Interaction* 2nd edition (2017), 1–94.

[76] Anna Ståhl, Madeline Balaam, Marianela Ciolfi Felice, and Irene Kaklopoulou. 2022. An Annotated Soma Design Process of the Pelvic Chair. In *Designing*

Interactive Systems Conference. ACM, Virtual Event Australia, 1921–1933. doi:10.1145/3532106.3533469

[77] Marie Louise Juul Søndergaard. 2020. Troubling Design: A Design Program for Designing with Women's Health. *ACM Transactions on Computer-Human Interaction* 27, 4 (Aug. 2020), 1–36. doi:10.1145/3397199

[78] Marie Louise Juul Søndergaard, Nadia Campo Woytuk, Noura Howell, Vasiliki Tsaknaki, Karey Helms, Tom Jenkins, and Pedro Sanches. 2023. Fabulation as an Approach for Design Futuring. In *Proceedings of the 2023 ACM Designing Interactive Systems Conference*. ACM, Pittsburgh PA USA, 1693–1709. doi:10.1145/3563657.3596097

[79] Marie Louise Juul Søndergaard, Ozgun Kilic Afsar, Marianela Ciolfi Felice, Nadia Campo Woytuk, and Madeline Balaam. 2020. Designing with Intimate Materials and Movements: Making "Menarche Bits". In *Proceedings of the 2020 ACM Designing Interactive Systems Conference (DIS '20)*. Association for Computing Machinery, New York, NY, USA, 587–600. doi:10.1145/3357236.3395592

[80] Anne Tagonist. 2009. Fuck you and fuck your fucking thesis: Why I will not participate in trans studies. https://tagonist.livejournal.com/199563.html

[81] Hannah Tam, Karthik S. Bhat, Priyanka Mohindra, and Neha Kumar. 2023. Learning to Navigate Health Taboos through Online Safe Spaces. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*. ACM, Hamburg Germany, 1–15. doi:10.1145/3544548.3580708

[82] Rune Thorsen, Denise Cugnod, Marina Ramella, Rosa Maria Converti, and Maurizio Ferrarin. 2024. From patient to maker - a workflow including people with cerebral palsy in co-creating assistive devices using 3D printing technologies. *Disability and Rehabilitation: Assistive Technology* 19, 4 (May 2024), 1358–1368. doi:10.1080/17483107.2023.2177754

[83] Bente Træen, Ana Alexandra Carvalheira, Gert Martin Hald, Theis Lange, and Ingela Lundin Kvalem. 2019. Attitudes Towards Sexuality in Older Men and Women Across Europe: Similarities, Differences, and Associations with Their Sex Lives. *Sexuality & Culture* 23, 1 (March 2019), 1–25. doi:10.1007/s12119-018-9564-9

[84] Helma van Rijn and Pieter Jan Stappers. 2008. Expressions of ownership: motivating users in a co-design process., Vol. 8. 178–81.

[85] Helma Van Rijn and Pieter Jan Stappers. 2008. The Puzzling Life of Autistic Toddlers: Design Guidelines from the LINKX Project. *Advances in Human-Computer Interaction* 2008 (2008), 1–8. doi:10.1155/2008/639435

[86] Kelly Voigt, Yingtao Sun, Ayush Patandin, Johanna Hendriks, Richard Hendrik Goossens, Cornelis Verhoef, Olga Husson, Dirk Grünhagen, and Jiwon Jung. 2025. A Machine Learning Approach Using Topic Modeling to Identify and Assess Experiences of Patients With Colorectal Cancer: Explorative Study. *JMIR Cancer* 11 (Jan. 2025), e58834–e58834. doi:10.2196/58834

[87] Judy Wajcman. 2004. *TechnoFeminism*. Polity, Cambridge ; Malden, MA.

[88] J. Wajcman. 2010. Feminist theories of technology. *Cambridge Journal of Economics* 34, 1 (Jan. 2010), 143–152. doi:10.1093/cje/ben057

[89] Sandrien Weda, Danielle Zweers, Britt B. M. Suelmann, Richard P. Meijer, and Sigrid C. J. M. Vervoort. 2023. From Surviving Cancer to Getting on With Life: Adult Testicular Germ Cell Tumor Survivors' Perspectives on Transition From Follow-Up Care to Long-Term Survivorship. *Qualitative Health Research* 33, 8-9 (July 2023), 715–726. doi:10.1177/10497323231173808

[90] Michael J White. 1995. Re-authoring lives: Interviews & essays. *(No Title)* (1995).

[91] Faustine Williams and Stephen C. Jeanetta. 2016. Lived experiences of breast cancer survivors after diagnosis, treatment and beyond: qualitative study. *Health Expectations* 19, 3 (June 2016), 631–642. doi:10.1111/hex.12372

[92] Asta Zokaityte. 2025. FemTech Assets. *Feminist Legal Studies* (June 2025). doi:10.1007/s10691-025-09570-7