

Circles and Props— Making Unknown Technology

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How will you go about finding that thing the nature of which is totally unknown to you?

—Meno, from Plato's dialogue (in Solnit [1])

Any sufficiently advanced technology is indistinguishable from magic.

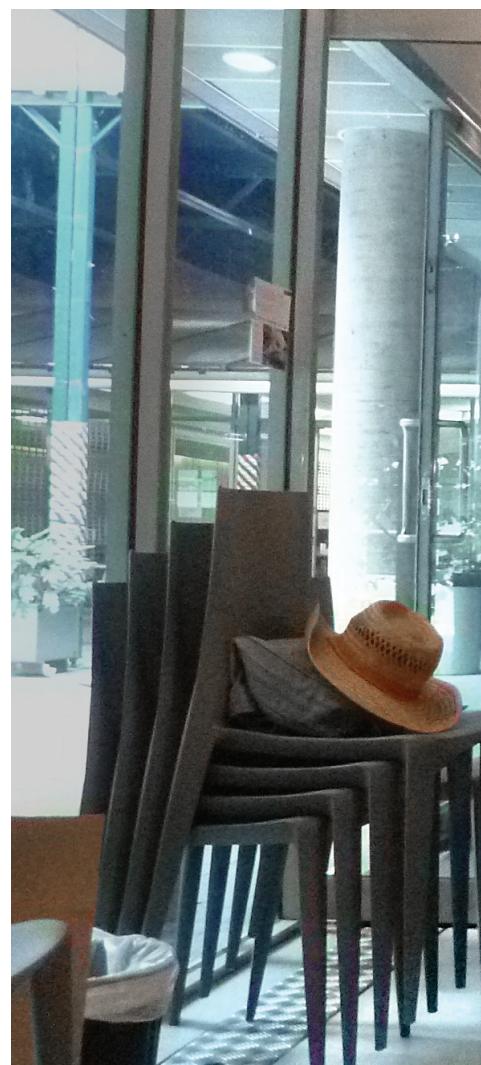
—Arthur C. Clarke [2]

It is almost impossible to imagine what lies ahead. What will the future bring? How could life be different? The OWL project is an evolving interrogation of how we might imagine technologies that do not yet exist. How can we support the emergence of radical future technologies that reflect and respond to our personal desires? Asking someone to imagine yet-to-be-imagined technologies puts a large strain on that person's ability to bring ideas into being. What do you really want, if you could have anything? It is an awful question to ask, and when you do ask it, you will mostly get simple, modest answers. In the quote above, Meno asks how we will go about finding that thing "the nature of which

is unknown to us" [1]. The OWL Circles were created as an attempt to find a way to blot out the most immediate answers, so that we might access more instinctual—and perhaps less plausible—responses.

The Circles are purposely designed as a way to sneak up on ourselves, to be caught unaware and unselfconscious for a moment so that we dare begin. Our aim is to elicit nuanced, imaginative, and implausible responses that challenge and stretch what we consider possible. The Circle workshop experience takes the participant through a rapid series of formalized conceptual shifts, each drawing on work in theater and performance theory, game play, psychology, and other areas. Here we attempt to account for these shifts and the body of work that lies behind them.

► Top: A group in the middle of the making stage. Tools and advice are shared around a central table. Bottom: F is being fitted for his "Stilts," an unknown technology that allows him to "jump really high and blast off to the moon." The cups at the back of his legs are "totally secret gadgets."





Setup and Structure

The OWL Circles are hosted in a neutral, utilitarian space containing a large, shared worktable with a selection of tools and various neatly organized recycled materials. The materials are chosen to afford a large range of structural possibilities and aesthetics. A small area is also set up for video interviews, with a video camera on a tripod in front of a black wall. The Circles are conducted with 12 participants and two workshop facilitators. The format evolved until it was reduced to the following strict sequence of conceptual shifts:

- Introduction: Welcome and brief introduction, including reading aloud the above quotes from Arthur C. Clarke and Meno [1,2].
- The desires: A list of common desires are read aloud and placed on the table in the form of index cards [3]. Participants are asked to choose one.
- Transfer to body: Participants are asked to identify the body part in which their chosen desire resides.
- The material switch: Participants choose materials they find appealing.
- Thinking with your hands: Without knowing what to do in advance, participants begin making.
- Being done: When they recognize that they are done, each participant is led to the video interview corner.
- Description: While being fitted with a microphone, participants are instructed to tell us on camera their name, their desire, what their object is called and what it does. The answers are filmed in one take.
- Debrief: A short debrief is performed to complete the process.

What Is Happening

We outline here the background for these conceptual shifts. The main

driver is a series of estrangement switches that shift the mindset of the group away from the predictable and toward a temporary moment of otherness.

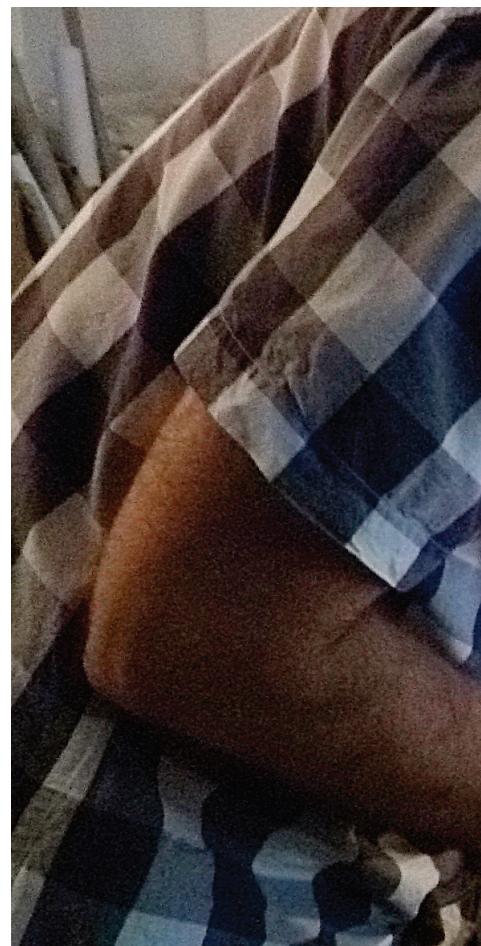
The introduction. The introduction functions as the drawing of a circle or the beginning of a game, and as such it serves a number of roles. In a theatrical sense it declares that a game is beginning. Caillois specifies a number of characteristics for games: They are engaged in by choice; they are separate from the routine of life and occupy their own time and space; they are uncertain—the results cannot be predetermined, and the players' initiative is therefore required; they are unproductive—they create no wealth and end as they begin; they are governed by strict rules that suspend ordinary laws and behaviors; and, finally, they involve make-believe that confirms in players the existence of imagined realities that may be set against "real life" [4]. By framing the Circle as a game, Caillois's characteristics come into play. This liberates qualities of attention and engagement that are useful when trying to find "that thing the nature of which is unknown" [1]. Clarke's assertion that "any sufficiently advanced technology is indistinguishable from magic" [2] further emphasizes the game-like quality of what we are trying to do while focusing our quest on the realm of technology.

The desires. The list of desires is borrowed from Steven Reiss's motivational psychology research [3]. Reiss's desires are usefully provocative. They reduce a complex emotional field down to someone else's shorthand definition of the world. They also introduce language before we know what we might be describing, and thereby provide an uncommon point of departure for

an embodied discovery process. Choosing to approach a difficult subject in a difficult or convoluted manner is a common strategy of fine art. The underlying assumption is that to "free up" the creative and expressive body to respond to the unanswerable, we must first "busy" the reasoning part of the brain so that it will not interfere [5]. The sparse yet strict instructions that we provide act as a structure that engages the reasoning part of the brain, freeing participants to be spontaneous and to follow their aesthetic and creative whims [6].

The list of desires:

- Acceptance, the need for approval
- Curiosity, the need to learn
- Eating, the need for food
- Family, the need to raise children
- Honor, the need to be loyal to



the traditional values of one's clan/ethnic group

- Idealism, the need for social justice
- Independence, the need for individuality
- Order, the need for organized, stable, predictable environments
- Physical activity, the need for exercise
- Power, the need for influence of will
- Romance, the need for sex
- Saving, the need to collect
- Social contact, the need for friends (peer relationships)
- Status, the need for social standing/importance
- Tranquility, the need to be safe
- Vengeance, the need to strike back/to win

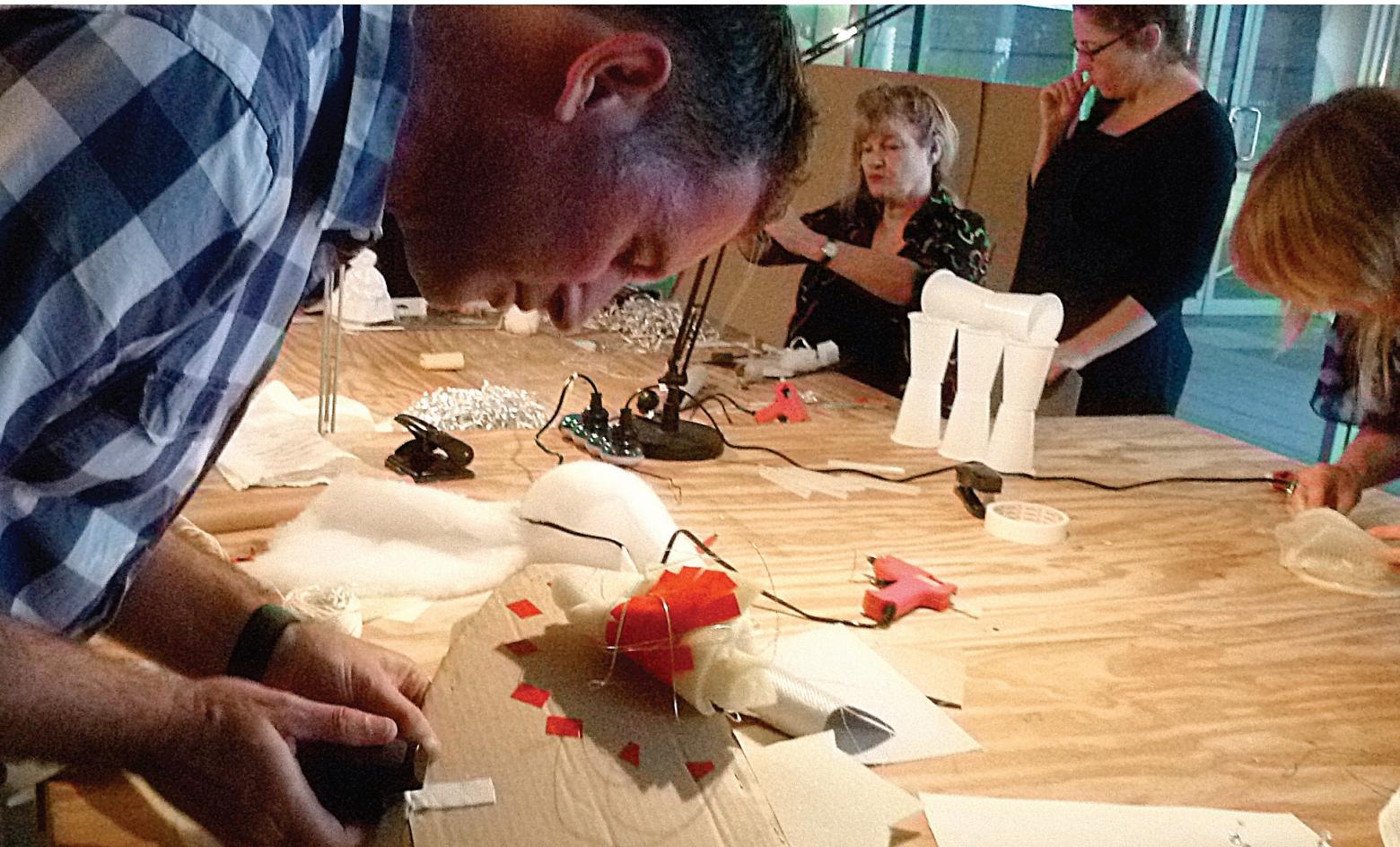
This list of desires acts as the first estrangement switch and is

followed very closely by the next conceptual shift.

The transfer to the body. "Where in your body does your chosen desire reside?" This question acts as a second estrangement switch, transferring and connecting desire to body. It is a nonsensical question that draws heavily on surrealist art strategies, liberating in their absurdity [7]. "If you were a color, what color would you be?" Children know this game and have answers for these types of queries. The switch between an abstract desire, defined very strictly by someone else and the feeling that this word does indeed reside within your body, allows the participants to begin to work. The question is no longer abstract; it has been made concrete and physical. This clear concept now becomes the participants' guide in the work.

The material switch. "Find the material that works for you." This request acts as the third estrangement switch and allows the physical making to begin as participants find physical form and texture for the body-feeling that has been identified. Again, the decisions made here are not reasonable; rather, participants continue their line of absurdist questioning by asking: If this feeling had a texture and a shape, what would they be? This process exposes unexpected and poetic possibilities that can be explored from the specific sensory potential of material to body behaviors as they arise from desires, feelings, and anxieties. Dr. Montessori famously used blindfolds in reviewing materials, stating that the eye can interfere with what the hand knows [8]. We add that language

► Making the "Ear," based on the desire "vengeance."



can interfere with what the hand knows. Once the participants have chosen materials, they begin building and supporting their burgeoning concepts.

Thinking with your hands. Through the making process, the work is one step further removed from reasoning and habitual thinking. The participants have until this point made three very large leaps of faith: choosing a desire, connecting this desire to their body, and connecting their until-now unnamed feeling to a material texture and expanse. These three switches have occurred in less than 15 minutes, allowing no time to reconsider or back out into careful reasoning. In a sense, participants are not completely committed at this point, simply because they do not know what it is they are making. The work that

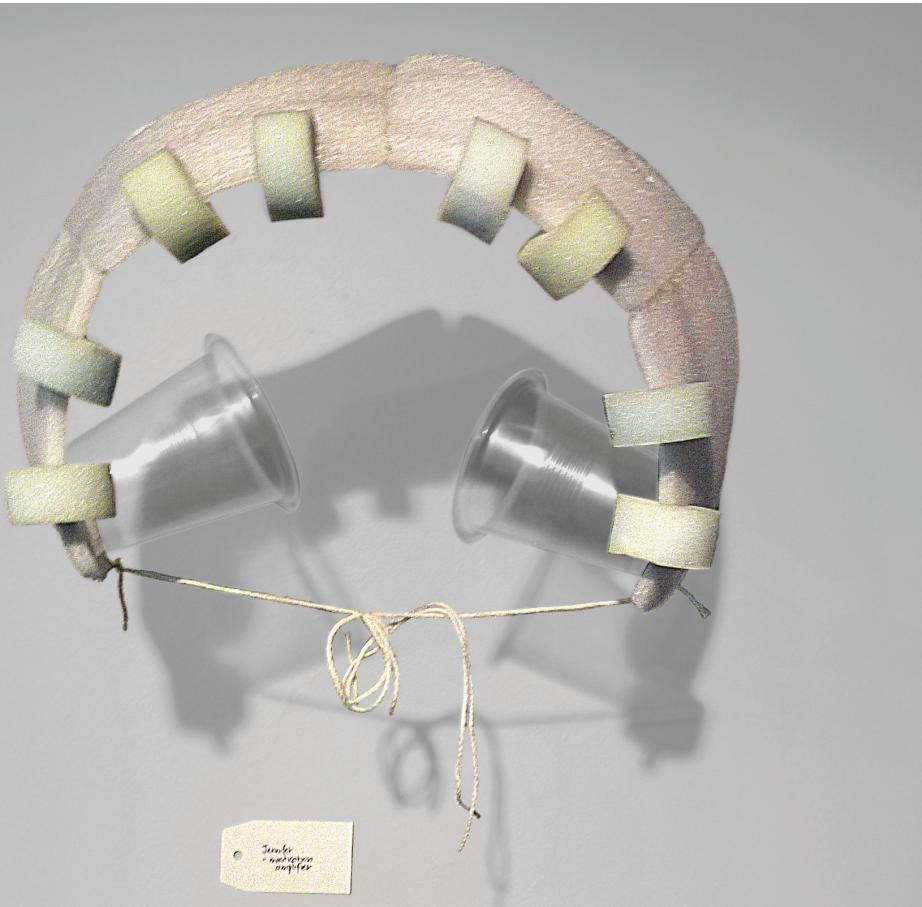
follows is instinctual and effective. The conversation around the table is practical: Can I have the scissors? How do I make this stick out to the side? Kelly claims the divorce of the hands from the head puts a strain on the human psyche [9]. This suggests that bringing them back together again through embodied processes relieves strain. Having viewed numerous circle participants engage in this process, we suggest that the state it engenders is tranquil: focused, efficient, relaxed, and also gently energetic. Thinking as an emergent bodily process allows us to access knowledge, expertise, or connoisseurship that otherwise eludes articulation. The OWL processes lean heavily on this idea.

Being done. Knowing when a device is “done” is an instinctual knowing. The circle structure

removes verbal reasoning from the imagining and creating process and frees the participant to trust their ability to recognize what it is they are doing as it emerges, including when it is done. This knowing when is something we all have experienced. Henri Cartier Bresson called it “the decisive moment,” the moment when the shutter on the camera is released [10]. In musical improvisation, the knowing where to go next becomes a series of small decisions made in a hyperaware state of flow in which the musician “knows” both the minds and desires of his or her fellow musicians, and also holds the experience of the audience as an almost physical thing that can be examined, turned, changed, and at some point recognized as being “done” [11].

Description. We began with language, with the desires, and now we return to language. The process in between has been embodied and, in many respects, mute. As language floods in, it takes over, surprising the participants. Excluding language from the central part of our structure allows an intuitive and productive process to emerge. Only at the end is reasoning allowed back into the experience. In order to allow this process to appear on camera, we ask the participant to speak in one take, with minimal intervention from the camera operator. This achieves two things: First, it allows the process to remain personal and introverted—the camera operator is just that, an operator facilitating the participant to self-record their piece; and second, the switch between an intuitive and wordless making process to a reasoned presentation happens on camera, with many participants realizing what they have built only as they name it. To make this final switch more distinct, we ask strict, product-like

- The “Mastication Amplifier,” a bonnet-like device that when attached to your head will amplify the sounds of food and mastication for the food enthusiast.



questions. Instead of "How did you feel?" we ask, "What does it do?" The strictness of this line of inquiry allows the sometimes hazy decision-making process that has come before to crystalize. The "product" is described and the participants are thereby brought back into the everyday world. The circle is broken and the game is over.

Debrief. As a postscript to the overall workshop experience, each participant is debriefed before leaving the workshop space. This allows us to close any conceptual holes and attend to any concerns the participant might have and is an important part of our taking responsibility for the emotions and questions that may arise in an intense experience. It is also where we can explain a little bit more about the reasoning behind and background of the project.

The workshop takes two hours, including the recording of all 12 participants' work. In that time we have opened a bubble in time in which we were allowed to physically build what did not previously exist, and in turn meditate over our desires and how they might be met or mitigated.

Nine Circles have been conducted to date: three in Tokyo and six in Sydney. Five of the Sydney workshops were targeted toward specific social or community groups: artists with disabilities and their caretakers, design academics, young children, performing artists, and librarians. Outcomes were exhibited as part of the 2010 Participatory Design Conference.

Conclusion

In her book *On Longing*, Susan Stewart proposes that souvenirs are objects of desire that assist in the formation of continuous personal narratives that connect the present with the past [12]. OWL objects

and devices connect participants through their imaginations and desires, as well as through the objects themselves, from the present to the future. They give form to and assist in the formation of continuous or ongoing personal narratives that support this connection.

The workshops themselves are live, volatile processes, understood in the sense of Dewey's "experience" [13]. We work with ideas not just in the form of description, where only language can become knowledge and meaning, but rather as a "process of becoming." Without turning to either romanticism or mysticism, our process allows what may appear as chaos to create order and pattern through embodied experiences. Judith Butler states that we are required to "risk ourselves precisely at moments of unknowingness, when what forms us diverges from what lies before us, when our willingness to become undone in relation to others constitutes our chance of becoming human" [14]. The workshops are purposely built to facilitate this kind of risk taking, to provide a temporary space in which we can "become."

The OWL project confronts desires, bodies, and dreams about technology. It effects a displacement of desires, by naming them and giving them form. It also affords giving accounts from the place Butler speaks of, the place where we become and remain human. The objects that are made are a kind of souvenir from the future. Where souvenirs remind us "what happened then," the OWL objects carry stories about "what happens next."

Acknowledgements

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ABOUT THE AUTHORS

Kristina Andersen works with electronics to create unusual objects and experiences as a part of her ongoing obsession with naive electronics and magic. She holds an M.A. in wearable computers from the Academy of Fine Arts in Copenhagen, an M.Sc. in tangible objects in virtual spaces from University College, London, and works on her Ph.D. with Lynda Hardman (UvA) and Sher Doruff (Rietveld Academy) as advisors.



Danielle Wilde thinks, writes, moves, and makes to understand how technology might pair with the body to poeticize experience. Her research blurs boundaries between disciplines and questions the divide between art and everyday life. She holds a Ph.D. in body-technology poetics and embodied engagement from Monash University and CSIRO, Australia, and an M.A. in interaction design from the Royal College of Art, London.