A Third Space, X–Y–Z

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Produced during the past four years, Saskatoon artist Susan Shantz's exhibition *creatures in translation* investigates the "loss of cultural and sensory information that occurs as a result of digital reproduction of art and artifacts."[1] In a culture increasingly driven by its belief in digital technologies, Shantz's archive explores how digital translation affects the production and circulation of knowledge. Are there types of knowledge that do not translate into digital data—tacit knowledges that must be gained through imitation, practice, and experience within particular social networks—and how does one articulate these experiences so that they remain valued in a culture? Can digital haptic technologies visualize a thirdspace between tacit and codified knowledges? These and other questions are addressed in Shantz's latest body of work, which builds on her earlier postminimal and conceptual working methods, particularly serialization and remediation, to create *an archive of process*[2] that records how knowledge is shaped through digital translation.

The exhibition's museum-type display combines a series of 3D rapid prototyped models, inkjet prints and hand-rendered drawings that reinterpret online images of early twentieth-century Japanese Banko ware teapots from the Art Gallery of Greater Victoria's (AGGV) permanent collection. Crafted in the style of eighteenth-century Japanese potter Numanami Shigenaga,[3] Banko stoneware and enamel overglaze vessels take the shape of popular human effigies or imaginative animal representations. Celebrated ceramic artists made first and second wave Banko ware, but Shantz has an ongoing interest in mass-produced, domestic objects and this work references third stage, factory-made Banko ceramics[4] manufactured for commercial sale in early twentieth-century Japan and Europe. She was particularly drawn to the kitschy badger, sparrow, frog and sea creature teapots because of how the shaped animal imagery reflects cultural interpretations of nature that circulate in consumer and popular culture.[5] These Banko ware copies have already been reinterpreted and translated for mass production, but Shantz digitally retranslates and remediates these teapots to resituate them in a realm of experience and entertainment with formal and popular culture references to digital animation, Claymation, video gaming and virtual reality.[6]

At the exhibition's entrance, a series of archival inkjet prints reproduce the AGGV's website catalogue entries for each of the four Banko ware teapots that serve as the source material for all the other works in the exhibition. Four full-scale, 3D thermoplastic prints, tinted with a thin wash of clay slip are in a museum case adjacent the inkjets; they are translations—essentially new artifacts—paradoxically, original copies. A hand-lettered label identifies each form as a material manifestation of the digital artifact archived in a database, stored at a URL or rendered in digital space. Nearby an email from Shantz's assistant, Andreas Buchwaldt, to Cimetrix Solutions outlines the 3D printing instructions for the

sparrow and frog pots, each source file a URL link that evokes infinite reproducibility to the point where the authenticity of the original becomes almost moot. Like the artifact labels, the email's computer font is meticulously copied by hand, this time using carbon paper. Each text, like the objects themselves, is a hypertext—a text that cross-references its original, translated source data and unfaithful copy. Using a pseudo-scientific working process, Shantz repeatedly translates one thing into another to reveal what is lost or gained between the real and the simulated, the original and the copy and the analog and the digital, to explore where the cultural and scientific constructions of tacit and codified knowledges overlap.

A THIRDSPACE

Shantz's earlier installations—*hibernaculum* (wall) (1994), *Satiate* (1998), *untitled (canopy room)(*2006-2007)—relied on labour-intensive, handworked material processes, many of which borrowed from craft traditions that rely on tacit knowledge to make meaning. One might assume her choice to use a digital haptic tool and 3D modeling software to create multiple thermoplastic clay reproductions of each Banko ware teapot from low-grade, online collection images implies a more distanced relationship to the material processes of making. Indeed this digital technology does mediate the relationship the artist's hand has to the materialization of the virtual object. Through tactile feedback, the haptic tool maps the body's senses of vision and touch to simulate the physical and spatial experience of sculpting clay originally used to realize these objects. This data is then codified, mapped onto Cartesian X–Y–Z axes, visualized and manipulated in the abstract space of the computer screen. It only takes fixed form when extruded into striated, bonded thermoplastic layers or inked onto paper in a pattern of gridded pixels. Strangely, Shantz's digital translations seem to embody both the conceptual space of the original clay form and their new digital materiality, which invokes the technological processes that formed them.

Within *creatures in translation*, Shantz uses digital haptic technology to open up a *thirdspace* between body and mind, the tactile and the virtual, to create a point of intersection between subjective interpretive processes and seemingly objective technologies, and to level hierarchies between conceptual and material, digital and non-digital practices. Political geographer Edward Soja's book *Thirdspace* borrows from the work of Henri Lefebvre (*Production of Space*), Michel Foucault's idea of heterotopias, and Homi K. Bhabha's theory of cultural hybridization to describe a space in which:

> everything comes together. . .subjectivity and objectivity, the abstract and the concrete, the real and the imagined, the knowable and the unimaginable, the repetitive and the differential, structure and agency, mind and body, consciousness and the unconscious, the disciplined and the transdisciplinary, everyday life and unending history.[7]

A thirdspace, therefore, is an inclusive, hybridized space of potentiality that gives rise to a new trialectics of space that moves beyond dualisms—particularly thinking that divides the world into categories of either material or conceptual, tacit or codified and real or imagined—towards "an-Other" space that traverses binaries.[8] This in-between space is constantly being constructed and reconstructed, mediated by technology and language, which both reflect and shape societies and their inherent ideologies. A thirdspace can also be a psychoanalytical space—a space of becoming—one akin to D.W. Winnicott's idea of the transitional space[9] in object-relations theory that allows for the continual formation of subjects through their intimate and imaginative encounters with (art) objects in the world.

REMEDIATION

Artist and craft theorist Amy Gogarty's essay "Remediating Craft" is useful in thinking about how Shantz uses translation in this work to open up a thirdspace between codified and tacit knowledges. In it Gogarty rearticulates Jay David Bolter and Richard Grusin's idea of remediation from new media theory and applies it to contemporary craft practices. Briefly, they describe remediation as "The formal logic by which new media refashion prior media forms" using the "twin logics of remediation," immediacy and hypermediacy.[10] Gogarty traces a history of mimetic representation in the West that attempts to evoke the real in evermore refined (codified) and immediate ways from the twelfth century to today's virtual reality. Paradoxically, this history of immediacy reveals the real is nonetheless always mediated by the medium—the contact point between the real and its representation.[11] Hypermediacy "acknowledges multiple acts of representation and makes them visible," within the same space and time to create a fragmented, heterogeneous representation that "makes us aware of the medium or media and … reminds us of our desire for immediacy."[12] *creatures in translation* exercises an overt form of remediation in which the Banko ware teapots are refashioned entirely by 3D-digital technology while still referencing the conceptual space of ceramics and industrial slip-cast processes. Here a remediated copy can become more real than real—better than the original, an improvement on reality—but not without acknowledging the disjuncture between the two or creating a sense of hypermediacy. Conversely, Gogarty argues that "old media," can also remediate new media to draw attention to the technological and ideological limits of each by gauging what is lost or gained in translation. Historically this has been particularly true of ceramics, which has been used for centuries to model things to be made in another medium. In the case of *creatures in translation*, Shantz uses remediation to raise the possibility, as Gogarty suggests, that "handmade objects problematize concepts of reality and mediation,"[13] which, in this case, might otherwise go unchallenged in a seemingly seamless digital world. Gogarty concludes, "All mediation is a form of remediation. Media constantly comment on, reproduce or replace other media, operating within webs of cultural meaning and social relations,"[14] and it is through this process of remediation, or translation, that it becomes possible to reform reality.

creatures in translation

Shantz's exhibition design is modeled on the modern museum, which through its ongoing interpretation of cultural collections contributes to the construction of knowledge that shapes our reality. Her meta-museum suggests the digital reproduction of artifacts has implications for the future role of the museum, which relies on the authenticity of its original collections for its cultural authority. In recent years, the museum's encyclopedic collections and metanarratives have given way to an experience economy,[15] which is often mediated by digital technology and online circulation. Aware that the modern museum's metonymical truth relies on the decontextualized fragment, but the authenticity of the artifact is increasingly less important than the cultural narrative it helps to construct, there has been a growing trend to use digital technologies including 3D rapid–prototyped artifacts to animate museum collections. *creatures in translation* investigates the implications of this for the future production, circulation and understanding of visual and material culture.

Pioneered in the late 1980s, 3D printers for rapid prototyping use an additive process to map and render points of the X–Y–Z axes of a virtual object onto the material world, effectively opening up new interdisciplinary approaches to conceptualizing and materializing forms. Shantz's *creatures in translation* are hybrids: they use 3D printers, haptic technology and modeling software to collapse the boundaries between what British craft theorist David Pye calls the "free" workmanship of risk—the handmade—and the "regulated" workmanship of certainty—industrial, or in this case, digital reproduction—which, according to Pye, are inextricably linked.[16] Shantz's works are based partly on what is known from perceived experience and partly on what is imagined or constructed by the digital interface that renders them. Often the forms rendered would be impossible to produce using conventional industrial or artistic processes, thus making familiar forms unfamiliar, even uncanny. Take for example *Fragment Rendering (Frog Crown)*, an archival inkjet print of the frog pot's surface decoration floating, decontextualized, on a black background. The pot is implied by the negative space— there even seems to be a vague pixilated outline—but it is absent. Parts of the image, particularly at the edges of the decoration or where there is detail, are also pixilated due to a lack of data. The object's identity is even more ambiguous without the ceramic pot to give it context, and one is left to wonder if this *Frog Crown* could ever materialize as represented, without the pot's supportive form (a hypothesis Shantz tests later).

The equally ambiguous archival inkjet prints *Fragment Renderings (Crayfish A; Frog Alone B; Crayfish B; Badger; Frog Alone A)* and *3D Modeling in-Progress (Badger)* also document how 3D-print technology has to rethink the modeling process to render an existing clay form within the constraints of digital space. A commercial glass vitrine contains 1/3, 1/2, and 3/4-scaled 3D thermoplastic prints of these teapots and fragments. Multiple versions of different slices (views) and scales from each pot's rendering demonstrate the ease with which this digital

technology can edit, re-scale and re-print reality, calling the authenticity of these, and all the other works, into question. Further down in the vitrine, 3D frog fragments that look as though they have been peeled off a missing vessel pepper the shelves, but closer to the bottom the shelves are empty. These missing artifacts (proofs) signal gaps in knowledge and cultural narratives, which are yet to be constructed and circulated by those with the power to do so.

Joseph Anderson's subtle watercolour interpretations, *AGGV Website Watercolours*, of Shantz's hand-cut, digital collages of the Banko ware collection images, *AGGV Website Collages,* reference a long historical trajectory of imitation and reproduction associated with amateur art and popular craft as much as digital reproduction, which is their source. Shantz also contrasts handworked and digital modes of rendering—particularly traditional perspectival conventions and those of Euclidian digital space—in her mixed-media triptych of the *3D Rendering* (*Badger Teapot)* and *3D Rendering (Frog Teapot)*, hand-rendered in pastel. Each rendering gives the illusion of three-dimensionality and completeness from a singular point of view, or as one might view it on a screen, but the illusion breaks down as you move past the images to realize they are gigantic, 3D paper pop-up drawings based on 3D wire-frame computer models. The *Badger Teapot*'s exaggerated scale makes the distortion at once menacing and hilarious. Reminiscent of Victorian-type paper cutouts, *Frog Teapot*'s trompe l'oeil decoration is cut out and superimposed, in real space, onto a shaped representation of the pot from which it was lifted. Caught between 3D digital model, drawing, collage and bas-relief sculpture, between an illusionary representation and a real material object, *3D Rendering (Badger Teapot)* and *3D Rendering* (*Frog Teapot)* become somewhat alien, exceeding the language of representation.

3D Print Fragments (Frog Alone A) also eludes easy categorization. It is a gigantic pair of hand-finished styrofoam and plaster 3D frog print fragments derived from the same digital file. Cut with a CNC (computer numerical control) router, it relies on a more traditional subtractive, sculptural process that recalls industrial prototypes. Placed end-to-end on top of a plinth that descends architectonically to the gallery floor, these enlarged fragments seem to emerge out of the material like they are still forming. A subtle line traces the edge of the fragment, marking its separation from the supporting material from which it was cut. Shantz sanded the thin plaster surface smooth, but retained this line in surface of the final form as evidence of the CNC rendering, which in its final form, could be easily mistaken for a stone carving or bisque. Rather humorously, what was once a kitschy decorative element dematerialized through digital representation is now rematerialized as an almost monumental sculpture that exhibits signs of both its digital re-conception and its handmade nature.

As if engaged in a process of reverse engineering, in *Slip-cast Teapots (Sparrow)*, Shantz translates the digital model into clay once again to explore how the originals were likely made in sections using press-molds. These bisque-fired, clay slip casts were taken from a seven-part mold of a 3D thermoplastic print. The

clay sparrow pots lack detail; they are soft, rounded, and imperfect and some are "cut off" near the top echoing the fragments and slices of the 3D digital prints. These copies fail to replicate their originals; instead they become perfect renditions of multiple imperfections, or lacks, encountered during the translation process. These imperfections point to types of tacit knowledge that are not digitally reproducible, but can still affect the ways we interact with technology.

What do these clay copies of a digitally translated ceramic teapot tell us about the original teapot that we might have otherwise overlooked or made different value judgments about? Does it redirect our attention away from the authenticity of the museum artifact and its aesthetic qualities to focus our attention on its conceptual and symbolic functions? According to critic Love Jonsson, "the visualization of abstract information does not lead us away from the real thing; it may actually make us return to it with fresh eyes."[17] Shantz's *creatures in translation* suggest a "'conceptual' primacy that resides in their digital coding,"[18] but paradoxically, in the process of translation the conceptual processes and tacit knowledges engrained in the clay object's form are rendered visible. As opposed to assuming a loss of cultural information through digital translation and reproduction, these technologies might, in fact, create a third space in which localized, cultural and material knowledges can be seen to operate, albeit differently, in a networked, distributed and dematerialized space.

ERROR & POTENTIAL

In her rereading of image into object, of remediating old media into new media and back again, Shantz stays particularly attuned to the *glitch*—errors and miscalculations that occur in translation—choosing to show these unexpected accidents encountered during the creative process. Referencing Dutch artist, Rosa Menkmen's "glitch aesthetics," artist Mikhel Proulx defines a glitch as the unique "aesthetic result of an error"; it is "endlessly producible, but by definition never *re*producible—each a sudden crystallization of a data-flow."[19] The glitch signals what cannot be translated—a slippage in meaning, misrecognition, a conflict in the code—a failure in the highly systematized, accurate digital technologies that seamlessly shape our world. In this sense, glitches or failures in translation, record moments when technology is revealed to be incommensurate with other types of cultural knowledge. Proulx observes "artists exploit the capacities for glitches, error, noise (and similar 'faults' within digital systems) to enact a counter-force within systems that demand clarity, efficiency and certainty."[20]

In *creatures in translations* too, the glitch signals an unexpected interruption to the relentless repetition of modernist progress and technological certainty to open up an ambiguous space, a thirdspace. The certainty of the digital world falters in *Fragment Rendering (Partial Frog Crown)*, a black and white digital rendering of a teapot decoration that is a misprint; it is misregistered on the paper and disrupted by lines of errant pixels (digital noise). These glitches, or failures in translation, reveal technology's inability to fully perceive and translate certain types of

knowledge, but this lack opens up rich epistemological territory to be explored. Failure itself becomes productive and presents potential for new knowledge. Shantz's artistic process also recalls how in the history of industrial production products and by-products often resulted from some *failure* so "[w]ith each translative turn, some signifiers are lost while others are gained."[21] In *3D Print Fragment (Frog Crown)* the printer nozzle spits and sputters shiny, crystalline thermoplastic, it slows, pauses and stops—translation fails—resulting in the failure to print altogether. There are three such aborted attempts before a full 3D print of the *Frog Crown* is completed. Fused to its digital substructure and lacking detail, it is difficult to tell if it is a finished object or a model for some sort of imagined, but unrealized, ideal.

Susan Shantz's exhibition, *creatures in translation*, reveals how knowledge is in a constant state of translation. In it, Shantz explores how digital haptic technologies might be able to mediate and visualize a thirdspace between tacit and codified knowledges. Here, failures in translation are productive, indicating a conflict in the cultural code that demands a paradigm shift—models yet to be imagined. Shantz's work suggests how we are all in a constant state of becoming, shaped by technology and language; we are all *creatures in translation*.

1 Susan Shantz, artist's statement, May 2012.

2 Blair Fornwald, Susan Shantz *creatures in translation* (gallery didactic), Dunlop Art Gallery, April 27–June 14, 2012.

3 *Online Encyclopedia*, "Banko ware," accessed August 18, 2012, http://www.encyclo.co.uk/define/Banko%20ware

4 Blair Fornwald, Susan Shantz *creatures in translation* (gallery didactic), Dunlop Art Gallery, April 27–June 14, 2012.

5 Shantz, artist's statement, May 2012

6 Susan Shantz, author in conversation with the artist, May 19, 2012.

7 Edward W. Soja, *Thirdspace: Journeys to Los Angeles and other real-and-imagined places* (Cambridge: Blackwell, 1996), 57, quoted in "Edward Soja," *Wikipedia, the free online encyclopedia*, accessed October 14, 2012.

8 Soja, *Thirdspace*, 61.

9 Sigrid Dahle, *Susan Shantz technologies of tenderness* (Medicine Hat Museum & Art Gallery, 1998), 18.

10 Jay David Bolter and Richard Grusin, *Remediation: Understanding New Media* (Cambridge: MIT Press, 1999), 273, 21, quoted in Amy Gogarty, "Remediating Craft," *Utopic Impulses: Contemporary Ceramics Practice*, Ruth Chambers, Amy Gogarty & Mireille Perron, eds., (Vancouver: Ronsdale Press), 2007, 92.

11 Bolter and Grusin, *Remediation*, 30, quoted in Gogarty, "Remediating Craft," 93.

12 Bolter and Grusin, *Remediation*, 34, quoted in Gogarty, "Remediating Craft," 93.

13 Gogarty, "Remediating Craft," 96.

14 Bolter and Grusin, *Remediation*, 55, quoted in Gogarty, "Remediating Craft," 95.

15 J. Pine and J. Gilmore, *The Experience Economy* (Boston: Harvard Business School Press, 1999).

16 David Pye, "The Nature and Art of Workmanship," in *The Craft Reader*, ed. Glenn Adamson (Oxford/New York: Berg, 2010), 341–53.

17 Love Jönsson, "Rethinking Dichotomies: Crafts and the Digital," in *NeoCraft: Modernity and the Crafts*, ed. Sandra Alfoldy (Halifax: Nova Scotia Art and Design Press, 2007), 246.

18 William V. Ganis, "Ars Ex Machina Digital Sculpture," *Sculpture* 23:7 Spring 2004, 30.

[19] Mikhel Proulx, "The Progress of Ambiguity: Uncertain Imagery in Digital Culture," unpublished thesis, Concordia University, 2013, 23. Also see Rosa Menkmen on "glitch aesthetics," http://rosa menkman.blogspot.ca/.
[20] Mikhel Proulx, 20.
[21] Blair Fornwald, Susan Shantz *creatures in translation* (gallery didactic), Dunlop Art Gallery, April 27–June 14, 2012