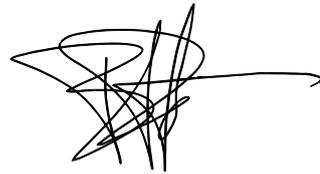BUILDING
THE
HUMAN

Tree Burl Detail
Carr Canyon, Arizona
2008

ABOUT THIS WORK

This publication presents a conceptual exercise—an interaction between my philosophical and sculptural investigations. The photos are ordered in a way that parallels humanity's trek through time: We find things in nature, we explore their possible use, we place them in a context and join them with other things to add functionality, and if we find something more effective, we return them to the unbuilt realm. The architectonic pieces represent the robust aspects of humanity's achievements, but their open character reveals the stance of a species adapted for change. My essay develops a methodology for giving objective heft to human action and lays out a path to show how human values can be extracted from nature. I hope, in the end, it points the way to a deeper connection to all of existence as well as deepens our connection to one another.

Bradley Robinson

BUILDING THE HUMAN

"If you want to make an apple pie from scratch, you must first invent the universe."
— Carl Sagan

THE PHILOSOPHIC CONTEXT

The long history of Western philosophy can be read as either: an attempt to separate us from the ground beneath our feet, or separate us from our mythologies that keep us from being grounded.

Plato, as he is generally understood, believed the world of ideas (or *Forms*) was "above" the world of the senses. His *Allegory of the Cave* demonstrated that the world as it *appears* to us is not the "true" world, but merely a shadow of reality. This separation of the intellectual from the sensual—which over the next several centuries, evolved into deceptively more subtle versions—still exhibits power in contemporary life. And in the post-truth world in which we often find ourselves, we see that the damage to human progress is not just academic, but very real.

The understanding of what we know (epistemology) has often been tenuously connected with the understanding of what we are (ontology). Descartes (1596-1650) was trying to fix this schism in a couple of ways. First, by trying to ascertain how the mind, or *independent, rational soul*, interacted with the mechanistic body. This, in and of itself, can help us see the incongruity of understanding that still existed in Renaissance Europe, though Descartes' efforts placed him at the birth of modern philosophy. Second, Descartes was looking for certainty, and in so doing, he introduced what he called "hyperbolic doubt" to all that he knew in order to gain a foundational truth which could not be doubted. His famous reduction *cogito ergo sum*, or "I think, therefore, I am," was the result which, for Descartes, proved with absolute certainly, that he was a "thinking thing." Despite his attempts to better connect human knowledge to nature, his mind/body problem, as it became known, persisted and perpetuated the misunderstanding that what the mind does is utterly distinct from what the body does.

Although the mind/body problem becomes more metaphorical than literal in subsequent thinkers, I maintain it is no less pernicious in separating us from a holistic view of our relationship to the natural world. David Hume (1711-1776), for example, famously separated "facts," or *what is*, from

"values," or *what ought to be*, known as the fact/value dichotomy—a delineation that persists to the present day (though some, myself included, believe it is collapsing). One example of its continued use is Stephen J. Gould's *Non-Overlapping Magisteria* (NOMA) published in 1997, which, in an attempt to affect some sort of détente in the religion versus science debate, claimed that science and religion represent two separate spheres of inquiry, facts versus values, and the two should respect each other's authority.

Immanuel Kant (1724-1804), claimed he was awoken from his "dogmatic slumbers" by David Hume. In answering Hume, he derived that *all* knowledge passes through the interpretative scheme of the mind and that we therefore never get at the real world, or the *world as it is in itself*, but merely to our mental impressions of it, putting facts and values, in essence, on the level playing field of interpretation. Kant sets up a problem that persists today: Are our beliefs connected to something "real" apart from our subjective viewpoint?

Friederich Nietzsche (1844-1900) was no Kantian, but he borrowed the idea of interpretation, connecting it to the subjective desires, goals, and perspectives of the individual. Hence, the world holds a multitude of meanings from a multitude of interpretations (though some people will relinquish their individualism and merely adopt their society's worldview). The relative, individualistic strain of thinking which Nietzsche carved out was both a cause for celebration and concern—celebration in that each person had the opportunity to create their own meaning, and concern, as to whether people, on their own, *would* create valuable meaning. While Nietzsche did much to place the individual back into a more central and creative place in the natural world, he left some confusion with regard to subjectivity and objectivity.

The Structuralists' movement and its various iterations (Post-Structuralism, Post-Modernism, Deconstruction) that followed Nietzsche have exerted a profound influence in both the academy and in the general population. Structuralists took Nietzsche's subjective, creative self and constrained it to a cultural post, claiming that norms, values, and meaning emerge, not from the individual but from the community to which he or she belongs. While there is obvious truth to shared and received values, the structuralists did not consider this community as *natural*, but rather *socially constructed*. The connection to the natural world was thus restricted and the agency of the individual was neutered.

With science largely out of the values game and philosophy linking values to "mere" contingent, social constructions, the abili-

ty to garner objective value has since been met with skepticism and cynicism. What remains are competing opinions and entrenched ideologies which become matters of faith. Without this facilitation in our public discourse, we are often left with factions who resort to the manipulation of "facts," or even to violence.

THE NATURAL CONTEXT

How can we bridge the gap between personal and/or societal perspectivism and objective values in the natural world? And further, why does it matter? As to the latter question, there are several reasons. Human rights, for example, have long been critiqued as having no legitimate foundations (religion is no prescription either as Anet Biletski has shown: "[t]here is no meaning to human rights under divine commandment. A deep acceptance of divine authority—and that is what true religion demands—entails a renunciation of human rights if God so wills."). One society could conclude that it's perfectly fine to torture another human being, even a child—who's to say it's not? If values are tied to the local community instead of our shared natural setting, the project of establishing objective human rights is threatened. Beyond human rights, there are a number of issues that come under the purview of values that

have real-world ramifications, in both societal and economic structures. This essay will attempt to show how objective values can be garnered from nature as well as how they can be assessed and applied to improve the human condition.

To begin answering the initial question, I believe we must first take a step back, get out of our heads, and reassess what the human actually is, and discover what it means to truly exist in the world.

Martin Heidegger (1889-1976) took up this task in his existential philosophy. One distinction of his work was his creation of compound words in order to disassociate our reflexive understanding of them. His essential word "da-sein," for example, often simply translated as *being* in English, literally translates in German as *being-there*, critiquing the idea of a mere, abstract, and disembodied being that exists no-where in particular. "In-der-welt-sein" or, *being-in-the-world* speaks directly to the reality of our natural context; being is wholly integrated and embedded in a real, tangible, and physical world.

Maurice Merleau-Ponty (1908-1961) further clarified the nature of the human being with the understanding that the mind, far from being distinct in any way from the body, is utterly integrated in and dependent on a moving, physical body for its

very structure and potential. Perception is central to Merleau-Ponty's thought, and he critiques the passive behaviorists' ideas of a machine-like reflexivity, and shows instead that the conscious body and the world are constantly engaged in a state of perpetual becoming—what he called "primordial openness." Merleau-Ponty's work also emphasized the acquisition of useful coping skills, acquired not by reflection on ideas, but by active participation in a task (sailing a boat, for example), effectively inverting Plato's order. This helps us "get a grip" on the world in a way that theorizing does not. Niche Construction Theory (NCT), a recent development in evolutionary science, confirms this active aspect of nature by showing how we are constantly engaged with and changing our environment which, in turn, changes us (feedback loops).

Second, I think we have to reexamine our understanding of human behavior and how we form meaning and value through our perceptive, moving bodies. Before we can understand the *substantive nature* and *form* of this meaning, however, it's necessary to understand how form emerges in nature apart from us, via the symmetry-breaking process (Complexity, Chaos, and Dynamic Systems theories). For this, I turn to the work of Noah Moss Brender:

Contrary to what we might expect, then, greater symmetry does not imply greater order or struc-ture. On the contrary, the greatest symmetry belongs to structure-less uniformity. Form arises through the breaking-up of this uniformity, the introduction of differences which break one or more of its symmetries...If nature were completely symmetrical, there would be no phenomena to study—and no one to study them...

For us, bodily movement then plays a central role as it (Mr. Brender continues):

...discovers asymmetries in its surroundings by producing variations in the body's perceptual field. The particular asymmetries a body perceives will depend on its particular way of moving, the unique motor habits it has developed over the course of its life. As our movements become more complex and asymmetrical, so too does the world we perceive. Thus the organism and its world grow together dialectically, each driving the other to become more articulated and determinate through its own increasing determinacy. This is the growth of sense: the self-articulating field of differences that make a difference to the organism.

This understanding of human behavior, which continuously seeks *valuable* difference as the body makes it way in the world, disconnects truth and value from an ideal, static state, which it inherited from ancient philosophy, and places it alongside other natural phenomena. It thus redefines the very notion of relativism and separates it from *mere*, subjective opinion by connecting it to an integral process in the natural world (For example, the unique growth of

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2017

one plant from another because of different environmental situations—though sharing identical DNA—while very much subjective, would never be viewed as anything less than real and objective).

What I'm attacking specifically here is the type of relativism that hides behind the *universal* bugbear in that, if it can't be proven to be universally true—that is true at all times and in all places as well as *independent* from the human—we can't say it's *actually* true. We therefore are restricted from using our *truth* discoveries in any foundational sense such as for the establishment of human rights. Connecting truth with static, Platonic ideals of eternal, independent existence, which I think some relativists unwittingly do, disconnects it from *real*, dynamic reality.

(This dynamic character does not mean that there are not robust, human-wide values. The remainder of this essay discusses my belief that indeed, there are, and shows how they may be characterized.)

Third, I believe we need to reconsider the *structural* nature of truth, meaning, objectivity, and value. While I don't think we need to go the full, reductive distance of some digital physicists, who propose that nothing really exists save the digital bits of simple information processing (re: John Wheeler's catchy quip, *it from bit*), I cer-

tainly believe that understanding how nature acts as an *information container* clears up a lot of issues. Seth Lloyd, an MIT professor who has done seminal work in quantum computing, notes that the "quantum" in "quantum mechanics" means the world "comes in chunks. It's discrete." Professor Lloyd further explains:

Quantum mechanics means that there are only a discrete number of species of chemicals. You can only put together two hydrogens and an oxygen to make a molecule in one way that I know of. This means that we can catalog chemicals in a discrete list — chemical number one, chemical number two, chemical number three — you can order it any way you want according to your favorite chemicals. But it's discrete. This digital nature of the universe actually infects everything, in particular life. It's been known since the structure of DNA was elucidated that DNA is very digital. There are four possible base pairs per site, two bits per site, three and a half billion sites, seven billion bits of information in the human DNA. There's a very recognizable digital code of the kind that electrical engineers rediscovered in the 1950s that maps the codes for sequences of DNA onto expressions of proteins. There's a digital nature to the universe, and quantum mechanics makes this happen.

Consider then, that objects are *coalescences of information* which are constantly interacting and emerging in the universe, whether a star, galaxy, or simply an idea in our brain. Salt, for example, is the coalescence created from the merger of two in-

formation structures, sodium and chloride, themselves coalescences of various information structures. Salt, of course, is critical to human existence, and in that way demonstrates how values, in the form of information structures are experienced. Sodium and chloride *fit* together and subsequently *fit* the human in a vital (and often enjoyable) way. This discovery of fit, whether in the form of salt or fire, or in jazz , technology or society, demonstrates the ongoing, emergent nature of creating and engaging with ever-new and ever-more complex coalescences of information structures. Some of these structures will be robust—meaning the symmetry holds together despite changes in the environment—and some will be fragile (and some will be *antifragile*, see Nicholas Taleb's work on the subject), but they will all be participating in the complex system we know as existence.

Fourth, in light of the preceding suggestions, we need to redefine subjectivity and objectivity with regard to human experience. In popular verbiage, for example, the idea of having a "zen experience" confers the notion of the merger of the subjective self into the objective world, wholly integrated in the situation of the moment. John Dewey, American Pragmatist, discusses the similar idea of "losing oneself" in such examples as being caught in a storm on a ship or experiencing an amazing meal in Paris. He notes that,

In such experiences, every successive part flows freely, without seam and without unfilled blanks, into what ensues. At the same time there is no sacrifice of the self-identity of the parts. A river, as distinct from a pond, flows. But its flow gives a definiteness and interest to its successive portions greater than exist in the homogeneous portions of a pond. In an experience, flow is from something to something. As one part leads into another and as one part carries on what went before, each gains distinctness in itself. The enduring whole is diversified by successive phases that are emphases of its varied colors.

In the end, what is carried forward is a tangible memory. Certainly it's easy to make the connection of *memory to information* in this regard, and the information structure of that enraptured meal in Paris can provoke a smile (that is, literally affect the material world) years after the experience or event. Subjectivity, therefore, involves an agent—in the *now* of an experience or creative endeavor—with the surrounding environment, together creating an object, whether in the form of a memory, value, or the physical product of some effort.

Finally, in light of our real powers of creation, how are we to assess all of the things that are being created? We have established that everything, when understood as information, has an objective existence. How, however, do we establish value in the traditional sense of *real worth*? First, in keeping

with the technical, information language, we can imagine each human being as a sensor with a very real and distinct place in existence, engaged with their environment, creating objects in the world. These objects, while sharing equal existence with all other things, do not share equal value. They may indeed be valuable to the individual, but as the objects move outward, into the wider world, their value to others will either increase or decrease. (The idea here relates to the common usage of the word *objective*—can our values, beliefs, *et cetera* survive as independent objects apart from us? Can they be duplicated or verified by others? If not, in the traditional use of the word, we would say they are not *true*.)

Here, we can now employ the evaluative language of Pragmatism, specifically that of inquiring into the *benefit* or *use* of something and whether or not it actually *works*. Pragmatists also emphasize the close connection of thought to action and the importance of *situatedness* and *experience* to gain relevant knowledge. John Dewey criticized traditional philosophy as being "spectatorial" by which he meant the obtainment of rational, static truths which are then applied in a top-down manner. Douglas McDermid explains:

...knowledge (or warranted assertion) is the product of inquiry, a problem-solving process by means of which we move from doubt to belief. Inquiry, however, cannot proceed effectively unless we experiment—that is, manipulate or change reality in certain ways. Since knowledge thus grows through our attempts to push the world around (and see what happens as a result), it follows that knowers as such must be agents; as a result, the ancient dualism between theory and practice must go by the board. This insight is central to the "experimental theory of knowledge," which is Dewey's alternative to the discredited spectatorial conception.

This repudiation of the passivity of observation is a major theme in pragmatist epistemology. According to James and Dewey, for instance, to observe is to select—to be on the lookout for something, be it for a needle in a haystack or a friendly face in a crowd. Hence our perceptions and observations do not reflect Nature with passive impartiality; first, because observers are bound to discriminate, guided by interest, expectation, and theory; second, because we cannot observe unless we act. But if experience is inconceivable apart from human interests and agency, then perceivers are truly explorers of the world—not mirrors superfluously reproducing it.

I would note that some of the things we "find" as we make our way through the world are the aforementioned information structures that others have created. We do not need to continuously reinvent the wheel. But if our environment has changed sufficiently, we may need to discard previous solutions for new ones. Occasionally, as Thomas Kuhn pointed out in *The Structure*

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18" x 20" x 9"
2017

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21"x 13"x 13"
2017

of Scientific Revolution, there is a need for a "paradigm shift."

We must address the potential problem that a simple application of Pragmatism does not restrict us from using our powers of creation simply to fulfill selfish desires, and thus undermine progress in the human community. While selfishness certainly is a possibility, I think we can effectively dismiss this as an overriding issue by pointing to Robert Wright's book *Nonzero* in which he lays out the grand view that humans have long been engaged in nonzero-sum games (*win-win* scenarios), whereby through greater and greater levels of *cooperation*, we have progressed from lone hunter-gatherers to the United Nations (i.e. we have become more differentiated and complex similar to other natural phenomena). While there is obviously self-preservation at work, I think the altruistic potential of humans is equally on display (in accordance with other mammals; see the work of Frans de Waal regarding animal empathy).

I think we must also add to the evaluative language of Pragmatism the category of *well-being* which Sam Harris effectively defends in his book *The Moral Landscape*, the subtitle of which, "*How Science Can Determine Human Values*" echoes Francis Bacon's belief that science should "relieve and benefit the conditions of man." In one of Sam's illustrations he makes the comparison of

well-being to our understanding of physical health:

Many readers might wonder how we can base our values on something as difficult to define as "well-being"? It seems to me, however, that the concept of well-being is like the concept of physical health: it resists precise definition, and yet it is indispensable. In fact, the meanings of both terms seem likely to remain perpetually open to revision as we make progress in science...There may come a time when not being able to run a marathon at age five hundred will be considered a profound disability. Such a radical transformation of our view of human health would not suggest that current notions of health and sickness are arbitrary, merely subjective, or culturally constructed. Indeed, the difference between a healthy person and a dead one is about as clear and consequential a distinction as we ever make in science. The differences between the heights of human fulfillment and the depths of human misery are no less clear, even if new frontiers await us in both directions.

HOW SHOULD WE THEN LIVE?

The picture of the world that emerges from the ideas elaborated in this essay is one of an integrated, holistic existence, inseparable, not only from each other and the world, but the very universe itself. This, I believe, gives a depth to human experience that can negate nihilism and ties every act—even the act of making an apple pie—deeply to the

Upright Form

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34"x 10"x 5"
2017

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universe. It also points the way to universal values and breaks us out of our various silos and bubbles toward a shared experience, without robbing individuals of their powers to act and express themselves. The importance of society to be structured in a way that makes room for both the consideration of well-being for others, and allows for flourishing of the individual cannot be overstated. A society that also addresses problems, not with a pre-ordained ideological fix but rather the true heart of a Pragmatist that asks: What is the best way to address this *now*?

Life is experienced as a continuum, despite the discrete nature of reality discussed earlier. We can break down a symphony, for example, into discrete notes on a page or discrete parts of various instruments, but the joy of the coalesced experience of a live performance stands as a complete, emergent thing in its own right. And while John Dewey encouraged the practical benefits of Pragmatism, he expanded this aesthetic understanding to the whole of the human experience. Richard Field elaborates:

The roots of aesthetic experience lie, Dewey argues, in commonplace experience, in the consummatory experiences that are ubiquitous in the course of human life. There is no legitimacy to the conceit cherished by some art enthusiasts that aesthetic enjoyment is the privileged endowment of the few. Whenever there is a coalescence into an immedi-ately enjoyed qualitative unity of meanings and values drawn from previous experience and present circumstances, life then takes on an aesthetic quality—what Dewey called having "an experience." Nor is the creative work of the artist, in its broad parameters, unique. The process of intelligent use of materials and the imaginative development of possible solutions to problems issuing in a reconstruction of experience that affords immediate satisfaction, the process found in the creative work of artists, is also to be found in all intelligent and creative human activity. What distinguishes artistic creation is the relative stress laid upon the immediate enjoyment of unified qualitative complexity as the rationalizing aim of the activity itself, and the ability of the artist to achieve this aim by marshaling and refining the massive resources of human life, meanings, and values.

I'll conclude with a quote from Richard Rorty from his essay *Heidegger, Contingency, and Pragmatism* where he critiqued and compared Heidegger's nostalgia—that something in the human's experience of the modern world had caused a loss—to Dewey's hope in a future where Dewey claimed that "science and emotion will interpenetrate, practice and imagination will embrace. Poetry and religious feeling will be the unforced flowers of life." Rorty then asks us to regain a sense of gratitude:

The gratitude in question is not the sort which the Christian has when he or she thanks Omnipotence for the stars and the trees. It is rather a matter of being grateful to the stars and trees themselves...

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31"x 21"x 16"
2017

being grateful for the existence of ourselves...If you can see yourself-in-the-midst-of-beings as a gift rather than as an occasion for the exercise of power, then, in Heidegger's terms, you will cease to be "humanistic" and begin to "let beings be." You will combine the humility of the scientific realists with the spiritual freedom of the Romantic.

"Letting beings be" does not mean keeping to ourselves or encouraging others to do the same. It means we come to others as Kant would wish us: as ends in themselves—individuals who have unknowable creative potential. They, like us, can leave behind real value by merging our unique ideas with the material world in innumerable, and yet unimagined, ways; not for ego's sake, but to truly benefit our fellow travelers on spaceship earth.

Standing Figure

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73"x 28"x 19"
2017

ABOUT THE ARTIST

Bradley Robinson is a sculptor/blacksmith from Richmond, Virginia. He has worked on projects at the National Cathedral and Smithsonian Institution in Washington, D.C., several universities, the City of Richmond, and many individual residences.

PARTIAL LIST OF CLIENTS

The City of Richmond, Virginia

VCU Medical Center, Richmond, Virginia

Washington and Lee University, Lexington, Virginia

Union Presbyterian Seminary, Richmond, Virginia

Second Presbyterian Church, Richmond, Virginia

William and Pamela Royall

Mary Ellen and E. Claiborne Robins Jr.

Floyd and Helga Gottwald

Terrell and Elliot Harrigan

Will and Alice Massie

Freddie and Lawrence Gray

Robin and John Nester

Carole and Marcus Weinstein

Ivor Massey

Lisa and Charlie Luck

CREDITS

All photos by the artist

Graphic design by Brandon Robinson

Tree Roots
Balboa Park, San Diego
2008

BRADLEY ROBINSON
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