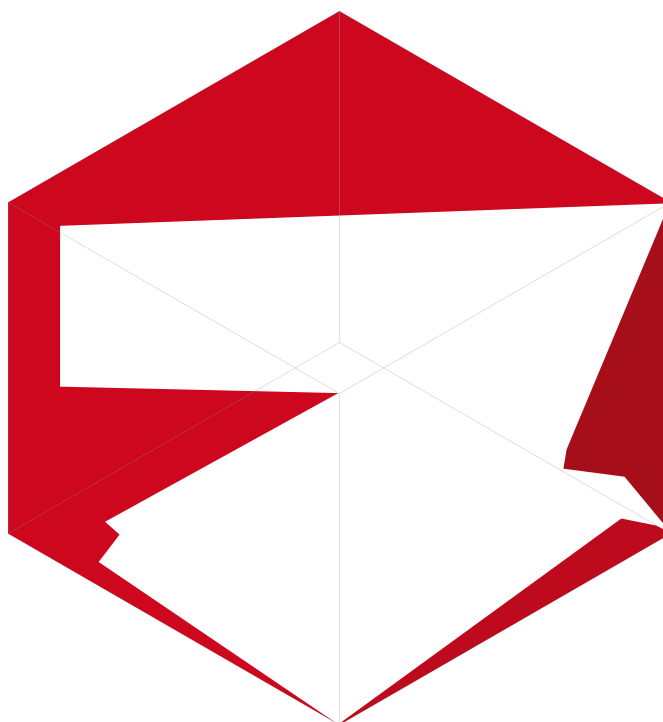


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The Visible and Invisible in Making: Reflecting on a personal practice

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Abstract: In this paper I reflect upon the nature of making within my own practice, with specific reference to intrapersonal conversations (Bolt) and those with materials. The nature of flow as suggested by Csikszentmihalyi, in the process, when presencing (Heidegger) a concrete artefact into bronze via material thinking is discussed. Some reference is made to cultural overlays (personal and external) that sit within the evolving of a work, and the legacy of which inhabits it (Margetts), long after making has ceased.

Key Words: intrapersonal, material thinking, flow, presencing, Csikszentmihalyi, Bolt, Heidegger, Margetts, wax, bronze.

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In this paper I will reflect on my own studio experience of invisible and visible elements in making visual art work. The key elements brought together in the making process are the intrapersonal space and actions of the maker, and the tangible and potential qualities of the materials. I will explore these interactions in terms of working with wax and bronze, and contrast these with my earlier work with wood and glass. The experience of flow (Csikszentmihalyi, 1990) and Heidegger's (1968) concept of "presencing" are discussed in relation to the creative process of bringing the new into being. These represent crucial aspects of the interaction between unseen and seen elements in making. A side reference is made to Australian Aboriginal reifying of reality. Emotions and intuition are also parts of human making, and this is discussed in the approach to "careful and concerned dealings" when handling materials (Bolt, 2006, p.5).

As a fourth generation New Zealander, I have become aware of certain characteristics of traditional Maori art and artefacts, in particular the concept of *wairua* or spirit. This notion, as I understand it, is about the crucial transmission of self into an object (Margetts, 2011, p.40), and I discuss this as a further dimension of the invisible. This spiritual dimension illustrates that the making partnership involves an almost mystical space, in which the multi-dimensional presence of the maker touches the mysteries of the voice of the material. In reflecting on my studio practice and related theory, my intention is to highlight the complexity and richness of making, and how this touches some of the fundamental aspects of our shared humanity.

The initial and developing idea for an artwork is itself a product of fluctuating influences, intentions, conceptual vagaries, emotional and needful urgings, and cultural conditionings. These are drawn into the making with an array of conditions of self and external referencing that get played-out as the work evolves and is resolved. The physical partnership (between maker and materials) of making empowers a shift from abstract (internal) to substantive (external), and there is a spatial, tactile connection between inner-self, hand and materials.

In my practice, working in wax towards bronze, the impetus for resolving media choice reflects on the conceptual rationale. The process from unworked and resistant wax, (figure 1) using heat and tools to form the nascent object, till finalised in noble bronze, begins in the mind and specific understandings. It is then shaped by conditions, foibles, and unforeseen occurrences that need to be responded to, and which often revise the original intent or form itself.



Figure 1. Working in wax



Wax has a wonderfully flexible and varied plastic nature. Cold, it is resistant, brittle, carvable. Warmed, it gives more of itself in the shaping, becoming elastic and malleable, even receiving the maker's fingerprints. Still warmer, it can be rolled and persuaded to do many things its cold condition would not allow. When heated further, wax will become a free agent in pouring, but also restrained when cast into something to contain it, or to create thin sheets for use when cooled. This variety of responses to the maker's attention and tools provides a space in which the artist connects fully with the materials physically, and serendipity can inform the process vitally.



Figure 2. Working in wood

My experience with bronze had a different connectedness to that of the wax. While timber, (figure 2) being something once alive, is closer to our corporeality, this metal has a foreignness about it that requires greater effort in building the relationship. As a cold material, in the early making stage it avoids an emotional attachment, but when heated and persuaded to be involved it becomes a fastidious yet capricious friend, with a capacity for serious physical risk to the maker. This tension is not about acting separately, but about working together in a partnership with strict protocols. The bronze waits inert, to be heated beyond human endurance, to take on its new form and life. It moves from being a cold, impenetrable mass, not accessible in the way wax is—not relatable in this way—into molten and dangerous, but now with its defences down, it is able to be persuaded easily into something new. As it returns to its comfortable, original state—solid, hard, again inaccessible—it has a new persona. It appears as a new form, (figure 3) with characteristics that are an amalgam of the maker's intent, the resolution of a chemical and physical shift and the perceptions of the waiting viewer.

When etching glass, (figure 4) it similarly demanded adherence to special handling, involving a fragile material (despite being toughened) and dangerous chemicals. As with bronze, glass does not have that direct relating to my sense of being human, but as a material manufactured from silica, it also points obliquely to our connection with the base elements of our physical environment.





Figure 3. Bronze casting



Figure 4. Etched glass

The identity of a material is implied in a resulting artefact, however, invisible dimensions are present. The implicit working association with materials is loaded with intent, an expectation of how the relationship might evolve, and this potential has an emotional charge. The physical intimacy touches deep, internal chords, as the artist shifts into “flow” (Csikszentmihalyi, 1991, p.4). The unseen elements of a varied connectedness hover near a sense of our humanity, our ability to create, and joy in the creating. Making in itself produces happiness, flow and pleasure experienced by the maker and this can be transmitted through the work to the viewer (Margetts, 2011, *ibid.*). These experiences and their testimony in the work can hint at universal human sensitivities of contentment and fulfilment common to us all.

Flow is a state of forgetfulness, the opposite of rumination and worry. Instead of being lost in nervous preoccupation, people in flow are so absorbed in the task at hand that they lose all self-consciousness—in this sense, moments of flow are egoless. “Paradoxically, people in flow exhibit a masterly control of what they are doing, as it is a state devoid of emotional static, save for a compelling, highly motivated feeling of mild ecstasy” (Goleman, 1996, p.91). These descriptions allude to aspects of the space in which the making partnership operates—the focus, unforced energy, seemingly sublime understandings, and the disappearance of time and self—towards masterful and caring handling of materials and focussed intent.

Heidegger contested modern thinking around cause and effect, citing the Greek reference to causality as being “the letting of what is not yet present arrive into presencing”. (Heidegger, 1977, p.10) For Heidegger, there is a sense of indebtedness in this appearing. This is suggesting that things exist before they are seen, and that the agency of the artist is a delving into mysteries of existence, acting as a sort of shaman, reifying them into being. Australian Aborigines, in their traditional Dreaming, enact a volitional bringing into being of the reality around them (Caruana, 1993). Their human partnering as intermediaries to the material has similarities, in a way, to an artist evolving their work.

Heidegger also suggested that the world is only theorized after experiencing it. Handling (Heidegger, 1968) points to the idea that the physical, spatial, interactive aspects of experiencing the world exterior to ourselves are essential to a true understanding of how our body (and in fact, our sense of being) fits into the larger picture. For Heidegger, the concept of circumspection alludes to the ability we have of building upon this experiential knowledge, referencing it in drawing, painting, and writing as creative revisions that exhibit traits of new knowledge. Experimental art practice, in which materials, tools, and creative exploration partner in a process, promotes this potential for the new, both conceptually and in terms of making.



Handling of materials is seen as a responsive and responsible set of actions. Gray and Burnett (2007) encourage a respectful interaction with materials and tools that fosters a concern for their inherent qualities and capabilities. Bolt (2006, *ibid.*) also refers to “careful and concerned dealings”, that suggest “an alternative ethic to mastery” —the maker’s role would not be in ascendancy over the materials, as manipulation, but would involve close working that recognises fully the latent potential of the materials voice. A respectful interaction with materials enables an emerging artefact to be realised, while maintaining the specific voice of the media (figure 5).



Figure 5. Bronze furnace



Figure 6. Bronze form and wooden box

With reference to our use of tools, Bolt maintains that moving away from a purely instrumental use of tools towards handability and concerned thinking is a prerequisite to promoting material thinking. Essentially, he is saying that with material thinking, the interaction with materials via the agency of skill moves the intent of the artist away from mere production using tools, into intimate and shared experimentation. This is what the tools and materials partnership can offer the evolution out of the initial conceptual framework—affording a new insight into how knowledge emerges from practice, and also a more open interpretation of the use of the tools themselves (Bolt, 2006).

Miller (2011) also suggests that the making of an object well and skilfully enriches the artist’s life experience. The dynamics of interactions with the materials, the perfecting of their use, the beauty of the result, all resonate in our human capacity to be creative and to produce something that manages to tune into an aesthetic profundity within us (figure 6). “The care that we take in making something properly is cousin to the care we retain for other people and their labour, and to a care and concern for our environment and its future” (Miller, 2011, p.22). This is an interesting corollary, as it hints at the idea that the artist is emotionally entwined with the materials, the making, and the conceptual rationale such that the resolution of *techne* challenges becomes an inner, as well as an external, technical struggle. For Miller, care in the making distinguishes craft from other form-making. In this, objects are made by human beings for other human beings. There is an individual approach to how



the materials will communicate, and the skill level is high and demonstrable. Out of these positions, it could be said that the life of a work is embedded in its making, and that the transitional space between maker and made, containing the corpus of sentient decisions made, imbues its legacy not only in the work, but also within the soul of the maker, and ultimately an interested viewer.

The shift from ignorance to knowledge via action and doing is sometimes slow, sometimes speedy, and relies on repetition and failure. Planning involves projection into process, but the making asserts the ascendancy of materiality as the proprietor of actions. The materials will dictate what can be done, and making failures becomes a support for successes, with messages from the materials suggesting the parameters that the *techne* can occupy.

My experience in working with base materials like wood, glass, and metals, reminds me of our relatedness to earth elements and, by inference, our own substance. The specific characteristics of different timbers (in my work, mostly hard-woods) speak about the time, energy and manner of their growth and health, and this is both a visual and tactile communication that resonates in the deeper parts of my being. This is, in a way, similar to how Maori, the indigenous people of New Zealand, show great respect for the natural resources that they use for both arcane and ritual artefact making. In *whakairo* (wood-carving), the chips created in making are not thrown away or burned as fuel, such is their reverence for the tree (usually Totara) felled for the purpose (Mead, 1995). The piece of wood is often given a name that will continue to be used during the carving work. With Maori, this connection to the timber, flax (*harakeke*) or thatch grasses (*toi toi*), had a cultural and religious dimension, with the use being tailored towards conversational thinking. Often a *karakia* (prayer) was offered before each session of making, and activities like *whakairo* had other sacred protocols applied to them. The concept of *wairua* (spirit in the body, that exists beyond death) is often applied to a crafted object, containing a lasting presence of their cultural values (*tikanga*), and often aspects of their *whakapapa* (ancestor remembrance). Mead (1995) explains that the artefact becomes, in its appearance and making, a *taonga* (sacred object) that resides within the culture in an active and dynamic way. Likewise, a contemporary artefact can carry with it the gamut of the maker's investment of time, emotion, understandings, care and skill. This might often reflect an artist's signature, but it could also allude to the sum of an even greater resource—the individual's surrounding cultures.

Pye a woodworker and theorist, coined the term "workmanship of risk" (Margetts, 2011, *ibid.*) to describe the decision-making (often split-second and purely intuitional) that benefits a work (though it could also have disastrous results) suggesting that this is the foundation of an individual craftsman and epitomises the crucial transmission of self into the object. Margetts sees this as "a repeated affirmation of the conscious coming-into-being of the person and the thing" and suggests that, in the making, life is given to things made. For Margetts, this is also a reference to life within us, perhaps at a spiritual level. This life is invoked, imbued and applied by the partnering and dancing with the materials—both adding conceptual power (referent) and empowering the intelligence inherent in the materials. Greenlees (2011) states that when objects are made, the making resonates through the work into the hearts and minds of others, activating sentient capacities present in us all. Here she says that this essential level of humanity bridges divides that might be cultural, age-related or between communities. Charny (2011) describes making as a way of exercising (free) will. The democracy of the artist's partnership with materials is again a fluid linking to our deepest sentient being.

The environment of connectedness within, and through, making promotes new knowledge that contributes to greater mastery, an expanded experience, and deeper awareness of the maker / materials relationship. This is explained by Carter (2005) as material thinking—the space in which specific learning occurs. I consider that this thinking happens also within a personal, intuitional landscape, deeply related to our humanity as sentient beings linked to nature. With poised thinking, Carter refers to synergies inside collaborative making, but this could also be an apt term for the moments (fleeting or observed) in an individual maker's experience—those kairotic moments when a host of influences, a priori knowledge, and the experience at hand coalesce into new knowledge, and their profundity is understood.



Finally, in my experience of working as a visual artist, the more I do, the more I become aware of these subtle yet vital conversations at so many levels. To me, the making partnership involves an almost mystical space in which the sentient presence of the maker touches the mysteries of the voice of materials. This osmosis of invisible and tangible elements seems to flow both ways, though its outworking transcends both into the reified artefact. The space contributes an ongoing life to the made object that transcends the making transaction to communicate differently and variously to the viewer. That which is implied by the resolved artefact will have specific signs to a viewer that can enlarge, diminish or even ignore the latency of the earlier partnership. Despite this, when art and craft combine in an object there is a resonance within a shared humanity that can trigger emotions and deeper, spiritual awareness. This can only be possible if the maker ventures into the combining space of invisible and visible voices that seem to speak the artwork into being, while the artist and materials converse, each giving of themselves.



References

- Bolt, B. (2006). *Materialising pedagogies*. Working papers in art and design. Retrieved 19/09/11 from URL http://sitem.herts.ac.uk/artdes_research/papers/wpades/vol4/bbfull.html
- Carter, P. (2005). *Material thinking: The theory and practice of creative research*. Melbourne: Melbourne University Press.
- Charny, D. (2011). Thinking of making. In D. Charny (Ed) *Power of making. The importance of being skilled* (pp. 6-13) London: Victoria and Albert Publishing.
- Czikszentmihalyi, M. (1991). *Flow and the psychology of optimal experience*. New York: Harper Perennial.
- Goleman, D. (1996). *Emotional intelligence. Why it can matter more than IQ*. London: Bloomsbury Publishing.
- Gray, C. & Burnett, G. (2007). Making sense. 'Material' thinking and 'materializing pedagogies'. *Interactive Discourse: International Online Journal of Learning and Teaching in Higher Education*. 1 (1). United Kingdom. The Robert Gordon University.
- Greenlees, R. (2011). Foreword. In D. Charny (Ed) *Power of making. The importance of being skilled* (p.5) London: Victoria and Albert Publishing.
- Haidt, J. (2006). *The happiness hypothesis. Finding modern truth in ancient wisdom*. New York: Basic Books.
- Heidegger, M. (1968). *Being and time*. UK: Blackwell Publishing Ltd.
- Margetts, M. (2011). Action not words. In D. Charny (Ed). *Power of Making. The importance of being skilled* (pp. 38-43). London: Victoria and Albert Publishing.
- Mead, H.M. (1995). *The art of Maori carving*. Auckland: Reed Publishing.
- Miller, D. (2011). The power of making. In D. Charny (Ed). *Power of Making. The importance of being skilled* (pp. 14-27). London: Victoria and Albert Publishing.
- Pye, D. (1968). *The nature and art of workmanship*. Cambridge: Cambrium Press.



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