Designing for Uncontrollability: Drawing Inspiration from the Blessing Companion

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ABSTRACT

This paper presents an inspirational concept for companion technology design, *uncontrollability*, and a corresponding artefact, the Blessing Companion. Both originated from a research through design project exploring companion technologies for blessing rituals. We established an exchange with Protestant theologians, explored believers' experiences of blessings, co-speculated on potential technologies, and refined the resulting ideas through ideation, prototyping, and testing. Inspired by believers' descriptions of blessing experiences as not plannable, predictable, controllable, or enforceable, we adopted the concept of *uncontrollability*, explored how it might be implemented in companion technologies, and designed the Blessing Companion. The Blessing Companion embodies *uncontrollability* through its ambiguous appearance and (partly) uncontrollable behaviour. It thus stands in contrast to the prevailing on-demand and user-driven interaction paradigms. We discuss how *uncontrollability* can be reflected in content, form, and interaction, highlight respective possibilities for companion technologies, and reflect on the Blessing Companion as an example of designing for religious rituals.

CCS CONCEPTS

• **Human-centered computing → Interaction paradigms**; **Interaction design theory, concepts and paradigms**.

KEYWORDS

Research through design, religion, ritual, companion technology, techno-spirituality, transcendent experience

1 INTRODUCTION

In 2017, at the World Reformation Exhibition in Wittenberg, the Protestant Church in Hesse and Nassau presented BlessU2, an experimental art project of a blessing robot designed to initiate discussion among believers [35]. BlessU2 pronounced more than 10,000 blessings to visitors and has since been repeatedly exhibited in religious and non-religious settings [35, 44]. The exhibition of BlessU2 sparked considerable media echo and polarised reactions [35]. Besides theological questions, BlessU2 also raises questions for HCI: What does technology look or behave like to which spiritual or religious competence is attributed? What role can technology experienced as a companion take in religious rituals? These questions differ from those previously addressed in HCI in the context of spirituality, religion, and technology. So far, technologies were understood (and accordingly investigated and developed) more as facilitators, as a means to an end, and as tools to be used that solve problems or enhance existing religious rituals [e.g., 39, 41, 53, 56]. BlessU2 promotes a different interaction paradigm: It highlights technology not as a tool but as a counterpart or social actor to enter dialogue with [24, 27, 36, 57]. A metaphor often used for such technology is companion technology [37]. With companion technologies, more than the immediate interaction comes into focus, like its perceived character, social relationship with users, or reflections on the human self [37].

So far, various religious companion technologies like BlessU2 [35] have been proposed: For example, a Pepper robot programmed to perform Buddhist funeral rites [45], or an Alexa skill that enables Alexa to pronounce blessings [13]. These companion technologies took up existing religious rituals and made them more readily available, accessible, controllable, or efficient to take part in. Instead of seeking and asking another person to pronounce a blessing, one can ask Alexa for a blessing at any time and from home [13]. In addition, these companion technologies took over pre-existing roles and

modes of interaction almost "as it has always been done". BlessU2 imitates a pastor in church pronouncing a blessing [35], and Pepper performs funeral rites like a Buddhist monk [45].

While efficiency and accessibility are (rightly) the most important criteria for designing successful interactions in many contexts, HCI increasingly recognises that these criteria alone are insufficient in other contexts, such as rituals or life transitions [23, 29, 57]. Hansen and Koefoed Hansen [23], for example, suggested that digital divorce forms should not only be designed according to usability criteria but could also be inspired by theories of ritual, thereby resulting in an unusual form that takes into account the feelings, meanings, and uncertainties present during a divorce. Similarly, a project designing for relationship transition rituals documented that couples wished for even more extended and less efficient interaction with their ritual-mediating prototype [29]. We argue that this perspective can also be applied to religious rituals and that it is worth questioning the focus on simply making religious rituals more readily accessible, efficient, and controllable by imitating existing rituals through companion technologies. Approaching the complex and sensitive topic of religious blessing rituals in a more holistic and exploratory way, we identified a novel concept, *uncontrollability*, that might be a suitable guiding principle for technology design in the context of religious rituals.

We conducted a research through design project, exchanging ideas with Protestant theologians and using design fiction methods to get Protestant believers to think about their blessing experiences and speculate about future companion technologies. Through this process, we learned about an essential experiential component of blessings - their *uncontrollability*. Blessing experiences are neither plannable, controllable, nor predictable. They are essentially contingent and thus fundamentally open and uncertain. Believers detailed how blessing experiences can happen anytime, anywhere, and can take the form of small, positive, often surprising experiences in everyday life. We distilled these insights into the inspirational concept of *uncontrollability* and developed the Blessing Companion to explore how the concept can be approached in design. With *uncontrollability*, we refer to the experience that something or someone is not fully controllable, accessible, plannable, visible, available, traceable, graspable, enforceable, or knowable. The Blessing Companion seeks to provide such experience by implementing *uncontrollability* at various levels, namely form, interaction and content. It is a contingent companion that wants to fascinate by reminding us of the good in life, the blessed.

We contribute by introducing the inspirational concept of *uncontrollability* grounded in our research through design process and by presenting the outcomes of our design exploration of *uncontrollability*, which eventually resulted in a conceptual artefact that integrated *uncontrollability* at several levels: the Blessing Companion. We thereby contribute to research on technology-mediated religious, spiritual or transcendet experiences specifically and companion technologies more generally. We provide an account of designing for *uncontrollability* and connect it to previous examples from HCI and sociological theories. In the next section, we situate our work in the context of religious (blessing) rituals mediated by interactive technologies. We then describe the design process of the Blessing Companion and our growing understanding of the concept

of *uncontrollability*. Finally, we present an extended discussion on *uncontrollability* and the Blessing Companion.

2 BACKGROUND AND RELATED WORK

2.1 Religious Rituals Supported by Interactive Technologies

There has been an ongoing interest in how interactive technologies and religious rituals are entangled within HCI. Years ago, Wyche and Grinter [59] described how studying Protestant Christians' uses of technology inspired them to reframe the design of domestic technologies to support *extraordinary computing* - to take into account and honour the special in everyday life. Since then, various HCI projects have investigated the intersection between interactive technologies and religious rituals. For example, Rifat et al. [41] ethnographically studied the production of Islamic sermon videos in Bangladesh and traced the videos' influence on creating a political and moral counterpublic. Other recent work looked into how streaming worship services or Buddhist funeral rituals during the COVID-19 pandemic impacted the resulting experiences of believers [53, 56]. Besides research into interactive technology's appropriations, HCI has also designed for the religious context. For example, Wyche et al. [58] designed a smartphone application to support Muslim prayer, O'Leary et al. [39] designed a digital health tool for religious communities that included a feature for mutual prayer support, and Häkkilä et al. [22] developed a virtual reality app allowing for virtual grave-visiting rituals. In the above examples, technology was often adopted or designed to solve (non-religious) pragmatic problems (e.g., because communities were not allowed to meet in person [53, 56], or grave sites were inaccessible [22]). In doing so, technology was used to make religious rituals more easily accessible and controllable. Technology thereby became a means for pre-defined ends, a tool to access religious rituals.

Other HCI projects adopted a more exploratory perspective, not focusing on solving pragmatic problems but on creating possibilities for new rituals and practices. For example, Hemmert et al. [25] designed seven tangible artefacts reflecting specific Catholic beliefs like "all humans are equal", enabling novel confrontations with those beliefs. Analyzing their process and the artefacts, they suggested a design recipe combining everyday objects with a belief and an *unknowable element*. Inspired by Buddhist traditions, the two artefacts SenseCenser [51] and Fenestra [50, 52] were designed to explore how interactive technology could support memorial rituals in Japan. Both artefacts display photos of departed loved ones and are inspired by traditional Japanese practices of memorializing with a home altar [50–52]. A last exploratory example is the Prayer Companion, a device displaying a stream of news information designed for cloistered nuns [17]. It was not designed for a specific usage scenario but was deliberately open-ended so that it could be explored and adopted by the nuns in a way that was useful to them, e.g., as inspiration for prayers or conversation starter [17]. All exploratory examples were based on a thorough understanding of existing practices. However, the resulting technologies did not imitate these practices or solve problems. Instead, they explored new possibilities, which is what we wanted to adopt for our project.

The last set of relevant examples from HCI literature is connected to the perspective of interactive technologies as companions. Trovato et al. presented SanTO, a Catholic robotic saint statue that provides company during prayers, cites parts of the Bible, and should be seen as a sacred object embodying divinity [47, 48]. Another example is BlessU2, the Protestant blessing robot that was studied compared to the small robot QT programmed to pronounce blessings as well [33, 35]. The authors found that believers preferred, for example, loud voices in humanoid robots that pronounce blessings [33]. All religious companion technologies implemented a precise usage scenario only allowing for a set of pre-defined tasks (e.g., asking for a prayer or a blessing), making them efficient, predictable, and controllable, and drew (more or less) on existing rituals. In this paper, we want to combine the more exploratory approaches with the topic of companion technologies, speculating on the (novel) roles they may assume in blessing rituals.

2.2 Blessing

2.2.1 Blessing in Protestant Theology. Tracing the etymology of the word *blessing*, we found two different backgrounds and meanings: *Berakah*, (Hebrew) means strength, fertility, successful life, or the good encountered by man, understood as the gift of the blessing Creator God. A second origin of *blessing* is the Greek word *eu-logein* and the Latin word *bene-dicere*, expressing the transmission of the good, often accompanied by a reference to God that is believed to make the blessing come true. Here, blessing still refers to the good in life, but the focus is on the social practice of assuring the good. People can decide on the specific blessings to pronounce, but they cannot make the blessings come true themselves. Instead, Christian believers trust God to fulfil the blessings. When we speak of blessing in this paper, it is in this sense. Believers exchange blessings in various rituals and refer (more or less obviously) to God. These rituals serve as encouragement, remembrance, and recognition. A well-known blessing ritual is the Aaronite Blessing, pronounced by a pastor at the end of every worship service. According to Protestant understanding, however, it is by no means only the pastor who can pronounce blessings. The pastor is seen as a mediator, just like anyone else could be. Apart from such institutionalised blessing rituals, there are also less formalised ones that occur within everyday life, like greeting or farewell rituals [21].

In recent years, religious scholars have noticed a rise of interest in blessing rituals [1, 14]. Many church communities developed and offered novel benedictions for specific target groups, such as blessing services for pregnant women or bikers [e.g., 1, 11, 20]. In addition, blessing rituals moved into everyday environments, such as transition rituals performed in schools rather than staying within church buildings. Furthermore, blessing rituals received increased interest in those groups that had been refused blessings before (e.g., same-sex couples) or in more secular groups that nevertheless want to enjoy blessing rituals [10]. This trend has led to novel jobs such as ritual designers or blessing agencies [e.g., 12, 49] that offer individualised blessing rituals and novel digital blessings.

2.2.2 Transcendent Experiences in HCI and Digital Blessings. Blessing experiences, as introduced above, can be concrete examples of transcendent experiences, "the individual experience of connection or unity with transcendence" [4, p. 8], a type of experience that

has gained increased attention in HCI. Like transcendent experiences, blessing experiences engage with that which is intangible and greater than oneself and can trigger feelings such as awe, wonder, peace, and happiness [3]. Transcendent experiences contribute to well-being and mental health but can neither be forced nor guaranteed [16]. Thus, interactive technologies can only facilitate, support, or invite transcendent experience [3]. Recent, widely used examples are the smartphone apps Headspace or Calm or the virtual reality application TRIPP. While the focus within HCI is often on profound, mystical experiences, awe, and virtual reality [e.g., 6, 7, 19, 55], transcendent experiences can also be light, focus on components other than awe, and involve other technologies [3]. It is precisely these latter elements that we wanted to pay more attention to in our work.

Since there is only little scientific reflection on the topic of blessing rituals in the field of HCI, in contrast to a large number of existing religious technologies "in the real world" [5], we have also searched for digital blessings outside academia. We searched online and in app stores using English and German search terms such as "blessing", "blessing technology", or "blessing app". Most online services and apps provided blessing inspiration [e.g., 46] or blessings regularly or on demand [e.g., 28, 38]. An example is the online service segen.jetzt (English: blessing.now), invented by a German pastor and implemented by several churches [15]. Upon entering the webpage, the service displays written blessings, and one can order analogue QR codes to spread blessings. A similar blessing service is blessing greetings, a newsletter service that sends a blessing each day [12]. The blessings are composed of stock images and a written blessing, and anyone can sign up for the service [12]. One app stood out because of its different functionality: The Blessing Tracker App [2]. This app encourages users to set goals for how many blessings they want to pass on each day and to keep a record of the blessings passed on, almost like a fitness tracker [2].

While the previous examples focused more on supporting interpersonal blessing practices, we also found examples where the technology became more of a (blessing) companion, like the already mentioned BlessU2 [35] and the blessing Alexa [13]. Another example was the Benedicti-o-mat invented by an artist to make the blessings of her homeland controllable at a distance [26]. The Benedicti-o-mat consists of a wooden box that can be attached to walls. When standing in front of it and pressing a button, a beam of light from inside the box casts a cross outside. Not only believing individuals [e.g., 26] but also communities of believers and church institutions [e.g., 13, 15] started to develop blessing technologies, some of which were interacted with by thousands of people [e.g., 35]. Comparing the various blessing technologies, we identified two key elements: First, blessing technologies make blessings available faster, easier, and on demand. If one wants a blessing immediately, one can get it. This element is similar to what is documented within HCI on how streaming worship services or funerals made these rituals more readily available and accessible [53, 56]. Second, many blessing technologies use previously existing elements, like pronouncing a blessing. They extend, imitate, or reproduce existing rituals with novel technologies, much like the HCI examples do..

Overall, prior work in HCI and outside academia has focused on making religious rituals more readily available through technology. Technologies, especially companion technologies and technologies

Table 1: Details on the six participants of the design probe study.

ID	Age	Gender	Connection to blessing
P1	35	male	professional theologian, trains to become a pastor
P2	17	female	recent reflections while preparing for her confirmation, is active in a Protestant youth group
P3	34	female	recent blessing experiences, reflects on blessing in an "ideologically neutral view" through consciously perceiving surroundings and feelings as inspired by yoga-practices
P4	16	female	blessings as a ubiquitous topic within her family and church community, recent preparation for her confirmation
P5	34	female	frequent encounters with the topic of blessing in everyday life
P6	30	male	professional theologian, likes to pass on surprising, magical moments (blessing rituals) in everyday life

within blessing rituals, often imitated existing rituals for this purpose. In this paper, we follow the more exploratory approaches, speculating on novel companion technologies for blessing rituals.

3 THE BLESSING COMPANION: DISCOVERING *UNCONTROLLABILITY*

To explore blessing experiences and speculate on future technologies with a holistic and experience-based perspective, we drew on three related approaches, namely research through design [60], design probes [34, 54], and design fiction [30]. Throughout the overall process, we aimed to produce future-oriented design knowledge, anticipate possible consequences of future companion technologies in the context of religious rituals, and allow for challenging status quo thinking. Thereby, our focus was not on solving specific problems in existing blessing rituals but on exploring how companion technologies might take roles in novel blessing rituals that can be fulfilling and meaningful to those involved.

To realise such a project at the intersection of religion, design, and HCI, we assembled a team from different disciplines, including design, ethnography, HCI, psychology, and Protestant theology. The first author of the paper, trained in HCI, guided the overall process, and all co-authors participated according to their expertise. In this paper, we report on how believers' accounts of blessing experiences uncovered the concept of *uncontrollability* and how a subsequent design process helped us to concretise the abstract concept in form, material, interaction, and content of a companion technology - the Blessing Companion. We present our inquiry's major steps and insights, focusing on *uncontrollability*. Our exploration began with (1) a reading of Protestant theory on blessing (see section 2.2 for a summary), followed by (2) a design probe study with believers, (3) an exploration of how *uncontrollability* could be implemented in design through material exploration and sketching sessions, and (4) an integration and refinement of various elements of *uncontrollability* into the Blessing Companion concept through prototyping and a study. When we write of blessing technology in the following, this implies the perspective of technology as a companion. We highlight key insights in *italics*.

3.1 Design Probe Study: (Future) Blessing Experiences

After the theoretical engagement with blessings, we wanted to understand the experiential perspective and co-speculate on the possibilities of blessing technologies together with believers: How does a blessing experience feel like? How could companion technologies look or behave when taking roles in blessing rituals? We invited interested believers to reflect on blessing experiences and speculate on blessing technologies supported by design probes and speculation workshops [34, 54].

3.1.1 Method. Having obtained ethical clearance for the study, the collaborating theologians distributed the call for participants in their networks. We were searching for a variety of Protestant believers who had already dealt with the topic of blessing before the study (e.g., because being in training to become a pastor or preparing for confirmation) and were open to speculate on novel technologies. We restricted the recruitment to Protestant believers for several reasons: Most importantly, blessing takes on different meanings in different religions. Working with Protestant theologians enabled us to understand the perspective of Protestant Christians, but not that of other religions. In addition, Christianity was also the most widespread religion in the study's context. Still, finding people meeting the above criteria was challenging, and we were lucky to recruit six people (Table 1).

Since the study was affected by COVID-19 distancing regulations, we sent the study material to participants (Figure 1) and performed all workshops online. The two most essential items were the blessing artefact and kinetic sand. The blessing artefact, a non-functional textile object which we claimed could bless, was designed to serve as a reminder of the task within everyday life, a placeholder for anything that could be, and a support for speculations that go beyond the initial idea of imitating existing rituals (e.g., beyond a humanoid robot imitating human roles). Participants were tasked to imagine how, where, or when the artefact blesses and how it should be adapted to facilitate a meaningful blessing experience. The collaborating theologians suggested the kinetic sand as a metaphor that should challenge participants' conceptions of blessing. Like blessings, kinetic sand can take specific forms or no form and is tangible and intangible.

After participants received the packages and gave informed consent, we individually met online for a kick-off workshop to clarify our goals, the method, and the kinds of experiences we were interested in. To demonstrate our understanding of blessing technologies in the sense of technology as a companion and communicate our idea of exploring technologies beyond an imitation of existing rituals, we showed a short video of the blessing robot BlessU2 [40].

Figure 1: Items of the design probe packages.

Participants then observed themselves, reflected on their blessing experiences, and speculated on potential ways of engaging in blessing rituals with the design probe for as long as they wanted (times ranged between 7 and 17 days). During this time, participants documented their thoughts on blessing experiences and sent us individual messages (text, voice, or images) via anonymised chat accounts. The study ended with a concluding workshop in which we validated our understanding of the messages, elaborated on essential aspects of blessing experiences, and speculated on novel blessing technologies. Participants each received 40€ to compensate for their time and effort.

Overall, we collected an array of participant-produced data in the form of sketches (Figure 2) and messages, building the core of the analysis. For triangulation, this data was enriched by qualitative data from the workshops and interviews, such as field notes, audio recordings, and transcriptions. We organised the data roughly following an affinity diagramming process by grouping and regrouping the data, connecting participants' ideas of novel technologies with their conceptions about blessings and essential experiential elements. Reading through the resulting data clusters repeatedly, we generated a set of key insights.

3.1.2 Findings. Small positive moments in everyday life that remind of an omnipresent blessing and make it tangible. Participants expressed various conceptions of blessings, reflecting the complexity and multi-layeredness. Nonetheless, their initial associations were often alike: "The first thing you think of, of course, is being blessed by the pastor in a church" (P4). Apart from this, most of the participants' blessing experiences related to places, encounters, or events within everyday life, like "being spontaneously hugged by a colleague" (P5), learning about "the birth of my niece" (P4), "drinking a coffee with my mother" (P4), or consciously experiencing and enjoying life, e.g., how the sun was "shining on my head and my face" (P1). To our participants, blessing experiences related to concrete, *positive experiences* in their everyday lives that *reminded* them of and *strengthened their basic assumption that there is (unconditional) good in the world*. One participant described the experience of this basic assumption as follows: "Um, a blessing is a feeling for me. A feeling that is given to me, or a protection and a companionship

that is given to me along the way" (P3). Here, blessing refers to a particular, positive view putting the good in life into focus. These descriptions have shaken our original, theory-based assumption that blessings are mainly tied to formal rituals. We recognised that blessings can be consciously perceived in formal, institutional rituals and in multiple ways in everyday life and are associated with strong, positive feelings.

Blessing experiences can potentially happen anytime, anywhere, with almost any content. "Hm, another moment when I felt very blessed was when I was raking leaves in our garden, so a nature-related blessing experience, I would say, there are many of them anyway. I was raking leaves, and then I was walking along our apple trees, and I saw in the one tree above me about 50 birds sitting pecking at the apples that were still there, and then I started picking the good apples [...]. And all the time, I was thinking how great it is that this is just growing. So it's just there! It's a huge abundance that is just a gift. I find that very impressive" (P1). The participant described a blessing he experienced suddenly, within everyday life through *the conscious, appreciative seeing of the unique and extraordinary in the everyday*. The participant might have been in the same situation many times before, barely noticing the surroundings. However, a change in perspective allowed him to consciously look at the self-evident *with awe, astonishment, fascination, and admiration*. The feeling took him away from everyday life for a moment and allowed him to realise and enjoy the good in life.

Participants suggested that if novel blessing technologies were to be effective, they would need to *create sudden times and spaces perceived as out of the ordinary*: "And then I thought, if it [the design probe] had something like this now, something unpredictable. For example, it opens without you knowing when. Then I thought, wow, that would be something like that, that would totally surprise you! [...] So I think technology could become so unpredictable that it surprises and emotionally touches. And that would also have a quality for me that stylises technology not just as dead matter, but as something alive, sudden, unexpected" (P6). A related idea suggested implementing unpredictable behaviour through shape-changing artefacts (P1; Figure 3, top row second from left). Participants transferred the idea that blessing can *take place at any time, anywhere, and with any content*, as long as the exact time and content are *not known or planned*, to the design of blessing technologies. This mixture of the potential occurrence of blessings at any time and the simultaneous lack of clarity about the exact experience creates the *delightful tension, friction, and finally surprise* that participants described as essential for the experience of blessing in everyday life.

Giving up control: Blessing experiences do not occur on demand. Another participant echoed this idea of tension, describing how the element of *unplannability and untraceability* makes the blessing experience what it is: "Blessing technologies need to fascinate me [...] since it [blessing] has a little bit of a magical component to it, I've noticed. So um, it's more than rational. Um, so even if I find something rationally really cool, then I find it really cool at most, but it's not an experience of blessing yet. Um, exactly - so blessing still has a magical, spiritual, supernatural, you can use different terms for it, component" (P5). Looking at this quest for magical, supernatural experiences from a design perspective, we noticed a striking element that was also reflected in most of the
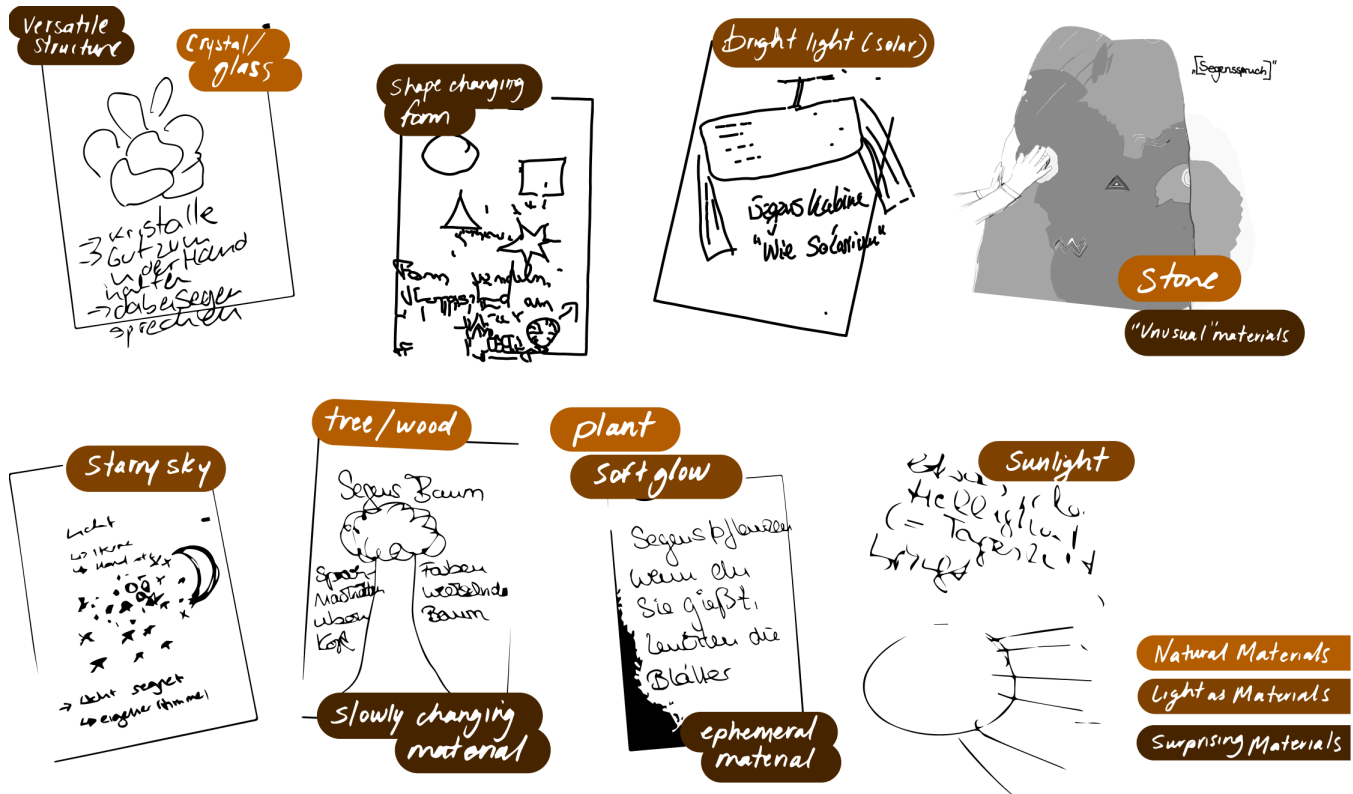
Figure 2: A selection of participants' sketches and ideas of future blessing technologies with our annotations (brown). The annotations refer to three recurring themes within participants' ideas that inspired the following design process: natural materials, light as materials, and surprising materials.

participants' ideas (Figure 2, surprising materials). To realise *magic and surprise* with blessing technologies, a *shift in control* was always required: away from the user to the technology. The described blessing experiences were not consciously initiated or planned by participants but always *triggered from the outside* and attributed to a transcendent power. "Yes, very often I have had the feeling when the sun is shining, shining on my head and on my face, and I have had the feeling that I had something planned and the weather suits it. That is, somehow, such a blessing! It somehow fits, um, yes, as if the good God wanted it to work out today" (P1). Again, the participant had no control over the experience. He had no way of ordering good weather or being sure that everything would go exactly as he wanted - it just happened. This element of *having little control* created space for a *positive surprise* and a blessing experience, something we summarised using the term *uncontrollability*.

Following this perspective, participants imagined that blessing technologies should decide on the interaction's when, how, what, or where. Blessing technologies could, for example, "require patience" (P6) and could behave in a way that no predictable pattern would become recognisable (P5). Thus, *uncontrollability* could be reflected in technology's interaction design and behaviour. Participants suggested placing blessing technologies as a constant background presence in daily life that, from time to time, could attract attention. "So I think the core of this technology would be to put

people in touch with something transcendent [blessing], let's say. Or taking them out of their everyday contexts for a brief moment. You could also say creating a brief moment of pause and pointing to it [blessing is everywhere]" (P1). Here, blessing technologies should serve as a brief, sudden *reminder* of blessing and the good in life or as "a thought-provoking impulse" (P5) that would trigger to take a different, positive view on life. Participants' ideas highlighted that technologies could refer to essentially *uncontrollable* content, like a blessing or the good life. Interestingly, several participants expressed that the non-functional object associated with blessing had already changed their view in everyday life. "I was very curious and had the feeling that I was being lured onto a new track [by the design probe]. So somehow something new came up for me, and yes, it was kind of exciting" (P6). Summarising the above findings, we recognised that blessing technologies do not necessarily need to take the role of a counterpart pronouncing blessings but could serve as a *physical reminder* of blessing or a *surprising, idiosyncratic companion* that embodies the core of blessing experiences, their *uncontrollability*, in form, behaviour, interaction, and content.

3.2 Initial Design Development: Exploring *Uncontrollability* in Design

We were particularly intrigued by the concept of *uncontrollability*. Although it is an obvious concept of religious rituals since they
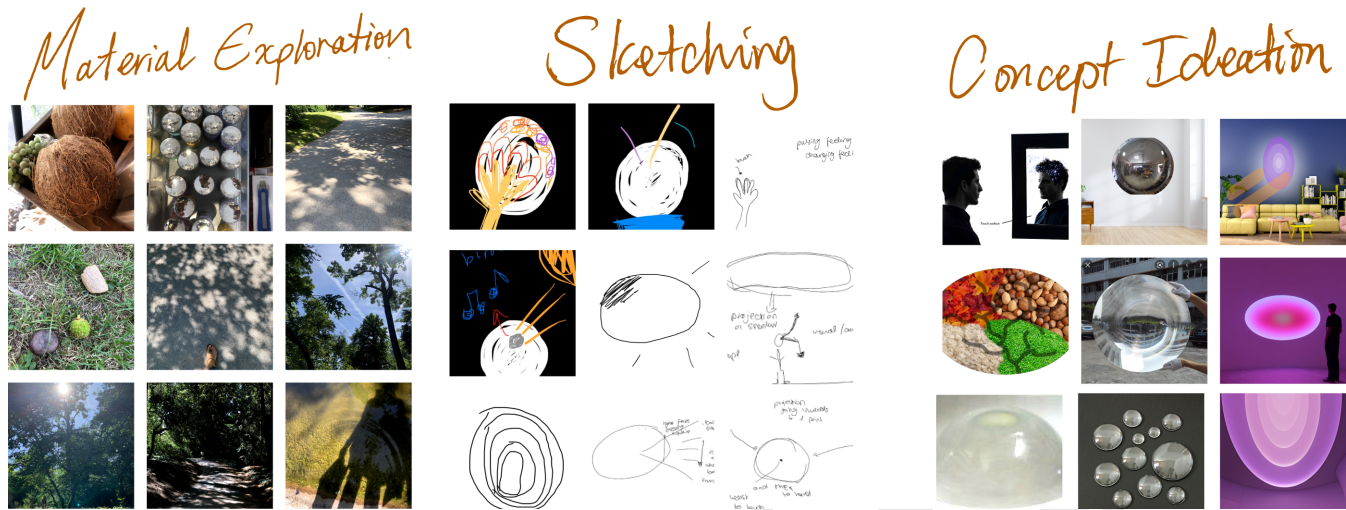
Figure 3: A selection of the materials, sketches, and concepts we collected and generated to explore and concretise the concept of *uncontrollability* for blessing technologies. The three sections correspond to the design process from broad exploration (left) to integration (right), reflecting *uncontrollability* in content, form, behaviour, and interaction.

often deal with *uncontrollable*, inaccessible contents, it is often overlooked in technology design, which prioritises ease of use and user control. Consequently, we saw a significant contribution in exploring how to design for *uncontrollability*. We (two HCI and one design person) engaged in various ideation activities to concretise the concept of *uncontrollability* for the design of interactive technologies. The starting point for our design process was blessing experiences as described by our participants: surprising, fascinating, small moments in everyday life that allow perceiving the everyday with an appreciative view.

3.2.1 Material Exploration and Sketching. We began by exploring how *uncontrollability* and further aspects of blessing experiences like awe, holism, divine, or peace are reflected in the environment and existing materials, performing a material exploration workshop. Within the workshop, we tasked ourselves to respond to prompts (e.g., "Describe a positive yet unexpected experience in one item!") by collecting materials from an art store and nature (Figure 3, left). Analysing the resulting material collection, we found some recurring features related to *uncontrollability*. For example, clouds or shade from trees shared an abstractness and ambiguity: Everyone can see something different in them depending on individual associations or perspectives. Another outstanding feature was change: Shadows of trees changed depending on one's own or the sun's movements; reflections from glass spheres changed depending on light, position, or the changing environment.

After we had more sense of how *uncontrollability* could be expressed through material and form, we explored how the identified elements could be integrated into a blessing technology. To do so, we performed repeated individual and joint sketching sessions over several weeks (Figure 3, middle). In a subsequent meeting, we reviewed, clustered, and discussed all ideas and identified shared elements across sketches. The sketches showed that *uncontrollability* could be reflected simultaneously at different levels, such as the

form (e.g., material, appearance, shape, visual representation) but also the interaction (e.g., input, output, perceived behaviour). One prevalent idea concerning perceived behaviour and interaction was technologies that take on the character of *uncontrollability* and behave as if they are idiosyncratic and have something to hide. To this end, the interaction could be intentionally designed to be uncontrollable or unpredictable to some degree. For example, the interaction could be initiated by the technology and not by the users, or the technology could decide when to reveal something (e.g., a blessing). Another idea to integrate *uncontrollability* concerning form was ambiguity and openness. Technologies could provide contradicting affordances or lack information, consist of abstract shapes, materials, or visuals, or invite open-ended exploration rather than providing hints on tasks to be solved. Given that our ideas were based on the previous steps, many previously identified elements were integrated into our sketches, like the light as a material that could change slowly or create fascinating reflections.

3.2.2 Concept Ideation and Prototyping. To narrow down and concretise the abstract elements identified above (e.g., ambiguity and openness through abstract shapes), we continued with concept ideation sessions and prototyping (Figure 3, right) and developed an early idea of the Blessing Companion. The Blessing Companion is a technology that seeks to support people in becoming more aware of blessings and to create small moments in everyday life dedicated to fascination, reflection, and the conscious perception of the good in life - the blessed life. Following participants' suggestions (Figure 2) and our ideation activities (Figure 3), the Blessing Companion is a physical artefact that can be placed at a fixed location in a person's home, so it functions as a physical reminder without requiring constant interaction. Nonetheless, the Blessing Companion is interesting to look at even when it is not currently interacted with and invites exploration, almost like a piece of art.
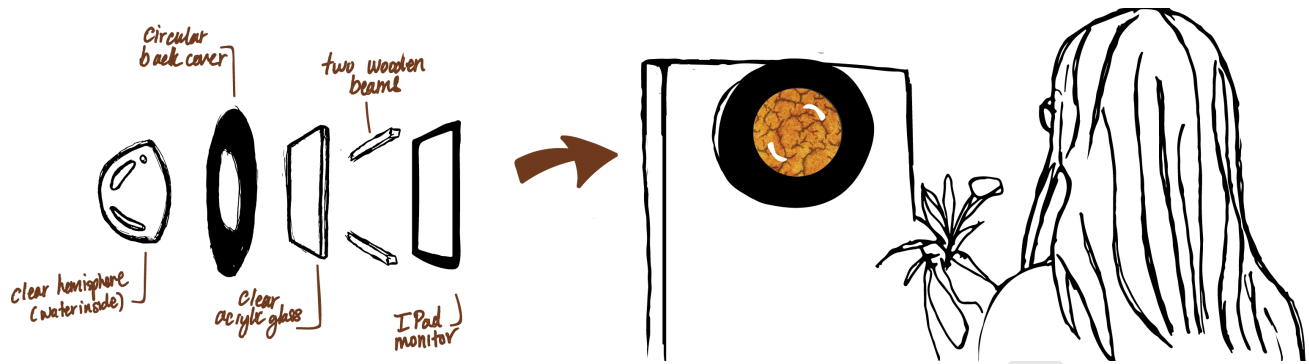
Figure 4: The assembly of the Blessing Companion prototype and a typical scene from the study in which a participant approaches the Blessing Companion.

The Blessing Companion's form and appearance reflect *uncontrollability*. For example, it has an abstract round shape that does not allow direct associations with its essence. In addition, it has an ever-changing appearance, achieved by using shaped transparent material that can refract and distort light (like we found in our material exploration, Figure 3, left). Through iterative prototyping, we found that a hemisphere-shaped glass filled with water and mounted onto a bright screen creates fascinating visuals. Visuals displayed look different each time, depending on the perspective, ambient light conditions, and reflections, inviting open-ended exploration. Visuals look distorted, magnified, blurred, or fused with the surrounding's reflections. To initiate a reflection on and conscious perception of the good in life, the Blessing Companion searches for and presents images of the good when a person approaches and looks at it more closely. The display of these images is gradual over days, requiring patience and relinquishing of control from humans, resulting in a somewhat *uncontrollable* interaction. The time to reveal and the content itself is not controllable by users but decided upon by the Blessing Companion. Users can explore the Blessing Companion but cannot simply request and receive a blessing on their own terms - it is *uncontrollable* to them.

The "what" of the concept was relatively straightforward, but the "how" was less clearly defined. For example, it was unclear how much *uncontrollability* in interaction might be too much, leading to pure frustration rather than excitement and anticipation. For example, we imagined the Blessing Companion to initially obscure the images of the good through haze that slowly vanishes over time or through macro shots zoomed out over days. Also, we imagined various ways of where and how the Blessing Companion could search for and select images of the good, like using a user's photo database, generic images found online, or a mixture of both. Each of these possibilities had advantages and disadvantages: A selection from online databases emphasises *uncontrollability*, private images emphasise the focus on personal blessing experiences, and the mixture might allow for both personalisation and *uncontrollability*.

3.3 Design Refinement: Balancing *Uncontrollability* and Controllability

The more we were invested in designing for *uncontrollability*, the harder it became to keep a sense of when *uncontrollability* was

implemented too drastically, rendering interaction impossible and leading to pure frustration in users. We recognised that designing for *uncontrollability* does not simply mean pushing *uncontrollability* to the limit but striking a careful balance between controllability and *uncontrollability*.

3.3.1 Wizard-of-Oz Study. To find such a balance for the Blessing Companion in form and interaction, we invited persons familiar with technology design (e.g., students from media studies or HCI) to interact with different versions of the Blessing Companion and discuss their experiences with us. To do so, we produced a prototype of the Blessing Companion (Figure 4) that could be controlled in a wizard-of-oz manner, so it would be perceived as acting autonomously. Throughout the studies, one researcher controlled the prototype's interaction (e.g., reacting to a participant approaching it). The researcher sat 2.5 metres away from the prototype and out of the participants' immediate field of view when they interacted with the Blessing Companion. We prepared various alternative behaviours and visual designs, like different ways of alienating images of the good (e.g., haze or macro shots) or different ways of reacting to a person approaching the Blessing Companion (e.g., turning visual elements in circles faster and faster or lighting them up and down), and different examples of the good to be revealed (e.g., a forest scene or a cup of coffee inspired by participants' stories).

Since, at this point, we were mainly interested in the interaction design details concerning *uncontrollability* and the emotions evoked when interacting with it (e.g., interaction perceived as too uncontrollable and frustrating), we advertised the study among students of technology-related subjects, inviting those interested in exploring a blessing technology (ethical clearance obtained). We did not exclude anyone due to religious background and included everyone who wanted to experience a blessing technology. Nonetheless, all participants were raised in the same cultural context and had a general understanding of blessing. Overall, seven interested students, all aged between 18 and 24 (Table 2), encountered the Blessing Companion in a living room-like university room.

Participants individually explored the Blessing Companion with various alternative behaviours and visual designs while thinking aloud. At the beginning of each interaction cycle, participants stood away from the Blessing Companion and were asked to explore it

Table 2: Details on the seven participants that explored the Blessing Companion.

ID	Gender	Religious affiliation	Blessing is...
P1-2	female	raised Christian, nowadays spiritual without feeling connected to any specific religion	a feeling of security and happiness, contentment, all positive feelings
P2-2	female	raised Buddhist, nowadays spiritual without feeling connected to any specific religion	to be lucky with something or to get some kind of acknowledgement
P3-2	male	raised Christian, nowadays Atheist	something that I do not know from a church perspective but only from a personal perspective; something that triggers feelings of security and safety
P4-2	female	Christian believer	a feeling where I am reassured and sure that all is well and I don't have to worry
P5-2	male	Christian believer	the small and big positive things in life (e.g., being healthy or winning the lottery) for which one can be grateful
P6-2	female	Atheist	expression of the religion to describe things that are positive, but I do not have a positive association with religion and thus with blessing
P7-2	female	raised Islamic and Atheist, nowadays Atheist	the positive things in life for which one should be grateful

at their own pace to mimic a home environment. When participants came close enough, the Blessing Companion began revealing an (initially distorted or alienated) image of something good. To make the temporal dimension of the interaction comprehensible, we used small vignettes asking participants to imagine returning to the Blessing Companion several minutes (or hours or days) later. Participants interacted with the Blessing Companion, paused, received a vignette, and interacted again with the Blessing Companion. Subsequently, participants expressed their emotions supported by the PrEmo cartoon characters [8, 9], and we performed a semi-structured interview focusing on the perception of the Blessing Companion, the interaction, and the attitude and opinion towards it. Each session lasted about an hour, was audio-recorded, and one researcher took notes of participants' expressions. Using our notes, we built an affinity diagram and supplemented them with transcriptions of participants' expressions. In the following, we present the key findings concerning *uncontrollability* in form and interaction.

3.3.2 Findings. What was striking in the participants' descriptions of the Blessing Companion was that the abstract, unusual form invited diverse associations and interpretations. Participants saw, for example, a divination sphere (P4-2, P7-2), a universe (P2-2), an eye (P7-2), or a symbol for infinity (P1-2, P5-2). The openness in form design triggered diverse associations and interpretations - even some we had not previously considered. However, the abstractness also led to no associations being found, highlighting that a general openness to speculation and association is required. Two participants (P3-2, P6-2), who could not imagine living with a Blessing Companion, found no associations. They described it rationally and more in terms of its elements, such as an artefact consisting of a screen and a (strange) glass hemisphere mounted on top, almost like an enhanced digital picture frame (P2-2). In terms of the Blessing Companion's interaction and resulting perceived behaviour, the macro zoom-out version led to more confusion, tension, and surprise than the slowly vanishing haze. "At first, it [the Blessing Companion revealing a macro zoom shot] was more like this: I couldn't do much with it; I didn't know what to expect. Then

approaching it for the second time, I found it more interesting when I realised what it might be, also hypnotising. And then I was thrilled when it zoomed out completely" (P2-2). Participants explained that the macro zoom shots were so abstract and incomprehensible that they triggered constant associations and interpretations, "like when looking at clouds" (P5-2), making the Blessing Companion more interesting for open-ended exploration and hence more *uncontrollable*. Some participants were even initially repulsed because they had negative associations such as mould (P3-2) or small eyes (P5-2) with the macro shots used in the study (e.g., macros of a cup of coffee). This build-up of tension had not worked with the vanishing haze because the recognisable shadows had already hinted at the content beforehand. In addition, the zoom effect was perceived as a more appropriate metaphor for the context that "connects me with the small and big things in the world and that you can change and expand your view. There is not only black and white, and you should not only focus on one aspect but the whole" (P2-2).

Some participants were confused about the openness of the interaction and the lack of any overarching task to perform, leading to the initial quest for a more framed interaction. "This [the openness] frustrated me the most. Normally I am told what to do, but having complete freedom of choice was weird because I didn't know what was expected. I didn't know if I was doing it right or not - I was afraid I was doing something wrong" (P7-2). The openness differed from what the students had previously experienced when interacting with technology and thus perhaps expected (e.g., a clear goal to achieve). Nonetheless, participants also felt spurred on by the openness and developed a curiosity toward the Blessing Companion (P3-2, P5-2, P7-2). The interaction over days was perceived in ambiguous ways. Participants suggested that it might lead to frustration if one was searching for something positive and unable to receive it on demand (P6-2) or to boredom when only minor changes appear over time (P7-2). The extended interaction was also appreciated for stimulating reflection (P1-2, P2-2) and lasting curiosity (P1-2, P3-2, P5-2), aligning with our goal of promoting *uncontrollability*. The results show that the interaction's slowness

Figure 5: The Blessing Companion and its behaviour when being approached and left alone. The part with coloured background shows the same step of revealing something good from everyday life but at different times (e.g., day 1, day 2, day 3).

gave more control to the Blessing Companion and thus integrated *uncontrollability* in interaction. However, careful design is needed to ensure the interaction is neither too frustrating (e.g., *uncontrollable*) nor too dull (e.g., transparent, controllable).

3.3.3 The Refined Behaviour of the Blessing Companion. Concluding what we learned through the process and study, we decided to implement the following behaviour for the final Blessing Companion: As long as the Blessing Companion is left alone, it stays idle, communicating its presence through abstract visuals like slowly moving circles (Figure 5, left). When approached, it slowly increases the visual's speed, which has an almost hypnotic effect as the user concentrates on the centre (Figure 5, second left). When users stay close, these visuals slowly vanish from the centre and uncover a macro zoom shot of a blessing (i.e., something good from the everyday; Figure 5, middle). This shot slowly zooms in and out, producing intriguing visuals in the hemisphere and encouraging viewers to take slow breaths and reflect on its meaning. Users can look at it for as long as they like. There is no right or wrong way of doing it. When touched, the Blessing Companion emits a small flash to indicate awareness but does not permit increased control (e.g., fast-forwarding the zoom-out). When approaching it again immediately, it most likely uncovers the same macro shot again. Only after some time, which varies and is determined by the Blessing Companion, will it display a macro shot with less zoom (Figure 5, middle). This process continues over days until the Blessing Companion finally presents the good in a comprehensible way showing all shots up to the point where one can recognise it (e.g., a cup of coffee, Figure 5, middle). Thereby, an interaction cycle is terminated, and a novel cycle begins. In terms of finding and selecting the blessings, the Blessing Companion searches in both personal and online photo databases but presents a greater share of generic images. It searches for images using a set of keywords (that can be adapted and expanded), and the algorithm is designed so that users do not know what keywords are being used for the next search.

4 DISCUSSION

This paper presented a research through design project on companion technologies for blessing rituals. For our participants, blessing experiences encompassed more than institutionalised blessing rituals like the Aaronite Blessing. Participants encountered blessings in the form of small positive moments in everyday life. Once perceived consciously, these positive moments reminded of, strengthened, and made tangible the omnipresent blessing - the good in life. Most essential to the experience of blessing was its *uncontrollability*:

Blessing experiences were triggered from outside, and believers could neither plan nor force them. This *uncontrollability* created friction and positive surprise. Intrigued by these descriptions of *uncontrollability*, we embarked on a design process that explored how *uncontrollability* could be implemented and concretised in design, leading to the Blessing Companion. The Blessing Companion is a contingent companion that serves as a reminder of the good in life by slowly revealing images of the good. However, users have no control over the disclosure's speed or the content. Thereby, the Blessing Companion seeks to support people in becoming more aware of blessings and create small moments in everyday life dedicated to fascination and the conscious perception of the good.

Although we started by studying the experiences of Protestant Christians, our artefact strongly aligns with the notion of "lived religion" [21]. This perspective emphasises the significance of religious practices in people's everyday lives beyond institutionalised contexts. The transcendent perspective on everyday things and the conscious perception of the good in the everyday are elements to which equivalents can be found in many religions. An example is the Jewish blessing spoken before meals, which creates an appreciative awareness of the origin of food and gratitude in the face of the *uncontrollability* of (access to) food. We aspire to promote discourse on shared values and ritualistic similarities among diverse religions by encouraging scholars and practitioners from different faiths to engage with and respond to the Blessing Companion.

We expect the Blessing Companion to invite light transcendent experiences within everyday life, a type of transcendent experience that has received less attention in previous work [3]. In addition, the concept of *uncontrollability* might invite a new perspective on the design of transcendent experiences and respective technologies, given that it seems to be an element that is often integrated but seldomly reflected. For example, apps like Headspace or Calm often involve audio guides and moments of surprise, requiring a transfer of control to technology. In addition, surprise has been used to support feelings of awe in virtual reality studies [6]. In the following section, we discuss *uncontrollability* in relation to sociological theories and design, presenting the more general lessons that *uncontrollability* and the Blessing Companion may hold for HCI.

4.1 *Uncontrollability*: From our Data to Sociological Theory

The Blessing Companion's behaviour is coined by *uncontrollability* and increased control over essential interaction elements representing a fundamentally different approach from today's companion technology designs. For example, Alexa pronounces a blessing

on demand [13], segen.jetzt (German for blessing.now) displays a blessing upon entering the website [15], and the Benedicti-o-mat delivers a blessing light beam on button press [26]. Our work questions whether simply making blessings available, accessible, and efficiently controllable is the proper focus in design and whether it fits the context of blessing experiences and religious rituals. From our research through design project, we learned that blessing rituals are not about an easy solution or instant need satisfaction (push of a button = blessing). Instead, they are about creating a safe space to reflect on what remains *uncontrollable* to human beings and about requiring trust in the performative power of rituals. We believe companion technologies that take on roles in religious rituals need to take up this perspective and should not simply make the *uncontrollable* faster or easier accessible. Therefore, the focus of our design work was not on making everything accessible and controllable as easily and efficiently as possible; instead, we focused on the exact opposite. In this sense, the resulting concept, the Blessing Companion, can be understood as a counter-design to previous companion and blessing technologies that make controllable and understandable on demand or immediately satisfy needs. However, this is not necessarily bad, as one participant highlighted about BlessU2: "We had seen this robot last time, that would be too boring for me. [...] because it always happens in the same way. But I wouldn't want to know what's coming. Um, I would like to be surprised by it" (P5). Interaction on demand can become boring quickly, especially in contexts where magical, supernatural experiences are sought.

However, why should people be open to companion technologies that do not (immediately) satisfy their needs and limit human agency? It is part of the human experience that there is uncertainty and openness and that not everything can be controlled, planned, and predicted. Life is contingent, and parts of what we experience always remain *uncontrollable* to us [32, 42]. The social sciences have summarised such experiences under the terms *contingency* and *uncontrollability* [32, 42]. Contingency is a term used to reflect the fundamental openness and uncertainty of human experiences [32] and *uncontrollability* is an essential component of a sociology of the good life [43]. Sociologist Hartmut Rosa suggests that aimed at resonant experiences can only arise in interactions with counterparts that are not entirely controllable (e.g., human beings, nature, art, artefacts) - meaning visible, accessible, available, or usable [42]. Only when one cannot entirely know, plan, see, or control a counterpart's intention, reaction, or meaning can one experience resonance, a mode of relationship in which mutual "vibrations" are generated [43]. The opposite, making a counterpart entirely visible, accessible, controllable, and usable, prevents such relationships. However, *uncontrollability* does not simply mean arbitrary, random action. Instead, a counterpart is perceived as having its own character (or inner logic), which remains *uncontrollable* [42].

For Rosa [42], a resonance experience is only possible if a counterpart speaks to me with this *uncontrollable* character (figuratively) and if something in me reacts to it. We think the Blessing Companion might correspond to this description of a counterpart with an *uncontrollable* character and can trigger intimate reactions in its human counterparts. Perhaps, this is best reflected by participants' reactions in the second study. The mixture of feelings described, such as frustration and tension, but also curiosity and surprise, fits with not fully knowing or controlling the intention or meaning

of a counterpart. Participants did not react only frustrated or dismissive, nor only positively, but experienced both simultaneously. This mixture led to curiosity towards the Blessing Companion and speculation about his intention, meaning, or reaction over time. The experience of *uncontrollability* is essential in religious practices and rituals since, at their core, they deal with the *uncontrollable*, e.g., eternal life or the transcendent.

The quality we want to refer to with *uncontrollability* has a unique word in our native language (German: "Unverfügbarkeit"), but there is no corresponding word in the English language. Every related English word we had considered (e.g., unavailability, elusiveness, unpredictability, uncontrollability) lacks parts of what we wanted to express, a problem that had been described before (see the preface of [42]). In the end, we decided to use *uncontrollability* following Rosa [42] and to avoid associations with the context of mobile communications (e.g., when using unavailability). However, this word fails to cover certain aspects of "Unverfügbarkeit", such as not being visible or tangible. Nonetheless, we believe this difficulty is not a problem but a great opportunity for international research communities like HCI since coming from different countries, cultural backgrounds, and languages broadens perspectives.

4.2 Designing for *Uncontrollability*

While it has been argued that *uncontrollability* cannot be engineered or designed [42], we think the concept can nevertheless be stimulating for the context of technology-mediated religious rituals, transcendent experiences, and the design of companion technologies. As demonstrated with the Blessing Companion, we expect that there may be possibilities to design for the *uncontrollability*. One way to approach the design for *uncontrollability* might be to adopt what Rosa [42] finds in art or poems. Art or poems are manufactured as well, but Rosa expects them to be *uncontrollable* in a valuable way as long as one has not yet fully grasped them and they seem to hide something [42].

Reflecting on the Blessing Companion, we recognise that we made many design decisions relating to this art perspective. The Blessing Companion is designed to be constantly present but should remain interesting and fascinating over time and allow for new perspectives and interpretations - like a piece of art. To achieve this ongoing fascination, we have, for example, opted for a particular shape and materiality that a classic, usability- and efficiency-oriented design would probably not choose, such as a hemisphere on a screen that distorts the screen's light and at the same time reflects the surrounding. Thus, the Blessing Companion's appearance constantly changes depending on the lighting conditions or the viewer's position. In addition, the abstractness and openness of the Blessing Companion's shape allowed participants to find individual associations, such as a divination sphere (P4-2, P7-2) or symbol for infinity (P1-2, P5-2) - just as viewers of artworks would find individual interpretations. Again, this approach of using abstract shapes and lacking a clear metaphor by design represents a very different design strategy than those pursued in previous blessing technologies, such as the humanoid robot BlessU2 [35], or more generally in the design of companion technologies that often use animal or human metaphors [31]. We thus expect the Blessing
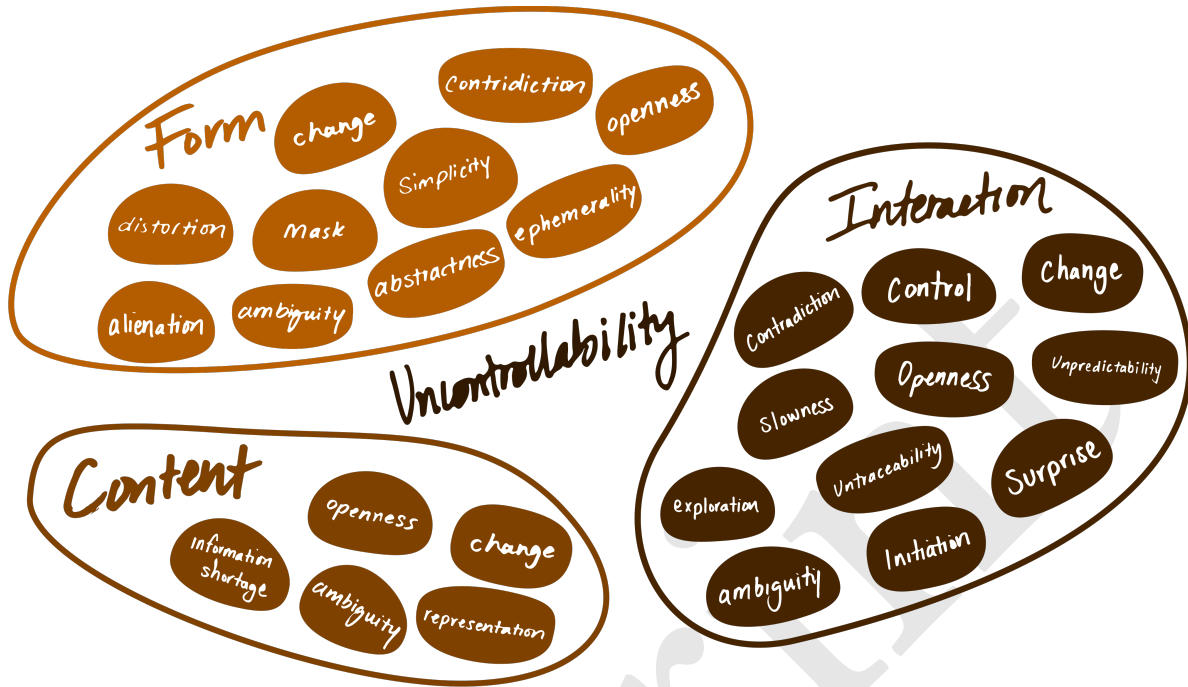
Figure 6: A summary of the approaches to designing *uncontrollability* explored in the research through design process.

Companion and the concept of *uncontrollability* to be a stimulating counter-design to currently prevailing design approaches.

Apart from designing for *uncontrollability* at a form level, the design process of the Blessing Companion revealed that *uncontrollability* could also be reflected through technology's interaction. For example, the Blessing Companion integrates *uncontrollability* in interaction by extending the interaction over days on its own terms (slowness). Also, it creates opportunities for surprise by deciding when to present something good in recognisable ways, not at the push of a button. Other elements to design for *uncontrollability* are summarised in Figure 6. It was helpful to break down our thoughts on *uncontrollability* to various levels (content, form, interaction), as these levels bring different requirements and design opportunities. We included a content level to make clear that designing for *uncontrollability* might not make sense in every context (e.g., in production process contexts). However, whenever something essentially *uncontrollable* is to be addressed by companion technologies, like blessings, happiness, well-being, meaningfulness, or the good life, our summary of approaches to designing *uncontrollability* might be helpful (Figure 6). The summary is intended to serve as an inspiring starting point and is neither complete nor applicable in just one way. We hope that future work in HCI will experiment with and extend the various approaches.

Using our *uncontrollability* lens, we went back to previous work in HCI and analysed existing examples with this novel perspective. Although previous work did not explicitly design for *uncontrollability*, we found individual elements of previous designs that can be interpreted as relating to design for *uncontrollability*. For example, the concept of *unknowable elements* proposed by Hemmert et al.

[25] seems to correspond to our understanding of *uncontrollability* in interaction. Unknowable elements are, for example, designs that are not entirely transparent and conceal underlying mechanisms such as who/what determines the balancing in an interactive seesaw representing "all humans are equal" [25]. The authors suggested that the unknowable element opens up space for believing since it could be random, determinism or God [25]. We think the concept of unknowable elements corresponds with our approach of untraceability in interaction (Figure 6): a human counterpart cannot trace who/what is responsible for a particular behaviour of technology. Similarly, Gaver et al. [18] suggested using *ambiguity in design* through distorting or presenting contradicting information, thereby opening up space for users' interpretations and beliefs [18]. These are elements that we also used to approach design for *uncontrollability* at a form level (Figure 6).

Yet another way to design for *uncontrollability* could be *openness in design.* Openness can mean deliberately not becoming too specific in design to create space for appropriation [17], which we realised in the Blessing Companion through, for example, its abstract, round shape. Our work on designing for *uncontrollability* complements previous work by proposing a novel, overarching perspective, namely *uncontrollability*, relating and integrating previously unconnected design examples within this perspective. In addition, we provide further approaches and examples of how to design for *uncontrollability* (Figure 6) and relate *uncontrollability* to sociological theories [32, 42] that highlight the concept's essential meaning for human existence and experience. In addition, our description of *uncontrollability*, especially of interaction (see Figure 6), could be an inspiration to the recently posed question of

how companion technologies can be designed to be perceived as "minded" [37]. The elements we identified, such as initiating interaction, surprising human counterparts, or slowly changing over time, can provide novel inspiration for designing companion technologies that are to be perceived as "minded". However, balancing controllability and *uncontrollability* remains essential. We believe that *uncontrollability* can be an inspiring concept for companion technologies, especially in contexts where the focus is on reflection, stimulation, or meaningfulness.

5 CONCLUSION

In this paper, we described how our inquiry into blessing experiences and speculation on future companion technologies led to the identification of *uncontrollability* as a valuable resource for design. In addition, we presented the Blessing Companion, a contingent companion that reminds us of blessings, understood as the good in everyday life, and embodies *uncontrollability* through its ambiguous, abstract appearance and unique behaviour coined by an intensified technology's control over essential interaction elements. Not making everything controllable (visible, accessible, available, usable) with companion technologies contrasts the prevailing interaction paradigms striving for transparency, traceability, and comprehensibility. In this paper, we suggest that *uncontrollability* might be a valuable concept for companion technology design for religious rituals or, more generally, when it comes to contexts where the focus is not on the efficient completion of tasks but stimulation, reflection, or meaningfulness. We argue that the Blessing Companion is an example of *uncontrollability* design. In future work, we aim to expand our research on *uncontrollability*, exploring other ways to design for it. Also, we will look into further concretising the sweet spots of *uncontrollability* - creating friction, excitement, and appreciation without making companion technologies seem too arbitrary or dull. We think the Blessing Companion can serve as an example of what one might call an "epistemological instrument". An instrument used to explore experiences and understandings of religious concepts in today's plural and interreligious world. As such, it is helpful for designers to understand technology's role in religious rituals. However, it is also helpful for believers who are challenged to think about their religion's concepts and practices. In future work, we aim to deepen this notion of "epistemological instruments" and outline how design can be approached for the complex, sensitive context of tradition-rich religious rituals that need to respond to contemporary technological innovations.

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