CARING WITH OTHERS – CULTIVATING AND REVALUING AS FORMS OF EVERYDAY DESIGNING

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ABSTRACT

In this paper we reflect on the notion of *caring with* in design research by discussing processes of *cultivating* and *revaluing*. Cultivating as a form of caring with other species. Revaluing as a form of caring with unwanted things. Both are addressed as everyday designing, ongoing liminal processes that have regenerative potential to revalue and care for/with *dirty matters*.

INTRODUCTION

In this paper we embrace previous invitations to write in experimental ways about our participatory design research experiences, and to play with conventional academic writing aimed at reporting research outcomes in novel ways (Light 2018). The text that follows incorporates the use of blank spaces with the intention of opening and evoking further meaning between the lines (Popplow and Duque 2017). We also use ~~crossed text~~, to interrogate our arguments, and to make visible what could be erased in the unfinished process of editing research writing and idea refinement.

This writing experiment includes two vignettes. The first presents experiences from FUNGUTOPIA, a series of installations and workshops of urban mushroom cultivation. The second vignette illustrates some of the practices of cleaning crucial when revaluing second-hand things. We argue that practices of *cultivating* fungi and of *cleaning* used things are forms of *caring with Others* that allow us to uncover mundane acts of designing that have regenerative potential. Beyond caring for fungus growth or for revaluing things, these are forms of caring for our interrelated beings *with* 'dirty' matters. Both vignettes draw from practice-based approaches to design research that are situated at the intersections between Participatory Design, Design Anthropology and Everyday Design.

We address dirty matters conceptually with three angles. Dirt or mould is a description of the aesthetically difficult appearance of mycelium, the matter that enables fungi growth. Dirt as 'matter out of place' (Douglas 1992) that can prevent the revaluing of second-hand things. And dirty matters as the unwanted experiences of grief or disgust that we present in the vignettes here. In all these angles, dirty matters are understood as ground and departure for varied forms of discussing, practicing and designing care.

The following terms address both vignettes' conceptual framework. *Everyday* constitutes a site of analysis but also a temporality of situated practice (Pink, 2012). *Designing* is understood as a verb, not exclusive to professional designers (Wakkary and Maestri 2008). *Revaluing* is presented as an intent to value again what has been placed in positions of devalue (Reno, 2017, p. 18). *Care*, rooted in the Old English means to grief, to lament, to feel concern (Care, n.d). In addition, *cuidado* (care in Spanish) from the Latin *cogitatus* suggests reflexion, which in being connected to *cogitare* refers to a collective move towards action (Cuidado, n.d).

CULTIVATING MUSHROOMS: CARING AND MAKING WITH OTHERS

This vignette is from a five-year design research project (2010-2014) about the urban potential of fungi as food resource, medicine, as building material and soil-remediation. A practice-based approach aimed at developing ecological design practices and collaborative knowledge with mycelium as participants in the process. Cultivating mushrooms as a form of caring for wellbeing became the main approach of the project and was developed through several short and long-term engagements. A series of Mushroom Cultivation workshops were made in a laboratory installation, during design exhibitions, fairs and conferences:

Figure 1: Cooking straw, workshop situation, DMY Berlin 2011.

In the following I will give an overview of two key moments from the processes of *cultivating* fungi. Firstly, the Mushroom Cultivation workshop, in which the participants initiated the mushroom growth in a collaborative setting. Secondly, with the 'mycelium-bag' (see Figure 2) prepared at the workshop, participants continued the process of cultivating the mycelium at their homes for 3-4 weeks until it was mature enough to produce fruiting bodies, the edible mushroom.

In every setting, the 2-4 hours workshop started with a short introduction into the world of fungi and the potential of mushroom cultivation in cities. Afterwards, participants 'got their hands dirty' by cooking straw to create the substrate to plant 'seeds' of oyster mushroom; which is one of just a few mushrooms that can be cultivated in that DIY style because they are able to grow in almost every condition.

Cultivating mushrooms is possible with the appropriate degree of humidity, temperature, substrate and preventing the intrusion from other fungi or bacteria. The mixing of the substrate with the mycelium must happen in clean conditions to not contaminate the freshly cooked substrate with other\ ~~non-desired~~ fungi or microbes that can overtake the growth of the desired, ~~inoculated~~ oyster mushroom.

Creating the appropriate environment at the workshops for the growth of fungi involved activities and materials such as: washing hands with alcohol before handling things, use of sterile gloves, and even building a separated clean room. All the other workshop materials were also chosen and prepared carefully: the substrate was mixed in a cleaned box and filled manually into new plastic bags to hold the substrate and its humidity during the mycelium growth. Bags were then marked with the golden-fungi logo of the project and placed on a map to mark the sites where the fungi would grow.

Figure 2: Bag with pasteurized straw, mixed with mushroom spawn (growing on grain).

Besides the growing of fungi, the designed materials and activities composing the workshops were all *cultivating* outcomes: the rituals of cleaning, cooking the straw, letting it cool down to the right temperature, mixing substrate and mycelium with clean hands and/or gloves. Cultivating has multiple facets (Cultivate, n.d): it describes acts of preparation for the growth of plants and other agricultural matters. It could describe acts of encouragement and of making friends with. I will draw on these multiple facets of cultivating here.

The acts of *cultivating* 'dirty' matters in the case of mushroom cultivation entail the rather contradictory moves of working *sterile-clean* to enable _____ the growth of mouldy, fungal mycelium. Normally invisible ~~and hidden~~ in the soil, the mycelium is essentially 'dirty' matter, inseparable from its symbiotic relations with plant-roots and rotting materials, but through human-made cultivation it gets exposed_____ in transparent plastic bags. This staging and cultivation became a matter of *care* that could enable humans, as I argue, to grow and become friends with dirty matters.

The contradiction of cleanness as necessary for successful cultivation and the necessary dirtiness with high humidity, specific smells of rotten materials and the visible transformation of the substrate that gets overgrown daily by mould, triggered mixed responses from participants. Some articulated openly as reactions of disgust during the workshop, others as questions via mail during the care time at home. The most common response was that people were unsure if the mycelium was developing 'right', because it looked to them like mould growing on rotting food. Even when the

mycelium was starting to grow visible fruiting bodies (see Figure 3), some of the participants felt uncomfortable to harvest the mushrooms and eat them. The tensions between notions of cleanness and dirtiness that the process of cultivating generated in participants manifested in unarticulated responses. For instance, acts of *forgetting*, _____ ~~*hiding*~~ or *throwing away* the mycelium, which revealed some of participants discomforts when forming a relationship with these fungi ~~dirty~~ matters.

Figure 3: Mushrooms after a workshop, growing hidden in a drawer in the basement of a design school.

It would be too easy to judge these acts of not-caring-for as ——————— . This includes a power-hierarchy, present in the compound 'caring for', it assumes that the mushrooms can just grow if we, as humans, take 'good' care *for* them. In one sense, that is true, because we will probably not experience the growth of the mushroom caps if we do not take care for humidity and oxygen. If it would not be for the participants or workshop organizers to report back to me or ask what to do, some mushrooms would have been thrown away unnoticed.

Figure 4: A (left-over) fungi-human-making.

However, the hierarchy seems to differ when we look at the agency the fungi develop *despite* the fact that we do *not* care for them, as participants of unintentional design (Tsing 2015). Indeed, in many cases the mycelium did not care if we cared, once the substrate was ~~inoculated~~

mixed with the fungal mycelium, growth and fungi-human-making continued (see Figure 4).

What if we change the notion from caring *for* to caring *with*, from designing for fungi to designing *with* fungi? Designing in that sense would entail mundane acts of *cultivating* _____ as a relational practice with others. Cultivating in that sense would be a liminal process of understanding where to clean and where to value dirt or mould, where to intervene and where not to. Everyday Designing as caring-with, as cultivating-with would be an engaged practice, embracing decay, grief as much as collaborative growth, curiosity and joy.

CLEANING AS AN EVERYDAY DESIGNING PRACTICE OF CARE FOR REVALUING

This vignette draws from a four-year study at a (charity) op-shop in Melbourne, Victoria. Undertaken with a combined approach of practice-based design research (Vaughan 2017) and sensory ethnography (Pink 2015) that developed into a practice of everyday designing for revaluing (Duque, 2018). At the op-shop, designing for revaluing is composed by sequences of actions that include cleaning, repairing, pricing, displaying and negotiating. In this vignette I focus in the acts of cleaning that occur 'behind the scenes' in the second-hand context, which determine the possibilities for used and dirty things of being revalued.

Revaluing second-hand things is in many ways a synonymous process to that of caring. Revaluing as a response to devaluing, caring as a response to grieving. Both are sequences of actions driven by reflexivity and aimed at alleviating unwanted states; both entail the recognition of material and emotional marks of previous lives that used things carry. A recognition that makes visible the grief of old selves that have outgrown these _____ things, of family members that have donated these material memories of their loved ones, and of fashions and technologies becoming ~~displaced~~.

The material that carries these social stories of grief, growth and value appears ~~quiet~~ to the volunteers in charge of their revaluing, but it is through the silent marks of decay, dirt and use that things communicate their latent values. As Denis and Pontille acknowledge in their analysis of workers practices of maintenance of the Paris subway signs, '[f]ragility is not a clearly identifiable state of the world with symptoms accessible and visible to everyone.' (2014, p. 356). At the op-shop, these signs of fragility are accessed by skilled volunteers who draw from their past experiences and memories to inform the recognition of value in things. Often engaging in dialogues with donors, colleagues, possible customers and consulting online markets to further unpack references that make explicit the historical, _____, economic, material and cultural values that things embody. The degree of perceived dirtiness and visible cleanness explained next, determines the possibilities of revaluing for things.

Things with a degree of perceived dirtiness, undergo quick processes of cleaning only done based on privileges of value. Given by for example, marks of brands, preferred materials such as crystal glass, and age in the case of antiques. ~~Rather than spending volunteer time and effort in caring for dirty cheap brand items, say, plastic merchandising products.~~ Below (see Figure. 5), the shop manager explains how practices of cleaning can increase the value:

Figure 5: *'...see how it has a silver shine to it, that tells you it has a certain amount of lead in it, so, unlike normal glass, as soon as you see this shine, it is either going to be crystal or very, very high quality. So, as soon as I saw this, it was very dirty, I cleaned it and also on the bottom, it actually says Orrefors, which means it is very, very good quality vintage glass, probably from the 1960s. So that suddenly now became something that would've been 50 cents, to something that we now put in the cabinet and put 15 dollars on it and that is a bargain because it's vintage, lovely good quality'.*

When donations are visibly clean, these are quickly sorted and placed for sale. However, visible cleanness is not a guarantee of sterility and indeed the suspicion it awakens in possible re-users plays a key role in second-hand imaginaries that reject the ~~TINY species (e.g. bacteria and fungi)~~ that live with old things and who are fed from human matters. Significant traces of the presence of past human lives and present lively beings that are accepted only by few second-hand treasure hunters. Who engage in further practices of care that attempt to wash these presences away. For instance, some customers interviewed shared homemade cleaning recipes with vinegar, bicarbonate, eucalyptus, tea-tree oils, and hot water as efficient disinfectants.

Cleaning as revaluing illustrates de la Bellacasa notion of care as 'a signifier of necessary yet mostly dismissed labours of everyday maintenance of life, an ethico-political commitment to neglected things, and the affective remaking of relationships with our objects.' (2011, p. 100). A remaking of relationships that in the reuse of second-hand things, also entails the unmaking of traces of old relationships, particularly when cleaning dirty matters. An unmaking that constitutes the 'practices of divestment' (2009, p.254) that Gregson, Metcalfe and Crewe argue are important in the renewal of second-hand things.

Overall, cleaning second-hand donations involves a disposition to push the boundaries of value and a series of practices of care that I argue can be regarded as a form of everyday designing for revaluing. In which things play key roles as participants in communicating their values to the humans handling things from socio-material positions of value and use 'from grave to cradle' (Duque 2018).

Cleaning as revaluing is a continual process in the everyday lives of things and humans that is mutually constituted by all of those who at any stage join to care for/with, which besides of the specificity of things and situations, reflect broader_____ often silent, practices of caring for the material culture we mediate our lives with. In doing so, reflecting practices of caring for ourselves and for some of the social memories that these used things crystallise. ~~A work of revaluing that while it must be acknowledged that it is not enough to slow industrial systems that are dedicated to a design that feeds a throwaway culture.~~ It is a work that has valuable implications as persistent reminders of the role that practices of care as ~~'simple'~~ as cleaning have in the maintenance of things _____.

Cleaning as a form of caring for these 'dirty' matters is a practice that in the charity context has sustainability implications. Beyond contributing to raise funds for the charity's altruistic agenda, it extends the socio-material value of 'old' things as these are maintained in use and circulation. Furthermore, by preventing these things from becoming waste, a form of consumption alternative to buying 'brand-new' is made possible.

CONCLUSION

By bringing together the examples of cultivating fungi and revaluing used things we have unpacked some of the tensions between dirtiness and cleanness and the role that practice-based approaches to design research can have when *caring with dirty matters*. Both fungi and second-hand things thrive between clean+dirty environments. Acknowledging that cleanness and dirtiness are composed by ecologies but also by human expectations that can be fluid, allow us to reflect about the potential of designing *with* and *within* a dirty and decaying world. We propose a revaluing of narratives that is not limited to highlighting practices of cultivating and cleaning, but also to the acceptance of degrees of dirtiness - as fertile matter to grow together with other species - and as valuable traces of collective pasts that can orient things to renovated states of their lifecycle to challenge the notion that all dirt becomes waste.

Dirty matters can be a fertile ground for mundane acts of *everyday designing* to unfold, to challenge the quick devaluing favoured by an over-consumerism responsible for many of the concerns of unsustainability _____. Caring *with* dirty matters like fungi and second-hand things are examples of *everyday designing*: ongoing, situated design practice concerned with shared matters of grief, disgust and decay, de-signing design from the myth of newness and increasing consumption by revaluing things as growing narratives.

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