

© Bruce Metcalf 2002

Recent artworld discourse maps the familiar struggle between form and content; between Modernist ideas about the aesthetic experience and Post-modernist theories about the cultural embeddedness of art. As the reductive formalism of Clement Greenberg lost its cachet, the idea that art must perform a critique on the dominant culture became a dominant force itself. A notable example of art-as-critique appeared at the 1993 Whitney Biennial, in the form of a set of five little metal admission tags by Daniel J. Martinez commissioned especially for the show. The five tags read, "I can't", "imagine", "ever wanting", "to be", and "white", the punch line being that the Whitney's mostly white audience had to fix fragments of this message on their bodies after buying their tickets. OK, whatever. But the problem was that the artwork was resolutely unengaging to look at. One could think about the tags at length, but seeing them provided no special charge.

Naturally, some artworld observers objected, and decried the absence of visual stimulation in an exhibition that was supposed to feature visual arts. Against a tide of political correctness, it appears that aesthetic pleasure has not been drowned by content yet. But the two views seem to be mutually incompatible: there appears to be no theory that can encompass both positions.

In craft, both positions have long been accommodated. (By the way, I speak of craft as a class of objects, and also as a practice rooted in late-industrial social conditions. I do not use the word as simply designating skillful accomplishment.) To craft practitioners, it has never been seen to be a contradiction to make a beautiful, useful pot, for instance. This ability to tolerate what appears to be logical inconsistencies may be a legacy of the craftworld's refusal to engage and clarify its ideologies. However, craft's ability to fuse form and content may not be as ignorant and uninformed as it initially appears.

© Bruce Metcalf 2002

A possible solution to the artworld quandary is in the adoption of multivalence as a structural principle. The opposition between form and content depends on a philosophical commitment to monism: the idea that a system of thought can be constructed from a single assertion, property, or concept of the good. Craft, by its very nature, refuses monism of any kind.

By definition, craft is multivalent. I can locate five aspects which identify a craft object, each of which have different implications. First, craft must be an object. That object is usually made substantially by hand. Third, the craft object can be made from traditional craft materials (like clay, glass, or fibers) utilizing traditional craft techniques – but it doesn't have to be made with these materials and techniques. Fourth, the craft object can, but again doesn't have to, address traditional craft functional contexts, like furniture or clothing. And last, the craft object can refer to the vast histories of craft. Thus, the craft identity is incremental: the more of these aspects embodied in an object, the more craft it is. There is no simple black-and-white here, only matters of degree.

Craft practice emerges from several sub-cultures, and the values of these cultures largely determine what kind of objects emerge from them. My mother, for instance, learned how to weave at the Hill Institute in Florence, Massachusetts, and she internalized the values they taught. She made placemats, table runners and the occasional coverlet. For a while, she even had a production line of placemats and runners, no two sets the same, which she sold for far less than they were worth. Weaving served several purposes for my mom. First, weaving was social: it gave her a group of friends who had the same interests. But it also enabled her to make useful, unique and good-looking objects to send out into the world. The low prices were her version of *noblesse oblige*. According to my mother, woven "wall hangings" did not interest her because they did not serve any useful purpose. She had no ambition to be an artist.

© Bruce Metcalf 2002

There are numerous other craft subcultures that uphold similar values. There are timber-framers, replica furniture makers, amateur knitters and seamstresses, guys who make flintlock rifles, women who embroider. All these craft practices prosper alongside of the mainstream art/crafts that are documented by *American Craft*, *Metalsmith*, or *American Ceramics*. I propose here that many of those craft cultures are not just superficial adaptations to late-industrial conditions – although they are partly that – but they uphold values that represent specific human mental structures, formed by the process of evolution. That is to say, craft is rooted in a biological human nature. Furthermore, I propose that some of these craft values are highly moral, and that this moral component is also rooted in human nature. I realize that these assertions might sound preposterous, so, let me explain.

In the past twenty years, a substantial body of research has emerged which provides strong evidence for an innate human nature, which has been formed in part, by Darwinian natural selection. Put another way, evidence indicates that the human mind exhibits pan-cultural "mental structures" that are very similar in every individual, and that these structures were formed as biological, evolutionary adaptations. Much of this thinking is influenced by Noam Chomsky and his idea of a "universal grammar", by which language is learned and used according to innate mental structures. Basically, Chomsky and his adherents believe in a human nature.

It should go without saying that such an assertion is controversial, for the idea of a definable human nature flies in the face of the "Standard Social Science Model" (or SSSM), which asserts that the human psyche is molded by the surrounding culture. The Standard Social Science Model was the creation of Franz Boas and his followers, and was developed specifically to counter Social Darwinism. In the late 19th century, some intellectuals seized on Darwin's idea of the survival of the fittest, which

© Bruce Metcalf 2002

dealt with species of animals, and mutated it into a social theory that held that the most fit societies would survive best. Of course, the purpose of Social Darwinism was to justify colonial exploitation. The theory held that weaker, presumably more primitive societies could be overrun by the presumably superior Western powers. Survival of the fittest, right? The fact that the theory was based on a fallacious analogy between species and societies was conveniently overlooked.

Boas was offended by the popular opinion that pre-literate people were nothing but savages. His goal was to place preliterate peoples on an equal footing with Europeans, and his method was to deculture all humans. If we are all equally blank, then we are all equal. So Boas and his followers sought evidence that culture imposes all forms of behavior and language upon a human *tabula rasa*. One of the most significant documents in the debate was Margaret Mead's *Coming of Age in Samoa*, published in 1928. In her fieldwork, Mead thought she discovered a society in which the normal rules of Western conduct no longer applied: there were no hierarchies of status and power; no competition; no sexual jealousy; and no monogamy. The supposed elements of human nature were voided, and the SSSM proven beyond a doubt. Social Darwinism was discredited. In turn, the conception that there is no such thing as a pan-cultural human nature is the foundation of a great deal of twentieth-century thinking. Another term for this thesis is environmentalism; one of its champions was B. F. Skinner. Ultimately, environmentalism underlies much of what passes for Post-modernism. The conventional wisdom holds that we are formed exclusively by culture, and especially by language.

At the age of 23, Mead spent nine months in Samoa, but the anthropologist Derek Freeman spent six years there in the late 1970's. He discovered that Mead didn't live with her subjects, and that her informants were often goofing on her. Some of Mead's conclusions were flat-out wrong. For instance,

© Bruce Metcalf 2002

while Mead said that unmarried Samoan woman freely experimented with sexual intercourse; Freeman found that Samoans put a great value on virginity at marriage, and that non-virgins were beaten and shamed. Many of Mead's other conclusions turned out to be suspect as well¹

In the past two decades, a great deal of research has emerged that points to a biological human nature that was formed largely by evolution.² Much of the evidence comes from rigorous anthropological fieldwork, and some comes from sociology. But the most persuasive evidence has come from research into the human brain, particularly studies of damaged brains and how they function differently from normal. The most famous book about this kind of research is Oliver Sacks's *The man who mistook his wife for a hat and other clinical tales*, 1985. Sacks recounts amazing stories of how damage to very precise areas of the brain cause very particular (and curious) losses in function. In one case, Sacks describes a patient with Korkasov's syndrome, (caused by destruction the mammillary bodies, two small protuberances under the fore ventricles of the brain) who had completely lost his short-term memory. He remembered nothing after 1945, and otherwise had complete amnesia. He thus remained in an eternal now, unable to remember anybody he met , anything he read, or most of what he experienced. Other cases of specific brain damage can cause people to fail to recognize things (visual agnosia), fail to perceive things in half their sphere of vision, or be unable to learn how to read. In the end, it appears that much of what it is to be human is sited in very specific areas of the brain.

Other research suggests how human behavior is formed by genetic imperatives. Evolutionary theory assumes that humans evolved in small groups on the African savannah. Certain facts of human life predominate. First, human babies are helpless at birth and need about 15 years to mature, demanding a great deal of care and attention. Females provide milk for infants, which males cannot

© Bruce Metcalf 2002

do. It appears that females and males adapted to the conditions of child-rearing by specializing in gathering and hunting respectively, and this division of labor led to genetic modifications. Women, for instance, have more neural connections between the two halves of the brain. It has been suggested that these connections make women better at perceiving small events in a wide field of vision, enabling them to find plants and berries better than men. Men, on the other hand, seem to be better at detecting motion at the center of the field of vision, which is exactly the skill demanded by hunting animals.

Another fact of human life is sexual: males and females have radically different ways of getting their genes into the next generation. Under normal conditions, females can have between one and maybe ten babies during their fertile years. Men, not being limited by pregnancy, can father dozens or even hundreds of children. If the evolutionary imperative is simply to get the maximum amount of genetic material into succeeding generations, it's pretty obvious that women and men would develop rather different strategies for doing so. And so it seems: the peculiar differences in male and female sexual behavior make sense when seen in this light. That sleazy guy sitting at the bar might not be just an insensitive cad - he might be employing the best strategy to spread lots of his genes into the world.

There appear to be other behavioral adaptations as well, which are shared by both sexes. Helping a close relative in danger turns out to be an adaptive behavior if the individual being helped is your offspring: more of your genes are likely to survive into the next generation. But surprisingly, such helping is also adaptive if you help your niece or nephew: again, more of your genes are likely to survive. Obviously, helping is extended to non-relatives as well: an individual who helps other people in his or her group will be more likely to have such favors returned at a later time, and is more likely to prosper. The mechanisms of helping appear to be the source of much of our social behavior: we

© Bruce Metcalf 2002

expect our favors to be returned; we admire people who unselfishly give to others; we learn to anticipate how other people feel. All these behaviors and many others now appear to be genetically programmed into the human brain... and these behaviors constitute human nature.

The field that studies innate human behaviors and mental structures has been called evolutionary biology. I should point out that little of the evidence about an innate human nature suggests that biology is destiny, exactly. While we are all evidently primed to learn a language between the ages of two and ten, and while all human languages share certain characteristics, we are not programmed to learn a specific language. The biological brain simply offers a menu of characteristics and possibilities. We will *tend to* behave certain ways, given the nature of our brains, but the specific behaviors are subject to considerable cultural and individual variation.

Obviously, the concept of a biological human nature will not sit comfortably with those who subscribe to the Standard Social Science Model. I cannot settle the argument here. In this essay, I can only refer to the evidence, instead of offering a persuasive case.

I was once very skeptical that anybody could delineate an innate human nature, and I was a true believer in the Standard Social Science Model. But four books, each one a summation of a broad range of research from many different disciplines, changed my mind completely. In his book, *The Language Instinct*, Steven Pinker³ details how all languages show remarkable pan-cultural similarities, especially in how language is learned and structured. Pinker persuasively defends Chomsky's thesis: that the human mind is a biological organ which predetermines much of our capacities, and is far from being an arbitrary cultural construction. Reinforcing this view, educational psychologist Howard Gardner argues that the mind has a several discrete capacities located in different areas of the brain⁴

© Bruce Metcalf 2002

. His idea of a distinct "bodily intelligence" has much to say about craft, in that the impulse toward physical mastery is both intelligent and innate.

A potter who learns to throw with great skill is exercising a biological aspect of mind, and he is doing so at a high level comparable to great athleticism, great musicianship, great science, or great writing. Skilled work is, in fact, a manifestation of intelligence. The hierarchy promoted by this culture's emphasis on verbal and mathematical intelligence is overthrown, in Gardner's view, because privileging one aspect of the biological mind over another is plainly arbitrary, nothing more than a social construction. The theory of multiple intelligences strongly suggests a multivalent approach to both art and craft, and provides a foundation in observable fact for a future aesthetic system. It also undermines any attempt to dismiss craft due to an ostensible lack of intelligence – which is the basis of an argument often encountered in the art academy. I recall a review of a Robert Arneson show years ago: the reviewer said the work "stank of the kitchen". Obviously, she favored the refined scent of the library. This type of snobbery would be much more difficult to defend if Gardner's theory was taken into account⁵.

I could continue examining the theory of multiple intelligences for some time, but I want to turn now to the moral component of craft. My thinking is based on two very interesting books offer evidence that a sense of morality may be part of the biological mind. One is Robert Q. Wilson's *The Moral Sense*⁶, and the other is Robert Wright's *The Moral Animal*⁷. Both provide a wide range of scientific evidence that suggest that certain moral tendencies may be part of our genetic makeup, and both speculate as to the evolutionary conditions that might have produced morality as an adaptive mental structure of the human organism.

© Bruce Metcalf 2002

Both books propose a stable human nature which is pan-cultural, and from which springs a moral instinct. Now, many liberal thinkers are offended by any linkage between art and morality, largely because morality is so closely linked to Christian Fundamentalism in this country. However, Christian morality is absolutist, defined by a declaration from god himself. Such morality depends on a prior belief in the credibility of the Bible, which defies rational dispute. A more moderate moral position is called ethical conditionalism, which asserts that morality is determined by human nature and the human condition. This can be called the dependency thesis, because it holds that morality depends on human conditions in the world, and does not emanate from some transcendent source. As such, ethical conditionalism relies on the concept of a stable and pan-cultural human nature, which, of course, is what Wilson and Wright argue for.

Both Wilson and Wright offer a persuasive case for ethical conditionalism. Both locate the moral sense in human nature, which is itself rooted in ordinary facts of living. The view is interesting because it neither assumes a moral law based on religious belief, nor does it submit to complete cultural relativism. Specifically, James Q. Wilson cites numerous studies about how people cope with families and child-rearing, how people make and keep relationships, and how people face ethical decision-making. He points to certain facts of human existence: that maternal feeling for small children is universal; that children are not abandoned in large numbers, even though it is inconvenient to care for them; and that some moral universals, like the prohibition against incest and unjustified murder, appear to exist. From the vast amount of evidence he assembled, Wilson concludes that there is a moral sense shared by all of humanity. He summarizes his case by claiming that

© Bruce Metcalf 2002

...people necessarily make moral judgments, many of those judgments are not arbitrary or unique to some time, place, or culture, and that we will get a lot further in understanding how we live as a species if we recognize that we are bound together both by mutual interdependence and a common moral sense. By a moral sense I mean an intuitive or directly felt belief about how one ought to act when one is free to act voluntarily (that is, not under duress). By 'ought', I mean an obligation binding on all people similarly situated.

Wilson proposes four basic moral sentiments, which appear to be pan-cultural, and provides numerous studies (mostly from the United States and Europe, but also from anthropological studies all over the world) as evidence. While space is far too limited here to give an adequate defense of Wilson's conclusions, I can outline them here.

First, Wilson talks about sympathy, which he defines as the "human capacity for being affected by the feelings and experiences of others". Sympathy has two components: first as a standard of judgment, in that we are disposed to regard worthiness as a precondition for our sympathy . Secondly, sympathy sometimes motivates benevolent actions, especially when people feel personally responsible for helping. As with any of the moral sentiments, Wilson insists that sympathy acts not as a monistic principle that applies in each and every case, but a sense of conscience that can be ignored, and which some individuals seem to lack entirely. As a moral sentiment, sympathy motivates altruistic acts like putting one's own life in jeopardy to save a drowning person, intervening to stop a crime in progress, or donating blood. Wilson cites studies that show those most likely to help others in dire need were themselves the beneficiaries of a warm family life where the importance of dependability, self-reliance, and caring for others were stressed. They saw people as basically good,

© Bruce Metcalf 2002

and usually had many close friends. Obviously, we don't always act in an altruistic manner, and calculations as to the cost of helping are important. Sympathy is a "fragile and evanescent emotion...easily aroused but quickly forgotten" , often subverted by authorities and peer pressure. Nonetheless, sympathy is surprisingly durable, and motivates many of the actions we most admire. (Think of the theme of the movie, "Schindler's List".)

Wilson defines self-control as another of the moral sentiments. He sees self-control as manifested in moderation and prudence, usually in making a choice between immediate gratification and long-term benefits. Self-control tempers impulsive action and moderates self-expression. Wilson contrasts self-control with destructive and violent behavior. For example, in tests given to preteen children, impulsiveness in combination with aggressiveness and lack of sympathy predicts a high probability of future criminal behavior. Amid the violence of urban America, one often wishes self-control were more prevalent. And of course, self-control is also demonstrated by the mastery of skills, which has clear implications about craftsmanship. A well-made chair demonstrates that the woodworker who made it was steadfast enough to learn the requisite skills, and patient enough to fabricate the chair itself. Mastery is evidence of self-control.

Wilson describes two other moral sentiments, fairness and duty. Fairness is the sense of just and proportionate distribution, and is usually manifested in sharing and reciprocity. It's the most legalistic of his four sentiments, closely related to making impartial judgments, assigning and claiming entitlements, and the distribution of property. The idea of fairness governs the business of helping, in the sense that we usually expect people to assist us once we have helped them, and think it unfair when they don't.

© Bruce Metcalf 2002

Duty is “willing[ness] to honor obligations in the absence of social rewards for doing so.” Wilson says it is roughly equivalent to conscience, but not in the Freudian sense of superego, which he rejects. Instead, he sees duty as rooted in the innate desire for human connectedness, in that conscience leads us to do what others expect, and thus gain their approval and respect. Wilson concedes that duty is one of the weaker moral senses. It’s also the moral sense that makes life civilized, and not brutal.

Obviously, Wilson’s thesis that sympathy, self-control, fairness, and duty comprise an innate moral sense will be rejected by those who deny the possibility of a human nature. Those individuals should read both books with an open mind.

Wilson finds extreme individualism - one of the more dubious inheritances from the Enlightenment - to be corrosive to modern society. He questions whether rights belong primarily to individuals (as in the United States) or to groups (as in Eastern Asia). He cites

Western thinkers who worry that the philosophical commitment to radical individualism is destructive not only of family life but also those mediating institutions — small communities and face-to-face associations — that sustain a morally competent, socially connected individual against the estrangement of mass society.

He continues to say that Western individualism, while reducing some mass violence and social prejudice, has resulted in “a lessened sense of honor and duty, and a diminished capacity for self-control.” Given the annual increases in rape, child abuse, and battering of women presently occurring in the United States, his critique of the cult of individuality has some urgency. While he does not

© Bruce Metcalf 2002

advocate abandoning the concept altogether, he links runaway individualism with alienation, and implies that a moderating influence is necessary. Unfortunately, he prescribes no cures. But he does locate the most effective devices for reinforcing social connectedness in modest areas like families, small groups, and neighborhoods. It is precisely these social spheres that art has abandoned, and craft continues to occupy.

What if an aesthetic theory embodied the moral virtues of sympathy, self-control, fairness, and duty? Instead of a legalistic structure to establish an aggressive hierarchy of exclusion, could there be an aesthetic of caring, a moral system of sympathy transposed into the realm of art? James Q. Wilson makes no claims in *The Moral Sense* that his understanding of human nature should have any impact on aesthetics. However, if a renaissance of moral thinking is demanded by current social conditions, then Wilson's idea of moral sense offers an excellent concept to begin with.

Craft, as a practice, has always had a moral component, and American craft in particular has been guided by an ethic of helping. Several prominent craft schools (Penland and Arrowmont among them) grew from altruistic projects intended to preserve local craft traditions while simultaneously providing livelihoods for the rural poor. The School for American Craftsmen started as a rehabilitation program for returning soldiers during WW II. Certainly the many American craft guilds and medium groups founded in the past five decades were conceived as communal mutual-aid groups, recognizing the educational and monetary benefits of cooperation. In the sociology of craft, helping (both altruistic and self-interested) is a primary value. Craftspeople have intuitively created exactly the mediating institutions that Wilson speaks of. The culture of American craft is a culture of sharing and helping.

© Bruce Metcalf 2002

Furthermore, I believe certain types of craft objects - especially objects designed to be used rather than just looked at - embody sympathy⁸. Because craft objects are substantially handmade, traces of the maker's body and its movements often remain in the object: the potter's fingerprint; the silversmith's planishing mark; the stitches of the needleworker; the irregular form of a glassblower's vase. Such marks record the presence of a living person, who exists at one "degree of separation" from the user. Ordinary people recognize this intuitively, and they read a craft object as a symbol of human presence. As such, crafts stand in clear contrast to mass-produced objects, from which any trace of the human has been erased. It's the difference between a handmade bowl and a piece of Tupperware®, and it's not merely a semiotic difference. In an increasingly dematerialized world, these records of human presence become increasingly important to people.

Secondly, a useful craft object becomes a helper in the home, and thus embodies a sympathetic gesture. The more quotidian and intimate the object becomes, the more vivid the embodiment of sympathy. If I eat my breakfast cereal out of a handmade ceramic bowl, I am reminded how the potter's effort is consummated in my use of the bowl. If I wear a piece of handmade jewelry, I am reminded how the jeweler helps me fabricate a persona to my liking. In these cases, and many others, the craft object intentionally benefits its user.

Craftspeople see their production as a means of distributing an experience. Most of them really like what they do (they're not in the business for the money!), and they are experts on the kind of experience their objects provoke. For instance, potters typically collect pots and use them all the time. They become familiar with the heft, the balance, the texture and the functional properties of a vast array of pots. They study each pot under a variety of conditions: full, empty, in the hand, or next to another pot. This is a research of experiences, not just visual data. A serious potter will make

© Bruce Metcalf 2002

qualitative judgments about every part of the encounter, even the sound. (A good pot will ring when you snap its rim with your finger, a poor pot will thud.) Their accumulated knowledge informs their studio work: each pot is intended to re-create, for the user, an experience its maker found good.

I think that the best useful craft unites helping with pleasure. Of course, helping is not the exclusive province of craft. Mass-produced consumer goods are sometimes very efficient at making our ordinary lives easier and more comfortable. I am a particular fan of plastic food storage containers, with their airtight seal and clear bowls so you can see what's decaying inside. Rubbermaid® has become very good at designing and making those little vessels, but they are intended to be economical and efficient above all else. The experience of using them is utterly ordinary. They are helpful, but resolutely unspecial.

On the other hand, good production craft makes what might otherwise be an ordinary experience interesting and satisfying. The goal is to move art into life. Of course, this was the same goal proposed by the Arts and Crafts Movement in the 19th century, and some aspects of Russian Constructivism in the 20th. Both movements recognized that purely efficient products might serve their purposes well but might remain uninteresting, and accordingly tried to produce useful objects that also provided (what might be regarded as) an aesthetic experience. In this new century, useful craft has the same agenda.

The craftsperson can orchestrate an experience that is fully encountered only through use. The scarf that is worn, the pot that holds food, the chair that is sat upon: each of these objects creates an experience for its user, and this encounter is designed to be more complex, more stimulating, and more pleasant than the experience of a similar mass-produced object. These pleasures might be

© Bruce Metcalf 2002

small, but they are not insignificant. Such experiences pull our attention back to our own bodies, away from the many distractions of contemporary life. They create unexpected surprises, they offer pleasure where we have become accustomed to having none. (Unique craft objects also help in the project of asserting an individual identity, but that's another subject.) Taken together, the many types of experience engendered by the use of craft objects can be quite beneficial, even while they are unassuming.

The maker of useful craft - in recreating her own pleasures for others - is performing an act of sympathy. The craft object embodies a moral act.

This kind of moral embodiment is pervasive because useful craft not terribly expensive, and persuasive because consumers often buy directly from the producers. Unlike fine art, production craft has never signified exclusivity with a steep price tag. Crafts have been purchased by hundreds of thousands of people, fulfilling the Constructivist ambition to extend art into life. In addition, consumers often meet craftspeople at fairs, and occasionally develop relationships over a period of years. Many people speak fondly of their encounters with craft producers, and the relationship underlines the sympathetic nature of the object.

In conclusion, a biological basis for examining craft objects and craft practice has three implications. First, we can align craft with a secular sense of morality, which I believe is demanded in the present social and political climate. Second, the biological basis implies a multivalent evaluation of both art and craft. I have been speaking of a moral component to craft, but only as one component among many possibilities. Other criteria remain. Instead of holding art or craft up within a single frame - the aesthetic frame, the embodied meaning frame, or whatever - it seems increasingly likely that we can

© Bruce Metcalf 2002

apply any number of points of view to the object at hand. And lastly, the biological basis suggests that any one of these points of view may not be inherently superior than another. The business of privileging one form over another becomes more difficult, while the tolerance of difference becomes easier. Craft thus serves as a vehicle for a number of important values, and encourages an open and multivalent interpretation.

¹see Freeman, Derek, *Margaret Mead and Samoa: The Making and Unmaking of an Anthropological Myth*, Harvard University Press, 1983

²The first important text to argue for a biological human nature was Wilson, Edward O., *Sociobiology: the New Synthesis*, Harvard University Press, 1975. It was widely attacked by the ranks of the politically correct when it first appeared. Also see Brown, Donald E., *Human Unicversals*, McGraw-Hill, 1991, Wright, William, *Born that way: genes, behavior, personality*, Alferd A. Knopf, 1998, and Pinker, Steven, *How the mind works*, W.W. Norton, 1997.

³Pinker, Steven, *The language instinct*, William Morrow, 1994

⁴Gardner , Howard , *Frames of Mind: The Theory of Multiple Intelligences*, Basic Books, 1985

⁵See the author's chapter in *The Culture of Craft*, edited by Peter Dormer, Manchester University Press, 1997 for a more detailed analysis of the theory of multiple intelligence and its implications for craft criticism.

⁶Wilson, Robert Q. , *The Moral Sense*, The Free Press, 1993

⁷Wright, Robert, *The Moral Animal, the new science of evolutionary psychology*, Pantheon Books, 1994

⁸For a more detailed exposition, see Metcalf, "Embodied Sympathy", *Metalsmith*, Summer 2002, p. 35.