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Exploring the challenge of designing rituals

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Abstract
Our lives are a collection of rituals. The way we wake up, the way we leave or enter our home are two of the many rituals each of us have constructed, and they structure our everyday lives. However, designing rituals remains challenging because of the nested structures of events within a ritual (temporal complexity) and the required consistency between the ritual and the involved artifacts. In this first Research-through-Design iteration, we introduce a workshop done to explore the way to design rituals from an interaction design perspective. Our inquiry addresses such approach and aims at proposing tools to support the design or the evaluation of daily rituals. The workshop was structured by a introduction session (a Japanese tea ceremony) and two iterations leading towards the design of a high-resolution ritual and required artifacts for welcoming people home for Dutch students. Findings mainly pointed out different starting points for designing rituals, suggested the pervasive effect of engagement in rituals, and proposed a descriptive tool to provide the designer with participants’ perspectives in and affect by the ritual.

Ritual, tea ceremony, interaction design, descriptive model, Research-through-Design, design workshop
Whereas food preparations made from scratch are valued by the cooking journey (and therefore can be considered as high-quality rituals), prepackaged food preparations are valued by their efficiency in getting food in the stomach (and can be considered as highly-efficient routines). In this research, we focus on rituals.

Moreover, we also distinguish ceremonial rituals (e.g., Japanese tea ceremony) and daily rituals (e.g., making tea in the morning). Whereas ceremonial rituals are based on formal, shared elements, and are most often used for social celebrations, daily rituals lack of formal rules and values, and what is celebrated (if any) is not as central as for the ceremonial type.

The workshop presented in this paper is the starting point of a research focusing on rituals from a tangible interaction design perspective. Its primary question of the research is how to design for higher experiential quality in rituals? It is important to notice that this research does not aim at providing means to create ‘great’ rituals, but rather to create beautiful rituals (Overbeeke, 2007). Moreover, we follow a research-through-design approach (Zimmerman, Stolterman, & Forlizzi, 2010), in order to provide a grounding to point out through designing relevant questions for design.

The workshop took place in November 2014 at Eindhoven University of Technology in the Netherlands. The aim of this workshop was to explore the feasibility of a suggested ritual design approach and to point out related challenges. Therefore, in this paper we describe the background (research background on designing rituals), the process, and the actual outcomes of the workshop. We conclude with a discussion on the challenges to be addressed further in the research.

Research objectives

As described in the introduction, daily rituals are essential in our everyday life. Therefore, there is a value to give designers means to understand better, to design, and to evaluate rituals. This challenge is the aim of this research, in order for design practitioners to be able to design for better quality in interaction within rituals, towards improving people’s wellbeing within everyday life. This is done through the following three research key objectives:

*Describing daily rituals from the perspective of the performer(s) – From an interaction design perspective, describing rituals is a complex matter. Among others, the person’s perspective and affective aspects need to be taken into consideration (Desmet & Pohlmeyer, 2013). Moreover, such a framework should be contributing to the activity of the designer. This research objective is therefore the creation of a descriptive framework for rituals, in a way that it supports the designer's intervention and evaluation.*

*Designing daily rituals – The aim is to actually inquire through designing actual daily rituals. The act of designing and its impacts on rituals will be the matter for creating insight on how to design (for) rituals. However, the Research through Design (RtD) challenge of this project is different from often published RtD researches. Classically, RtD looks at either the human-machine interaction (e.g., (Deckers & Lévy, 2012)), or at the system level, increasing complexity through multiple and connected interactions (e.g., (Frens & Overbeeke, 2009)). The current research focuses multiple interactions constituting nested events - how meaning and values emerge through...*
the timely process of the ritual – increasing complexity through a temporal dimension. This research objective is to see how to design with the temporal complexity of rituals.

Evaluating the impact of a design on the experienced quality in daily rituals – Finally, it is of course important to be able to evaluate a design of ritual. Providing a reliable means to evaluate experienced quality in ritual is therefore necessary in this project. This research objective is therefore to provide a reliable means to detect how a design affects the changes of behavior patterns (Pentland & Liu, 1999; Vastenburg & Herrera, 2010) and the experience.

Notions on rituals

The perspective taken to observe rituals matters: although rituals may appear ‘irrational’ to an outsider, most of them are ‘rational’ for the ones actually involved in the ritual (Coyne & Mathers, 2011). The ‘rational’ quality is due to two main factors: information and engagement. Information (or knowledge) supports the understanding of the ritual. Engagement supports the understanding (or the feeling) of the way the rituals are being processed.

Information

The topic of rituals has been researched in a great extent of fields, such as anthropology (Firth, 2012; Levi-Strauss, 1963), ethnology (Bell, 1992; Cullen, 1966), sociology (Chwe, 2001), law and economics (Leeson, 2005), psychology (McCauley & Lawson, 2002), and psychiatry (Erikson, 1966).

As a global observation, studies show that most rituals have rational foundations (Chwe, 2001) and are ‘stabilized’ because of their psychological salience (Schelling, 1980). This means that a ritual ‘has some unique characteristic or property that makes it easily noticeable to those involved’ (Coyne & Mathers, 2011). Moreover, a few qualities of rituals structure the way they can be mapped over time. Rituals are often ‘sticky’ once established due to path dependence and identity. However, they can change overtime, which ‘involves introducing alternatives to the status quo, overcoming existing path dependence and shifting the costs and benefits associated with identity’ (Coyne & Mathers, 2011). The existence of these foundations, the ‘stickiness’ of rituals, and the ways for change are essential for this research, as they will possibly be key elements to structure the description and the evaluation of rituals.

Looking at rituals from a cultural performance perspective, Petrelli and Light provides three key concepts (Petrelli & Light, 2014):

- a ritual is an event that expresses cultural values and affects people’s perception;
- participants are active, and the sensorial aspect of taking part is important;
- ritual performances are “framed” in some ways to contrast with everyday life.
These points address some of the expressive and the perceptive qualities in a ritual, and suggest that experiencing rituals affect perception. In other words, actively being part of a ritual influences the way one makes sense of one’s activity and of one’s being, in relation with one’s social and spatial surrounding. It is not only the ‘rules’ of a ritual that matter, but also and essentially the experience of performing it. Further, although this is not suggested here but was mentioned by the tea masters in Japanese tea ceremony who will be introduced later in this paper, the practice and the engagement – suggested by the second point – in the ritual has pervasive effects: it affects the way one behaves and perceives outside of the ritual. Therefore, assessing rituals is mostly a matter of experience evaluation, rather than an examination of procedures.

Engagement and attention

The notion of engagement is essential to comprehend the difference between rituals and routines. In the field of interaction design, Rozendaal (2007) has proposed the Richness, Control and Engagement (RC&E) model to describe and to evaluate the level of engagement in video games. Further inquiry has been initiated to evaluate and to possibly adapt the model to tangible interaction design (Lévy, 2013).

Attention is also an important notion in the present research. Moreover, two distinct types should be addressed: focused attention and peripheral attention. The earlier one is simply about what the involved person is mainly focusing on. It is often said that a focused experience can be improved by eliminating distractions, i.e., elements out of this main focus. However, in everyday rituals, the focus of attention is never exclusive, and one also has ‘lightweight attentions’ outside the main focus (i.e., peripheral), often in an unaware fashion (Bakker et al., 2014; Hausen, Tabard, von Thermann, Holzner, & Butz, 2013).

Both notions of engagement and attention are essential to comprehend and to evaluate rituals, as they can be used to describe the way humans relate to their environment within ritual: humans engage themselves in rituals composed of a multitude of parallel and nested events which make sense at once.

To summarize, the notions on rituals addressed in this section point out that rituals are stable. They are based on foundations which should be addressed from the performer(s)’s perspective(s). However, this stability is not definite, and design can provide alternatives by overcoming existing path dependence and shifting the costs and benefits associated with identity (the second research objective is to find how). Both the description and the evaluation of the ritual should focus on the performance, taking into account the experience through the performance, and addressing engagement and attention through the ritual.

Workshop

The first iteration for this Research through Design on designing rituals was made through the aforementioned workshop, which 17 design master students participated to. The aim of this
workshop was to address the qualities embodied in rituals from an interaction design perspective, and to explore the relation between the designed artifacts and the rituals they are involved in. This exploration aims at creating an insight in the reciprocal nature of the influences between the artifacts and the ritual (and by extension the experiential meanings and the expressed values).

For such first iteration, it was important not to meticulously plan the process of the workshop, in order to be able to adapt the process to the intermediate findings and the decisions extracted from the reflections. However, adopting an iterative process to support a continuous refinement in the exploration, a few steps were planned, and achieved accordingly.

**Tea ceremony**

After a short introduction on the workshop and on the notion of ritual, the first step was to elicit a common experience, rather than describing one. Sharing a common ritual experience is indeed powerful to settle a common ground on which the exploration and the discussions can start and refer to throughout the workshop. Moreover, we chose a ritual foreign to all students to have an interpersonally balanced common ground, and ceremonial enough to be able to discuss the nested events and the associated values based on existing and accessible knowledge. Therefore we invited the student to read the Book of Tea (Okakura, 1906), an essay on Teism, and then organized a Japanese tea ceremony, a highly elaborated tea ritual and a pillar of the Japanese craftsmanship culture. The ceremony was performed by an urasenke tea master and was served to all students in two tea ceremony sessions (cf. Figure 1 – top left). The ceremony was followed by an extensive discussion with two tea masters (including the one performed the ceremony) (cf. Figure 1 – top right). To the extent that contributes to this research, the discussions focused on the ritual, on the related values, and on the pervasive influence of tea ceremony training on everyday life.

**Project draft**

After the discussion with the tea masters, the project draft was discussed with students (‘design (for) a ritual to welcome guest(s) at home, details matter’) (cf. Figure 1 – bottom left and right). The draft suggested keeping the roles of host(s) and guest(s), but did not constraint the students to work around tea or any form of beverage. Moreover, the ‘(for)’ meant to leave to the students the choice of designing only artifacts for an expected ritual, or designing the events as well. However, and probably due to the great impression left by the Japanese tea ceremony on the students, the first orientation focused on welcoming with the preparation of a beverage. The draft was therefore quickly modified as follow: ‘design a ritual for the participants of the workshop to welcome their own friends at their own place’. The decision to work at a first-person plural perspective was taken in order to work as concrete as possible while aiming at keeping the common ground elicited by the Japanese tea ceremony experience.

The following step taken by the students was impactful on the entire workshop. To start such exploration at least two ways are possible: either drafting a ritual and making artifacts to experiment this draft, or starting from existing artifacts and exploring how they can be involved in
a ritual. In the earlier, the ritual leads and artifacts follow. In the latter, artifacts conditions the ritual. The effect of this decision will be discussed in the last section. However, the students choose to process with the earlier and a ritual was first drafted.

Low-resolution iteration

Based on the draft, the students designed a low-resolution set of prototypes, which the ritual was tested with and many cultural aspects were challenged by. This set was low resolution in the way that the choices of materials and shapes were still not refined. This quick design process mainly aimed at obtaining a usable set of tools to be able to discuss and to refine the design decisions through testing (cf. Figure 2).

Already during the making of this low-resolution prototype, some major decisions were taken. Anecdotally, whereas the students first planned to be able to propose and to serve several types of tea or coffee – as it is common in the Netherlands – they finally decided to restraint the choice to one tea (chosen ahead by the host) to which extra flavors could be added on request from the guests. The reason of such decision, taken after a long discussion among students, were the will to simplify the ritual and to unify the experience, which they unanimously appreciated during the Japanese tea ceremony.

Figure 1: Japanese tea ceremony (top left), Discussion with the tea masters (top right), first draft of the ritual: process (bottom left) and utensils (bottom right).
The set was tested by one host (a student) making tea for four guests (one student, the workshop organizer, and two tea connoisseurs who are staff members of the Faculty of Industrial Design (i.e., expert in interaction design)). The rest of the students were observing the ritual and were taking numerous notes and pictures. This session was followed first by an interview to the participants (host and guests) by the observers, and then global discussion on the ritual, leading to some modifications towards refining the ritual and involved artifacts. Factual aspects were first discussed and corrected. For example, as the basic tea (to which extra flavors can be added) was made in a larger teapot, each guest would drink the same tea yet with a different strength due to the time it takes to prepare each cup. It was therefore decided (and later designed) to establish a process to obtain similar tea for each teacup.

Figure 2: Elaboration of the ritual (right), low-resolution prototype (middle), ritual performance (right)

However, more interesting aspects for the research were stressed in the discussion, challenging some cultural qualities of the ritual. The presence in the discussions of the common ground set up by the Japanese tea ceremony experience helped to point out and to discuss essential parts of the ritual that were actually culturally framed. The extra flavors proposed by the host were of two types. The ‘essential’ extra flavors, which would be proposed regardless the type of tea served, included milk, sugar, and honey. The ‘complementary’ extra flavors, selected by the host based on the type of tea, included in this case apple, thyme, and cinnamon. However, comparing to the Japanese tea ceremony in which no extra flavor is proposed to the guests, the quantity of choices seems numerous, and disputably superfluous. The students agreed on the tentative of reducing the extra flavor. However, the discussion on the essential extra flavors revealed interesting cultural implications: whereas the milk was removed easily, the sugar was the focus of an animated discussion which resulted in upsetting a student, and in having a group agreement to leave it regardless the type of served tea. From this experience, it was pointed out that the presence or the absence of various ingredients can trigger different socio-cultural dissonance levels during the tea
ritual, considered here as a meal-as-event (Lalonde, 1992). In the case of sugar, its perception is socioculturally mediated, leading to locally dominant ‘flavor principles’ (Harbottle, 2004), making the sugar socioculturally unavoidable for such ritual.

Eventually all artifacts and all acts in the ritual were extensively discussed, negotiated (in the same fashion as the extra flavors), and refined or removed, leading to a second and high-resolution iteration.

High-resolution iteration

The high-resolution design process consisted in a refinement of the artifacts, based on the decisions taken at the conclusion of the low-resolution iteration. Thanks to the conclusive discussion of the low-resolution iteration, many details were clarified and could be implemented in the high-resolution prototype. This resulted in a very satisfying tea set, which was tested in the similar setting as for the low-resolution one, except that one of the tea connoisseurs was replaced by one of the tea masters present in the first step of the workshop. An extensive interview was also processed in order to point out qualities and limitations of the current design results, and to validate with the guests the values experienced throughout the ritual.

![Image](image1.png)

Figure 3: High-resolution prototype (top left), performance of the ritual (top right), cup holder and teacup (bottom left), wrapped high-resolution prototype (bottom-left)

The final artifact is a complete set including all artifacts used to prepare and to serve the tea, and to clean the utensils used for the preparation. The main structure is a wire-welded two-level cylinder...
that can host the kettle and the teapot at the center, the ingredients for the tea and the utensils to prepare and to serve the tea on the ring. Figure 3 (top left) shows the set as it is cleared up, and Figure 3 (top right) as it is used. The cup holder and the teacup show not only the quality of the realization, but also the way the complete set has been designed based on the consideration on both artifacts and ritual (cf. Figure 3 (bottom left)). The double wall glass teacup can be kept warm by means of a tealight placed under the teacup stand. However, in order to keep the air in the inside the double glass, the bottom of the teacup was cut out, so that the plinth on which the teacup stands actually enters the in-between wall space and keeps the air inside warm. This way, the tea remains warm using a cup while other guests are being served, and the cup itself remains appreciable to be handled.

The ritual was fully described and was performed accordingly. Figure 4 shows an excerpt of the description of the ritual. The way to describe and to annotate the ritual has been proposed by the students. The movie showing the ritual and the complete description can be found at http://plevy.fr/#2014_rituals. This description mainly shows the actions taken by the participants to the ritual (both host and guests) and the associated values (although the author thinks that this value attribution has been overdone). We can especially notice the points of interaction between participants and the parallel actions, which should inevitably be explored further by means of a peripheral interaction design approach (Bakker et al., 2014). This outcome is an important one of the workshop, as we expect this tool to improve over iterations and to progressively become a relevant annotation technique for rituals. Such technique is necessary to be able to analyze and possibly assess and compare rituals. Moreover, this one differs from existing ones (e.g., (Frank & Reiter, 2010)) as it is not semantic based but action based, in order to mainly point out interactions between people and between people and artifacts.

Conclusion

The progress between the low-resolution iteration and the high-resolution one is significant in many aspects. Most issues experienced with the low-resolution were fixed with the high-resolution. Although this will be discussed in the next section, the relation between the quality of the artifacts and the quality of the ritual seemed to have been an important challenge in the process of increasing the quality of the design outcomes: they contribute to each other.

Conclusion and discussions

Through this workshop, we have been able to point out many questions and challenges that will help to structure further our research by specifying or by clarifying some research questions we should inquire in the future. Main ones are discussed here.

The egg and the chicken

The first topic relates to the way the ritual design project can start. Unless the ritual to be designed is entirely new, which is not the case here, the design team has at least two possible departure
points. In one case, the team can decide to work with existing artifacts, and through their manipulation to propose actions or events in order to trigger experiential meaning (or values). In another case, the team can first envision actions (or events) and related values, and then make artifacts which can trigger these values in interaction. In other words, is the starting focus the artifacts or the actions? During this workshop, the group has started with the latter departure point: inspired by the Japanese tea ceremony, they created a ritual proposition, from which they started to list and to design artifacts (cf. Figure 1). We could observe that, through a few refining iterations, the team could reach a very satisfying results, pointing out that the decisions on the ritual influenced the designing of artifact and the other way around. The remaining questions are the feasibility of the other starting points, and further a comparative study on the design qualities of the two approaches.

**Legend**

- **Host**
- **Multiple guests**
- **Single guest**
- **Action engagement in current event**
- **Active engagement in current event**
- **Activity between all participants**
- **Participants enter / leave the ritual**
- **One way activity between two participants**
- **A loop of actions that keeps ‘Y’ times**
- **Issues that progress parallel to the activities**

**Actions**

- Host pours black tea in the filter
- Host closes the filter and waits for the tea to absorb the flavours while swirling the filter
- Conversation between host and guests
- Host flips the filter in order to pour the tea into the glass
- Host puts the filter on the workstation
- The glass is passed clockwise from person to person using the ritual gesture
- Guest thanks the host for the tea
- Guest thanks everyone for being present

**Values**

- Intimacy
- Intimacy, trust

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*Figure 4: Ritual description (excerpt). The complete version can be found at http://plevy.fr/#2014_rituals.*
Pervasive effect of engagement

Another aspect that was pointed out during the discussion with the two tea masters concerns the pervasive effect of engagement. Although a ritual is described as an encapsulate set of events, it appears that this encapsulation is ethically not hermetic: the tea masters agreed on the fact that the practice of the ritual impacts other daily experiences, the way they engage in them, and the type of qualities they value. Similar findings are addressed by Trotto (2014) on pervasive ethics through the embodiment of values. The way one actively engages with the world for a specific activity (or in our case a ritual) is not without consequence on the way one engages with other activities. Although this consideration imposes a new layer of temporal complexity for interaction design, it is to be explored further for a greater understanding of the impact of interaction design on everyday life (either within or outside rituals).

Impose or let the act free

One of the challenges met by the workshop participants while designing the ritual was related to their choice of either imposing a movement or, more classically for interaction design, proposing action possibilities. In other words, were the choreography details imposed or let free? Although we do not have a satisfying answer for this critical aspect, we believe it should be further investigated, and argue that it should be integrated in a framework for ritual design.

Workshop contribution to the research objectives

To conclude we would like to review the way this workshop has contributed to the research on ‘how to design for higher experiential quality in rituals’. The aim of such research was to support the design practitioner in order to design for better quality in interaction within rituals, and to improve people’s wellbeing within everyday life. The pervasive quality of rituals, as suggested during the workshop, comforts us already on this point: a well-designed and richly experienced ritual can affect on people’s everyday wellbeing.

Moreover, the research was structured around three research objectives. The first two have been considered in this workshop and are therefore reflected upon here:

Describing daily rituals from the perspective of the performer(s) – The ritual description (cf. Figure 4) aims at contributing to this objective. This description reports the actions and the relations between the participants of the ritual, and proposes values triggered by these actions. Although each participant’s perceptive and expected affects are not clearly described, it clearly appears that this approach provides a way in the complexity of the ritual. The perspective of the participants as a group is partially given: thanks to this description the rational of the ritual is given (cf. the first paragraph of the section Notions on rituals). However, our main reservation to its current version is that we find the left column, graphically denoting the actions and the relations between the participants, too elementary and not considering qualitative dynamics in these acts and relations. Many notation systems, such as the classic music notation system, integrate both denotative (e.g., notes and rests) and connotative (e.g., articulation) elements. In a future iteration,
we aim at exploring the way to integrate these two types of elements. This will support the
designer first to refine further the ritual, and second to evaluate the intension by comparison with
the actual experience. This descriptive model can be used both in the design process and in the
observation of the design result.

Designing daily rituals – Although this workshop did not clearly aim at a daily ritual, but rather at
a more ceremonial type, we have taken the advantage of the clarity of the meanings and of the
values embedded in ceremonial rituals for a first inquiry on the design of rituals. We believe this
experience, the emerging tools, and the reflections will support an inquiry on daily rituals. Both the
approach (multiple design iterations based on an alternative focus between ritual and artifacts,
towards a refinement of the resolution of the outcomes) and the ritual descriptive model appear to
be a good construction to inquire the design of rituals. Moreover, and this is the main outcome of
this first step, designing rituals as introduced here, seems to be a valuable way to approach
temporal complexity and temporal consistency in interaction design.

Further work

To advance further in this research, and starting to enable the evaluation of rituals, we aim at
creating a new iteration focusing on an actual everyday ritual (e.g., morning preparation before
leaving home). The workshop participants will be asked to analyze their own ritual (first research
objective) and to design for an alternative of one the ritual elements (second research objective).
Finally, this alternative will be used to evaluate and discuss the ritual values and the impact of
design on the ritual (third research objective).

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References

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His interest is about the implication of perception theories in design, especially addressing immediate perception and embodied interaction. His approach is twofold: Western, especially involving ecological psychology and phenomenology, and Japanese, involving both the reflection around sadou (Japanese tea ceremony) and the School of Kyoto philosophy. Based on the latter, he is recognized as one of the founders and an expert of kansei design, about which he has been invited numerous times for international university lectures and for an international conference keynote. His research mainly based on constructive design research approaches.