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Growing Home: Sacred Space and Contemporary Ecotopia

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GROWING HOME:
SACRED SPACE AND CONTEMPORARY ECOTOPIA

by

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THESIS

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DEDICATION

To my grandparents, Chester & Barbara Gingerich and Arthur & Amanda Goering.

Thank you for nourishing the future.

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ABSTRACT

This thesis investigates the concept of ecocentrism and how an emerging ecocentric worldview might uniquely shape the built environment. This thesis is particularly interested in the role of sacred space in urban development, and how the notion of sacredness, unique to an ecocentric worldview, might affect various aspects of the built environment.

These issues are explored in two basic parts. First, three basic worldviews are discussed—the pre-modern worldview, the modern worldview, and the emerging ecocentric worldview—specifically on the topics of nature, space, and the city. Second, a qualitative research study of three 'ecotopian' communities is presented—Village Homes in Davis, CA; Dancing Rabbit near Rutledge, MO; and Arcosanti near Cordes Junction, AZ. An 'ecotopia' is a community that is founded with the intention of harmonizing the built environment with the natural environment.

For the study, individual interviews were used to gain the perspective of residents, asking specifically about significance, shared values, sacredness, and how these topics are reflected in the built environment. Finally, findings from the fieldwork were used to extrapolate a theoretical process by which these communities become to be seen as sacred by residents, as well as a compilation of generalized built environment design themes.

This research finds that residents of the 'ecotopias' consider their community to be significant places. Residents highly value being near to the natural world, and consider nature to have intrinsic value. They also value community life and expressed that individuality is critical to healthy community. The built environments of these communities express these shared values in many ways. Residents generally consider a sacred experience as a melding between self, community, and the natural world, and feel that their community facilitates these experiences more than a conventional urban environment.

This thesis concludes that the residents' sense of sacredness reflects the concept of 'self-realization' described in contemporary deep ecology literature, and that this 'self-realization' is facilitated by many aspects of the built environments of the ecotopias. In this way, the ecotopias demonstrate many aspects of sacred space in a contemporary ecocentric context.

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"What we find as soon as we place ourselves in the perspective of religious man…is that the world exists because it was created by the gods, and that the existence of the world itself 'means' something, 'wants to say' something, that the world is nether mute nor opaque, that it is not an inert thing without purpose or significance. For religious man, the cosmos 'lives' and 'speaks.' The mere life of the cosmos is proof of its sanctity, since the cosmos was created by the gods and the gods show themselves through cosmic life. This is why…[he] conceives of himself as a microcosm. He forms part of the gods' creation; in other words, he finds in himself the same sanctity that he recognizes in the cosmos. It follows that his life is homologized to cosmic life; as a divine work, the cosmos becomes the paradigmatic image of human existence."

—Mircea Eliade (165-6)

"Modern astronomy, which I have followed since the 1930's, indicates that the universe is growing, and I feel that I am growing with the universe; I identify with the universe—the greater the universe, the greater I am. Some people feel threatened when they realize that the cosmos is so immense and we are so small. But we can be just as big as the cosmos, in a sense. We ourselves, as human beings, are capable of identifying with the whole of existence."

—Arne Naess (Bodain 27)

"The other thing I can say about my affection for this place is that it's kind of nested. I love this house, I love our immediate neighborhood, I love the greater Village Homes neighborhood, and I really love Davis I think it's a wonderful town with tremendous values, and I have developed affection for this bioregion...the area roughly between the foothills and the delta and Mt. Shasta and the Sacramento River. So I feel like I have a nested sense of place at many scales."

"And this is kind of the epicenter of it?"

"Right here in this living room, it goes out like a series of concentric donuts, and all of those things move in and out."

—Village Homes resident, interview #8

INTRODUCTION

At this moment, the world is in need of great hope. Terrible life-threatening realities exist today that were unimaginable even just a century ago. What were once thought to be triumphs of human achievement are now considered the means by which humanity might destroy itself. The industrial revolution once promised a world of peace and prosperity, but the wars of the 20th century revealed how industrial power can be used to destroy life at an industrial scale. Advancements in physics and other sciences expanded the horizons of human knowledge, but this knowledge was soon employed to build weapons so destructive that vast quantities of life on this planet could be destroyed instantaneously. In more recent decades, the intricacy of the planet's life-supporting ecosystems has become better understood, as well as the magnitude to which human activity can alter these systems.

With this new understanding of natural ecology, nuclear weapons are no longer seen as the only major threat to human life. The perpetuation of the rate at which the Earth's resources are being consumed in will also, over time, severely alter the condition of life on Earth. This emerging knowledge of ecological crisis has brought threats to the planet's health down to very personal level, which is now encountered not just in the context of war, but in all aspects of daily life. The issues are present at every turn. The energy required for the commute to work, the petrochemicals and pesticides used in food production before it reaches the dinner table, the source of electricity to power the light switch, the amount of water used in a toilet flush, now must be understood for their wider affects on the resiliency of earth's ecosystems.

Yet beyond the issues of resource depletion and sustainability, the destruction of the earth's ecosystems seems to have deeper implications. As human-altered landscapes continue to increase across the globe, many lament the loss of a certain kind of vitality that can only be found in the natural world; the loss of something that environments created by humans cannot truly capture or fully recreate. Some have even stated that the degradation of the natural world is at the same time a psychological degradation of humanity (Berry 11).

The immensity of these ecological challenges require, not a mere modification of the status quo, but an engagement of the crises at all levels of living. This has many asking, 'what is truly needed to address the crisis in such a total way?'—'what can instill a sense of hope in the face great fear and uncertainty in the changes that lie ahead?

A viable humanity now must now reconcile its tremendous power with the larger biosystems on which all life on this planet depends. This reconciliation requires a reconsideration of the appropriate place of humanity among the whole of life—it requires a new worldview. This new worldview entails a shift from the current anthropocentric worldview to one that is instead 'ecocentric'—concerned largely with how humans 'fit' into the whole of life, rather than current worldview which is concerned with the needs of the humans exclusively. This 'fitting in' entails a certain kind of reverence for that which is not human, and an openness to engaging the aspects of life that are beyond human control and perhaps even human understanding. Those subscribing to the 'deep ecology' movement are among advocates of this shift in worldview.

Furthermore, this notion of 'fitting in' or being in 'right relationship' with the world is not a new idea, but in many ways it is a resurgence of an old idea. 'Fitting into'

the cosmos has been a primary theme of sacred activity throughout human history, through which a sense of reverence for, or even identification with, the non-human world is instilled.

But with the rise of the Scientific Revolution, beginning in 16th and 17th century Europe, a new worldview emerged which held humanity at the pinnacle of creation. This anthropocentric worldview remains dominant to this day, and the deep ecology perspective considers to this to be a major cause of the destruction of the natural world. Interestingly, as the Scientific Revolution bolstered anthropocentrism—which consequently promoted the pillaging of the natural world for human purposes—the world was also desacralized.

From this, questions arise concerning how this notion of sacredness—the notion that there is something larger to 'fit into'—might play an important role in humanity's pursuit to live in harmony with the non-human world. Both the pre-scientific worldview and the emerging ecocentric worldview maintain a certain reverence for the non-human world and are primarily concerned with 'fitting' into nature or the larger cosmic order, however this order is perceived. Thus it seems plausible that the emerging ecocentric worldview would be evoking themes that parallel those of pre-modern sacred worldviews—or in the very least, that the notion of sacredness, perhaps understood in a new way, would have an important presence in ecocentric thought. Moreover, as human alterations of the natural world, particularly the construction of human settlements, have always been inextricably tied to their worldview, the study of the built environment provides a unique lens through which these issues can be explored.

This resurgence of sacredness in the ecocentric worldview is the basic concern of this study. This study seeks to better understand how sacredness is comprehended by residents of ecologically motivated communities and how the built environment of such communities enhances or facilitates a sense of sacredness or sacred feelings. By exploring sacredness in this way, this study seeks not only to highlight a potentially important element of the emerging ecocentric worldview, but also to give insight to the notion of sacredness in a contemporary context more generally.

The aim of this study is to directly engage these issues from the perspective of residents. In visiting three ecologically motivated communities that are not explicitly 'religious' in origin—referred to as ecotopias—qualitative research methods are used to explore the worldview of residents, the built environment, and to the way in which this notion of 'sacredness' might be present. General themes in urban design, architecture, and other elements of the built environment that recur throughout the communities are documented and generalized. Out of the strengths and deficiencies named by residents in each community, a theoretical framework is extrapolated in attempts to explain how built environments of these communities might come to be considered sacred by residents.

In summary, this study proposes that the feeling of placelessness is closely, if not directly, related to a disconnection with nature, and that without rekindling the feeling of belonging to place, people will not be able to self-identify with the natural world. Many deep ecologists believe this self-identification with nature is essential for truly engaging the planet's ecological crises (Capra 21). Furthermore this study proposes that sacredness is the remedy for placelessness, and that the ecotopias visited in this study provide some basic insights as to how people might 're-sacralize' or 're-place' their

world, though in a way that is fitting with contemporary understandings the origins and structure of the universe.

Though they have very different approaches, each of the communities visited for this study are centered on the idea of humankind *with* nature instead of humankind *over* nature, and therefore demonstrate a variety of ways in which an ecocentric worldview can physically manifest in the built environment. By holding central the aspiration of fitting *with* nature, the built environments of these communities are designed in ways that enhance the possibility for a making a variety of connections between the individual, the community, and the natural world. These connections, experienced over time, deepen the relationships between people and place—and not just the immediate place, but also the surrounding natural landscape, the larger bioregion, and beyond.

Both the physical and social aspects of the ecotopias engender such connections, and residents associate these connections with sacredness or sacred feelings. Residents describe sacred feelings in a variety of ways—awe, peace, hope, belonging, rootedness, confidence, among others—but can generally be summarized as a feeling of 'right relationship' or an outright melding between self, community, and nature. Residents interviewed for this study generally feel a stronger sense of sacredness (however they choose to define it) in their community than in conventional urban environments where, conversely, residents have experienced a greater sense of despair, lack of rootedness, and isolation. In fact, several interviewees express contentment, even excitement, about staying in a their community for the rest of their lives—perhaps the ultimate indication of feeling a sense of belonging. From all of this, it is extrapolated that environments that

deepen connections between self, community, and nature, play an important role in creating a sense of sacredness compatible with an ecocentric worldview.

Paralleling the sense of sacredness described by residents in the ecotopias, sacred activity in a pre-modern context can also be understood as a connecting of people to place. This is because sacralization is essentially an act of place-making. It is an act of embedding oneself into the larger, be it a larger human community, the natural world, or the whole of the cosmos—and this embedding happens in a sacred place and extends outward. If humanity is to find harmony wiht the non-human world, as the deep ecologists propose (Naess 68), people will need to feel a deep connection to place. They will need to have a sense of belonging to the point where they feel a sense of peace, even joy, as they practice embedding themselves in these larger life systems. These ecotopias appear to lend themselves to this 'embedding' more so than conventional urban environments, and because of this they provide valuable insight into the idea of sacredness and sacred space in a contemporary ecocentric context. They can help inform how one might go about creating built environments that engender feelings of awe, rootedness, peace, belonging, and right-relationship with the larger world—they show how one might 'grow' a sense of 'home.'

Sacredness, a major topic of this study, is difficult to define let alone write about. It is hard to imagine anything more personal. Everyone has their own definition of sacredness and their own sense of it. The elusiveness of this subject makes it difficult to study and presents several limitations that should be kept in mind while considering the

contents of this thesis. The following presents some important points that should be highlighted before proceeding:

First, it is important to note that the following definitions and discussions of 'the sacred' are largely based on Mircea Eliade's work *The Sacred and the Profane*. This work seeks to convey the common themes across religions, and contrasts them with the modern secular worldview (17). Indeed this was a seminal work in the time it was written and is still widely respected. However, critics of comparative religious studies rightfully point out that such studies run the risk of being over-generalized and too dismissive of important differences among religious traditions (Stump 24). Yet because this study seeks to explore a topic as large as past sacred themes and their relevance to the present, the generality of Eliade's work is quite appropriate.

Second, this document evokes a generalized narrative of human history. In large part, this narrative is based on the perspective of prominent deep ecology authors (Sessions, "Anthropocentric Detour" 156). Surely this narrative will oversimplify the diversity of human stories and worldviews that have emerged throughout history, and though speaking in such a way has limitations, it is nonetheless required by a study that covers to such a large spans time. The ecological problem is global and thus a global historical framework is required. This narrative is also focused largely on Western history, mostly because of its critique of the worldview that emerged out of the Scientific Revolution. Furthermore, this narrative will frequently assert that the built environment is a manifestation of worldview, but in reality the built environment is a manifestation of the worldview of those in command over the building process, which does not necessarily mean it is the worldview of all who lived in a given environment.

This thesis is written in two major parts. The first part is a detailed discussion about worldview in general, and specifically the relationship of worldview with nature, space, and the city. The second part will present the study of three ecotopian communities, including the methodology, the findings, the basic outline of a theoretical framework of how the ecotopias become sacred, including a list of general design themes that may be applied in other contexts. This document concludes in with a final discussion about what has been learned and what may be studied next.

PART 1 — THREE WORLDVIEWS ON NATURE, SPACE, AND THE CITY

The built environment—the world made by humans—can be observed as an expression of worldview. The term 'worldview' is a direct translation from the German word 'weltanschauung,' which literally means 'world perception," and can be defined more specially as "the comprehensive conception or image of the universe and humanity's relation to it" (Weltanschauung). Except in the case of a natural disaster, the built environment is shaped by human motives (Lynch 5). Therefore, what is built, both for function as well as aesthetic, indicates the cultural values, approaches, lifestyles, and attitudes of those who built it. All of these are outgrowths of worldview.

No matter the era or location, the built environment shows the builder's intentions for living and thus it reveals shared beliefs about the appropriate way to live, not only for people among each other but also among the natural world. This is just as true for today's contemporary urban environments as it was for the earliest human settlements. In his book 'Ecocities,' urban theorist Richard Register explains this idea succinctly. Thinking about the future of cities, he writes, "as we build, so shall we live" (5). But this idea can also be applied to the past as well as the present and so can be accordingly restated: 'as was built, so they lived' and 'in that which is currently built, so are we currently living.' A similar idea can be found in statements by renowned architect Aldo Rossi, who asserts that the city is "necessarily artifact." (Rossi and Eisenman 21).

Continuing in this line of thought, the city can be understood as a unique artifact of worldview. As current and past cities are investigated, it is not just roads, buildings, and walls that are revealed, but the 'world perceptions' to which these structures gesture. Therefore it can be expected that cities built by peoples with differing worldviews will

have distinctly different built environments. For example, a city built by a society with modern anthropocentric worldview can be expected to be different than a city built by society with an ecocentric worldview. A city built as a stage for religious procession can be expected to look differently than a city that is built for material production.

The city is the place where humans break free from the constraints of the natural world, and therefore the city magnifies the uniqueness of human creativity. Because of this the city is often seen as symbol for the creative power of humanity apart from nature. But since the city is envisioned by humans and then built out of materials from the natural world, the true essence of a city should be understood as *a dynamic mediation of human aims and the aims of the natural world.* In a religious worldview, it was the role of the priest to mediate between the natural order and human activities. They were the city designers. In today's modern secularized context, who is responsible for this mediation? Perhaps, like the priests or the shamans of a religious society, it is the fields that guide urban development—urban planning, architecture, and urban design—which must take on this mediator role today. The basic issue of reconciling the city with the natural world—the world from which it emerged, and on which it still depends—is still, and always will be a critical issue for the viability of urban environments. In a time when human and natural aims are more conflicted than ever before, these disciplines now find themselves in the middle of a deep discussion about worldview—what it means to be a 21st century human living among the non-human world, and the implications for how one should live.

Concerning the impact of the emerging ecocentric worldview specifically, urban designers have a critical role to play. Such professions contribute uniquely to the

unfolding of worldview because it is through these disciplines that worldviews manifest into a physical reality that can be lived and experienced—where worldviews become new worlds. Deep ecology and other movements that advocate for an ecocentric worldview, have been largely criticized for being too theoretical, too conceptual, and lacking examples of practical application (Zurick 352). Though their work is essential, so long as the movement is fueled solely by the writings of theorists and philosophers, this criticism will remain valid. For this reason is it important that advocates of ecocentrism start to build, experiment, learn, and share their experiences *in place and in physical form*. This is the only way that the movement can become grounded, both literally and figuratively. Here the urban design professionals, who are skilled in giving physical form to ideas, are uniquely suited to help shift this movement from the conceptual to the actual.

This is a difficult challenge and in some ways paradoxical. Many deep ecologists feel that urbanization itself is exacerbating the problems of anthropocentrism by contributing to an increasing detachment of humans from nature (Glendinning 39). Here too the urban design professionals, with their extensive and sophisticated knowledge about urban issues can contribute greatly to the movement toward ecocentrism by leading a discussion about the ways in which human settlement might, to the contrary, *help reconcile the relationship of humans and nature*. This study, which seeks to explore how the emerging ecocentric worldview might manifest in the built environment, aims to contribute to this very discussion.

Before discussing the study it is important to understand some of the major worldview shifts in the past—the topic of this section. Though there were earlier anthropocentric influences, deep ecology writers typically consider the developments of

Scientific Revolution as the beginnings of the modern anthropocentric worldview (Sessions, "Anthropocentric Detour" 160). The Scientific Revolution was an enormous paradigm shift that occurred at the end of the Middle Ages and set the philosophical underpinnings of Europe's early modern period (Korten 24). The basic elements of this worldview pervaded Western Civilization in the following centuries, made way for the industrial revolution in the later modern period, and eventually resulted in the techno-industrial globalized reality that exists around the world today. The following discussion will look at the general aspects of worldview before and after the Scientific Revolution, and then highlight some general themes of the emerging ecocentric worldview. The influence of these three worldviews on ideas about nature, space, and their affect on the city will be given special focus, as they are the topics most germane to the study.

It is also important to note that many deep ecology writers consider the Judeo-Christian tradition to be a great contributor to the current anthropocentric worldview, and a forbearer to the Scientific Revolution (Sessions, "Anthropocentric Detour" 156). This perspective is legitimate, as this tradition does commonly portray the divine as concerned largely with human affairs. Moreover, Christianity has been used in many instances through out its history to justify the suppression of nature oriented religious practices and the removal indigenous peoples from their lands. However, the claim that Christianity promotes domination and exploitation of nature cannot be made about the whole of the tradition, and is complicated by the fact that there are several Jewish and Christian figures whose perspectives are not only congruent with deep ecology but are in fact celebrated by the movement. Take for example St. Francis of Assisi, or the Jewish philosopher Maimonides, who are both considered part of the lineage of deep ecology

(Sessions, "Anthropocentric Detour" 160). Or consider the popular Catholic eco-theologian Thomas Berry, whose writings are prominent in the deep ecology movement (Berry 8). Moreover, a critique of empire's exploitation of people and nature is a prominent Biblical theme, and is the central topic in the theology for a large number of contemporary Christian theologians.

While it is important to note the contributions of the Judeo-Christian tradition to the dominant anthropocentric worldview, the difference in worldview pre- and post-Scientific Revolution is much sharper than the historical differences between the Judeo-Christian and other religious traditions (Eliade 14). It is for this reason that the following discussion focuses, not on the differences between Judeo-Christian other traditions, but instead on the shift in worldview that resulted from the Scientific Revolution.

A Summary of Three Worldviews

The following section will outline and briefly summarize three generalized worldviews: the pre-modern worldview, which was widely held before the Scientific Revolution and is still maintained by societies that have not been desecularized by modern thought; the anthropocentric modern worldview, which continues as the dominant worldview through today; and the ecocentric worldview, which is presently emerging.

The Pre-Modern Worldview

The pre-modern worldview is focused entirely on the creative power of the gods, as the gods are believed to have created the world and determine the fate of all things. In

this worldview a supernatural reality exists in addition to temporal reality—another mode of being that is beyond or behind the immediate natural state of human existence. Sacredness and transcendence are essential aspects of the pre-modern worldview, and are the orientation of all human activity. At special times and places, the gods are believed to puncture through from the realm of the divine into lived reality, generating sacred experiences and revealing cosmic truths. This experience of the divine occurs through a hierophany—the sudden appearance of something in this world yet does not come from it. In a hierophany, a worldly object manifests the sacred by becoming 'something else' yet still remaining itself. Accessing the divine realm is to break with space and with time, to experience the modality of the sacred and to receive sacred knowledge. 'Religious man,' what Mircea Eliade calls those holding a pre-modern worldview, believes these sacred experiences to be more 'real' than the non-sacred 'profane' reality, and strives to encounter it in all aspects of life. The creative power of the gods is revered above all else because it is this power that founded the world, while the profane world is seen as ephemeral and fleeting. Thus communion with the divine is pursued in every aspect of daily living. What is considered to be merely organic, physiological, or mechanical by modern society—such as food, work, sex, the building of a dwelling place, and life itself—are considered sacrament to those of a pre-modern worldview. (Eliade 11-14).

The experience of a transcendent reality beyond temporal human existence is shaping to the pre-modern understanding of death. Religious man sees the repeating patterns in the universe as evidence that the cosmos continually regenerates itself. Death and rebirth are understood to be the modality of the sacred as the world is observed to

periodically descending into cosmic night so that it can be made anew (208). In seeking the presence of the sacred, religious man seeks a reality that is continually renewing and hence transcendent of the temporality of human existence. This understanding of death is drastically different that of the modern worldview. Eliade writes:

> "For religious man, the appearance of life is the central mystery of the world. Life comes from somewhere that is not this world and finally departs from here and goes to the beyond, in some mysterious way continues in an unknown place inaccessible to the majority of mortals. Human life is not felt as a brief appearance in time [as is felt in the modern worldview], between one nothingness and another; it is preceded by a pre-existence and continued in a post-existence. Little is known about these two extra terrestrial stages of human life, yet they are known to exist. Hence for religious man death does not put an end to life. Death is but another modality of human existence (147-148).

It is for this reason that repeated initiation into new stages, is considered the true mode of being for religious man. Again, Eliade writes:

> "Every human existence is formed by a series of ordeals, by repeated experience of 'death' and 'resurrection.' Existence is established by initiation; it could almost be said that, in so far as human existence is fulfilled, it is itself an initiation" (209).

This is why many religious rituals are themed around significant passage in which some kind of a death and a rebirth are reenacted. To go through such ritual is to participate with the gods in the original creation of the universe and to be initiated into a new existence. Through this, religious man transcends his personal situation and accesses the world of the gods. Here he lives what Eliade calls a 'transhuman' experience, remaining human but at the same time becoming cosmic—he is himself, yet lives beyond himself by identifying and co-creating with the gods (166).

Connection to the realm of gods is not only necessary for sustaining individual human life, but is also necessary for sustaining the life of the community. A transcendent reality is foundational to pre-modern societies and is the orientation of all aspects of life. The regenerative power of the gods sustains all things and can be seen throughout their creation, from the movement of the heavenly bodies, to the changing of the seasons, and

the fertility of the earth. That which is created by humans, and all activities of the human community must be linked or kept in alignment with the original creative power of the gods. A break with connection to the gods, personal or societal, is thought to be an undoing of life, and is the equivalent of non-existence (Eliade 32-33). The importance of this connection means that the ultimate authority in pre-modern societies is given to leaders of those societies who are believed to have special access to the divine and are able to mediate the will of the gods with the people.

Ultimately religious man seeks to commune what is beyond this world. The mystery of life and death is the foremost concern. This 'beyond' is not encountered by denying the world, but through contemplating the structure and the workings of the world itself—by looking for the otherworldly in the world. The micro gives insight to the macro. All things in the universe have the potential to become sacred, including man himself. His life both human and cosmic—he lives both for himself and at the same time beyond himself.

The Dominant Worldview Today

The worldview shift that accompanied the Scientific Revolution brought anthropocentrism to a new level. Even those religious societies that worshiped a god largely concerned with human affairs, such as the Abrahamic religious traditions, were not entirely anthropocentric because they still revered and sought harmony with the divine. Perhaps they might be better described as theocentric, for even these societies considered the divine realm to be the ultimate reality. But the modern worldview holds an entirely different view of reality—one that denies the concept revelation from

'beyond' and instead insists that true reality is revealed through science and reason (Korten 25). Furthermore, these revelations occur in the mind, which is believed to be separate from the body and unique to humans, reducing the rest of the universe and all of the world's creatures to machines with no "mental life" (Sessions "Anthropocentric Detour" 160).

Through empiricism, mathematics, and reason the Scientific Revolution provided a new explanation of the world, one that obeys universal natural laws. Here the mysteries that governed the universe could be revealed to the individual through their own mind, instead of mediated by religious authority. This wholly changed European societies, undermining religious hierarchies and laying the philosophical foundations for the modern worldview, which continues to this day. Many drastic changes were occurring in European society at the end of the European Middle Ages such as the beginnings of colonization, the Reformation, the Renaissance, the emergence early capitalism, all of which were closely tied to the ascent of reason and empiricism. But it was the publication of *On the Revolution of the Heavenly Spheres* in 1543 by Nicholas Copernicus—which asserted that the earth rotates on its axis once a day and revolves around the sun once a year—that is typically cited as the beginning of the Scientific Revolution (Korton 24). This challenged religious doctrine that the sun revolved around the earth, and foreshadowed the ascent of scientific authority over religious authority in the following centuries. Led by the likes of Rene Descartes, Francis Bacon and Thomas Hobbes, this change in thinking created a huge paradigm shift in the way people understood the universe and the place of humanity within it. Life in society became oriented towards the human rather than towards the heavens (Stoll 18).

One of the greatest shifts in thinking due to the Scientific Revolution was that the world became desacralized. The authority of sacred revelation was replaced by scientific revelation. A momentary and subjective experience with the divine became seen as less reliant than empirical evidence and reason, which showed a consistent and dependable universe. However, the reliance on science as the ultimate authority is not without consequences. The premise of science doesn't consider that which cannot be measured or tested somehow, including some notions that lie at the heart of human existential concerns such as spirit, consciousness, transcendence, and the afterlife. In science, truth does not come from another world but from this one. In this worldview there can be no sacred times or places because there is no supernatural reality that punctures through—there can be no heirophany. Rather, everything in the universe can be explained by universal and predictable natural forces, which operate consistently and reliably. The universe is a machine. God, if God exists, simply the set the universe in motion—a clockmaker that built the great machine of the universe, but after starting it does not, or cannot, interfere (Korten 25-26).

This mechanistic view of the universe revolutionized every aspect of society, and dramatically shifted culture. The human body, human behavior, whole economies, political institutions, and the natural world could all be understood as clockwork, and became applied sciences. Furthermore all of these things came to be seen as perfectible—as science further reveals the laws that govern the universe so too it reveals laws to govern society (Wilson 19). Increasingly it was seen that the favor of the gods was no longer needed because humans now had the knowledge and the power determine their own destiny. By the late modern period, the industrialization of Western society

had thoroughly demonstrated this power. Heaven was no longer reserved for the afterlife. Heaven could be made out of the earth through the increase of material wealth (Stoll 18).

However, the unintended consequence of this worldview is that it leaves only individual material gratification as the purpose of human existence. All meaning comes from what can be an empirically measured and reasoned in this life—nothing before, after, or beyond. This can be seen in the philosophers that emerged during the Scientific Revolution. John Locke believed that people were born a 'blank-slate' with out any inborn morality or knowledge of good and evil. Thomas Hobbes, who believed that nothing in the universe existed except for material, motion, and body, asserted that human beings are selfish and are only motivated by material pleasures. The Hobbesian view of human nature greatly influenced the new sciences of human behavior, economics, and politics, all of which viewed individual human life as essentially hedonistic. (Korton 26-27). This worldview does not acknowledge the notions of transcendence and sacredness. There is no meaning or purpose beyond this world, no communion with ancestors from another time, no participation with the god's eternal reality which renews and replenishes life, no veneration for anything beyond what can be explained by science and reason, no greater purpose than to make the most out of one's individual life before it inevitably ends. Limited to only human understanding, life is a clock that is winding down to nothing.

The Emerging Ecocentric Worldview

The problems revealed by today's ecological crisis are challenging the dominant anthropocentric worldview. The power of humanity to alter material reality, once thought to be a force that would bring about world peace and prosperity, is increasingly coming to be seen as a destructive force. The human appetite for material gratification has begun breach the carrying capacity of the plant's ecosystems. This power now threatens to drastically alter the planet's life systems to the point that the viability of even the human species is threatened. As ecotheolgian Thomas Berry puts it, "Our quest for wonderworld is making wasteworld" (16). As humankind has ascended to power it has broken out of its biological niches, and now finds itself in a role it has never before been charged with. Where humanity used to struggle to survive *against the forces of nature*, humanity has now itself become *a force of nature*. In other words, human aspiration now has just as great an impact on the character of a given landscape as wind, precipitation, temperature, geology, and any other natural factors. As a force of nature humanity must now learn to work in concert with the other natural forces, rather than opposed to them, in order to create a healthy and sustainable planet.

The dominant worldview, rooted in the Scientific Revolution, is premised on a purely anthropocentric perspective and is thus insufficient for the addressing the ecological problem of the 21st century (Capra 19). In its place, a new worldview is needed—one that perceives the aspirations of humanity together with the aspirations of the rest of life. The emerging worldview recognizes that the well being of humanity is interdependent with well being of the rest of life—it must be 'ecocentric.'

Moreover, the desire for material wealth and consumption is at odds with this necessary change, hence new values and measures of progress must emerge. Prominent figures from all arenas of thought are hashing out the meaning of this unprecedented situation, and the dramatic change in human aspirations, values, and behaviors that must consequently take place. It is increasingly being recognized that societies are at a breaking point between two conflicting ways of viewing the world and how to solve its environmental problems. The dominant worldview maintains human-centered values and emphasizes techno-industrial solutions delivered and developed through a consumption-driven economic system. The emerging ecocentric worldview places ecological health as the focal point, trumping monetary value or materialistic gratification. This dichotomy is emerging across a wide variety of disciplines. Take the following examples of well-known voices from the fields of design, economics, and theology: David W. Orr, Professor of Environmental Studies and Politics at Oberlin College, stated in a speech to the University of Pennsylvania School of Design:

> "Designing ecologically [must become] the default setting, not an aberration…As designers, you ought to think of yourselves first as *place-makers*, not merely *form-makers*. The difference is crucial. *Form-making* puts a premium on artistry and sometimes merely fashion. It is mostly indifferent to human and ecological costs incurred elsewhere. The first rule of *place-making*, on the other hand, is to honor and preserve other places however remote in space and culture…Your great work, as designers is to honor wholeness, health, and the great holy mystery of life. No other generation before you ever had a greater challenge and none more reason to rise to greatness."

Economist and former Harvard Business School Professor David Korton writes:

> "We are called by competing attractors to two very different futures…One of these realities, the living world, consists of all the things that are essential to life…Life's song calls with a message of love and beauty, an entreaty to respect life's values, live fully, and to participate in the actualization of its creative powers. The second reality, the money world, consists of money and the institutions of money…Its song calls us with promises of ease, personal power, and material prosperity…The two songs call us to honor their values and serve their imperative. Yet the values and imperative of the one stand in stark conflict with those of the other. The two, it seems, are engaged in a mortal struggle for the soul of humankind" (22-23).

The late Gordon Kaufman, Professor of Divinity (Emeritus) at Harvard University, writes of the theological implications of the ecological crisis:

> "It is a problem in which all humans are implicated, and we are called to do our part in its solution. So the central religious issue confronting humankind today is of a different sort than ever before…what is required is a reordering of the whole of human life around the globe in an ecologically responsible manner—something heretofore never contemplated by any of our great religious (or secular) traditions. All of humankind must learn to work together on this issue, or it will not be taken care of. Theology now becomes essentially a constructive task, and the symbol-systems of our various religious and secular traditions, in terms of which we do our thinking and acting, our living and our worshipping, have to be reconsidered in light of these problems that so urgently demand our attention" (38).

Though they come from very diverse fields, each of these men agree that addressing the environmental crises will require more than a mere technological adaptation enabling the continuation of the contemporary status quo lifestyle. Instead, human goals, efforts, and the very idea of progress itself, must undergo a fundamental change in trajectory—a move away from material gratification and consumption, and towards the bolstering and restoration of healthy and robust ecosystems.

In recent decades many environmental voices from movement called 'deep ecology' have been among those advocating for a shift towards an ecocentric worldview. Here, the ecological crisis is considered not just a crisis of resources, but also a philosophical crisis that requires a revolution in perception and values, based on the idea that nature has an intrinsic value of its own (Naess 67). Though the deep ecology movement considers itself to heirs to the likes of John Mur, Walt Whitman, Aldo Leopold, and Rachel Carson, the term 'deep ecology' did not become popular until the 1980's. The phrase was coined by Norwegian philosopher Arne Naess who used it to describe the difference between what he saw as two distinct streams of environmentalism. 'Deep ecology' is the name given to environmentalism that is philosophically centered the idea that nature has intrinsic value and that humans are not

of higher value than the rest of nature. "Shallow" environmentalism, on the other hand, maintains an "anthropocentric survivalist" view in which humans remain separate and dominant over the rest of nature (Sessions "Preface" ix-xii).

In 1986, Arne Neass laid out the following eight points of the deep ecology movement:

1. The well-being and flourishing of human and non-human life on Earth have value in themselves. These values are independent of the usefulness of the non-human world for human purposes.
2. Richness and diversity of life forms contribute to the realization of these values and are also values in themselves.
3. Humans have no right to reduce this richness and diversity except to satisfy vital needs.
4. The flourishing of human life and cultures is compatible with a substantially smaller human population. The flourishing of non-human life *requires* a smaller human population.
5. Present human interference with the non-human world is excessive and the situation is rapidly worsening
6. Policies must therefore be changed. These policies affect basic economic, technological, and ideological structures. The resulting state of affairs will be deeply different from the present.
7. The ideological change will be mainly that of appreciating life quality (dwelling in situation of inherent value) rather than adhering to an increasingly higher standard of living. There will be a profound awareness of the difference between bigness and greatness.
8. Those who subscribe to the foregoing points have an obligation directly or indirectly to try to implement the necessary changes (68).

Though the emerging ecocentric worldview is a contemporary movement focused on solving present and future problems, it can also be considered a reconnection and validation of past worldviews. In the context of this discussion about worldview shifts, it is interesting to note that, in their critique of contemporary Western values, deep ecologists tend to show great respect for pre-modern religious societies—particularly indigenous societies—and sometimes look to them for inspiration (Devall and Sessions 97). Some even advocate for the inclusion of ritual practice in deep ecology, based on the claim that that in indigenous cultures ritual serves an important role of connecting humans to nature experientially instead of just rationally (LaChapelle 62).

Here the notion of transcendence can be seen as a key point of convergence for pre-modern and deep ecology perspectives. Both worldviews, in some sense, hold the idea of transcendence as a critical aspect of a viable human society. As previously discussed, the pre-modern worldview seeks transcendence through participation with the gods in divine reality. In another sort of transcendence, deep ecologists describe a need for an identification of self with the whole of life in order to truly perceive the non-human world for its intrinsic value. In both worldviews the human seeks a reality beyond the self. This self-identification with the rest of nature, or 'self-realization,' as Arne Naess describes it, is rooted in the idea that, if the individual self and the natural world are seen together, compassion for the earth and the other human beings will follow. Here, encountering diversity is seen an asset and not a threat—for if one can identify with the whole of life, diversity expands the possibility of the 'self' (Bodain 29-30).

In fact, some have even suggested that the deep ecology movement can be understood as a revival of religion, for both share the essentially same task—to instill a sense of reverence for the non-human world (Gottlieb 17). This connection is evidenced by the fact that some of the movement's strongest advocates can be found among the religious community. Religious leaders associated with the deep ecology movement typically hold the view that nature itself is sacred—as we diminish the natural so too do we experience spiritual degradation. Here religious life is focused on *this* world, seeking the heaven *within* instead of the heaven *above*. Again, Catholic priest Thomas Berry writes: "we suppose that the universe itself is *the* enduring reality and *the* enduring value even while it finds expression in a continuing sequence of transformations" (8). From the

other end, deep ecologists that do not necessarily carry a religious title frequently cite the inherent spirituality of the movement. Physicist Fritjof Capra writes:

> "Ultimately, the recognition of the values inherent in all living nature stems from the deep ecological awareness that nature and the self are one. This, however is also the very core of spiritual awareness. Indeed, when the concept of the human spirit is understood as the mode of consciousness in which the individual feels connected to the cosmos as a whole, it becomes clear that ecological awareness is spiritual in its deepest essence and that the new ecological ethics is ground in spirituality" (21).

In contrast, the dominant anthropocentric worldview, which values only what can be known in the mind through science and reason, is utterly lacks a sense of sacredness and reverence for that which is beyond human understanding or control—it is a worldview founded in desacralization and negation of the beyond. But often in the event of personal or world crises, the appeal to reverence resurfaces. Emerging as a response to the present ecological crisis, the ecocentric worldview can be thought of as a return to reverence. Paul Woodruff, professor of philosophy at the University of Texas in Austin recently published a book entitled *Reverence: Renewing a Forgotten Virtue* in which he articulates the importance of reverence for a society to be viable. Woodruff spends much of the book defining reverence, but on the opening pages he writes:

> "Reverence is an ancient virtue that survives among us in half forgotten patterns of civility, in moments of inarticulate awe, and in nostalgia for the lost ways of traditional cultures. We have the word 'reverence' in our language but we scarcely know how to use it. Right now it has no place in secular discussion of ethics or political theory. Even more surprisingly, reverence is missing from modern discussion of the ancient cultures that prized it. Reverence begins in a deep understanding of human limitation; from this grows the capacity to be in awe of whatever we believe lies outside our control—God, truth, justice, nature, even death. The capacity for awe, as it grows, brings with it the capacity for respecting fellow human beings, flaws and all…Simply put reverence is the virtue that keeps human beings from trying to act like gods (3-4)"

In the face of immense world crises, humanity is being dethroned from the center of the universe, and the value of reverence is reemerging. The ecocentric worldview evokes a sense reverence as it calls for respecting that which is not human. Out of this

new attention is being paid to sacredness and the mystery of life. As the capacity increases for humanity to find harmony or even identify with the non-human world, a deeper meaning to life and a connection to 'the beyond' emerges—beyond self, beyond human, perhaps even beyond death. Ultimately, the emergence of an ecocentric worldview can be understood as a resacralizing of the cosmos, and there is a pervasive feeling that the reverent worldview of ancient societies has something critical to offer.

Three Worldviews and Nature

Since the ecological crisis is the centerpiece of this discussion, it is worthwhile to dive a bit deeper into the connection between worldview and human attitudes toward nature. Worldview is entirely concerned with humanity's place among the universe, and thus the relationship of humanity to the natural world is a fundamental aspect of worldview. Because of this, changing circumstances in the natural world can be a main driver of worldview shift, as is the situation today. In any case, a shifting worldview has implications for the how the idea of nature itself is perceived and how people behave towards it. Variations in the understanding of nature among the different worldviews will be briefly discussed in the following section.

In the pre-modern worldview nature is sacred—it is full of cosmic meaning. Nature, when viewed for its cosmic significance, is a way of knowing about the beyond. The natural world is the creation of the gods, and therefore is evidence of their intentions. Patterns in the natural world can show something about the whole of the cosmos—they can reveal aspects of the structure and meaning of the universe. In this worldview, nature

is imbued with cosmic lessons and even gives insight into the mystery of being itself. Eliade writes:

> "For religious man, nature is never only 'natural': it is always fraught with a religious value. This is easy to understand, for the cosmos is a divine creation; coming from the hands of the gods, the world is impregnated with sacredness…[the gods] manifested the different modalities of the sacred in the very structure of the world and of cosmic phenomena. The world stands displayed in such a manner that, in contemplating it, religious man discovers the many modalities of the sacred, and hence of being" (116).

Nature shows the gods are continually reviving the world through repeated injections of creative power. The cycling of the seasons shows death and a rebirth in the heavens—it shows that the movement of the cosmos is renewing and regenerative. The tree grows out of the ground towards the sky—connecting the heavens to the earth, and seemingly bearing fruit out of nothing. Again, Eliade writes:

> "Since every creation is a divine work and hence and irruption of the sacred, it at the same time represents and irruption of creative energy into the world. Every creation springs from an abundance. The gods create out of an excess of power, an overflow of energy. Creation is accomplished by an overflow of ontological substance…this victorious manifestation of a plenitude of being, becomes the paradigmatic model for all human activities. For it alone reveals the *real*, the superabundant, the effectual" (97-98).

In this worldview the structure of the world is see as a message from its creators. The existence of the world itself is a revelation about the mystery of being. This gives meaning and purpose to life and entices further pursuit of the sacred. With a cosmic view of the natural world, it is found that if human society is to endure, it must be regenerated by the same divine modality that cycles through the rest of the living universe.

In the pre-modern worldview the universe is not dead, it is a living thing that is moved by the gods. This is even true of the worldview of the European Middle Ages, which preceded the Scientific Revolution. Here the earth is the center of the universe, bounded by concentric crystalline spheres. God is thought to be the unmoved mover of everything, and everything on earth, including the natural world, is in the continual

process of becoming. Nature is alive and organic, and humans can learn from its general principles (Devall and Sessions 42-43).

In contrast, the modern worldview holds a secular view of nature. Humans are seen as separate from nature. Considered only in material terms, the natural world is not alive but a spiritless machine. The world is not periodically renewed by an irruption of divine creative power from beyond—in fact, the gods, if they exist at all, have no participation with the world other than starting the great machine and putting the universe in motion. The world is not imbued with cosmic meaning but is purely accidental, and so too is human life. In this worldview hedonism, instead of religious adherence, is seen as the highest good. (Korten 26-27). Because the mechanized view of the world leaves the natural world with little to say about the greater meaning of human existence, and therefore nature has no value except for it materialistic use. Compare, for example, the difference in the practice of agriculture. In many pre-modern societies, agriculture is imbued with religious meaning, often believed to have been revealed by the gods or a mythological hero. In a modern worldview, however, agriculture has no cosmic significance and is thus valued solely for the economic profit it brings (Eliade 96).

Prominent figures in the Scientific Revolution commonly spouted human separateness and dominance over nature. They believed that scientific developments would allow humans to break free from the limitations of the natural world. It was human destiny to transform the nature into a world of plenty for humanity. Take this excerpt from Descartes' *Discourse on Methods*:

> "Knowing the nature and behavior of fire, water, air, stars, the heavens, and all the other bodies which surround us, as well as we now understand the different skills of our workers, we can employ these entities for all the purposes for which they are

> suited, and so make ourselves masters and possessors of nature" (qtd. in Sessions and Devall 41).

In both the early and late periods of modern era, the transfer of nature to material wealth was believed to be the ultimate path to peace among warring and quarrelsome nations. No longer would people have to fight over land and resources. Heaven could be made from the earth, in the here and now. This dream of a technological society of material plenty drove the visions of early 19th century utopian thinker John Adolphus Etzler who proposed:

> "[We should use] the materials of the world to the best purpose of human life, as the true universal means of the salvation of all mankind, not in dreams, but in the plain realties of life…food, clothing, houses, comforts and conveniences" (qtd. in Stoll 21).

In fact, Etzler believed that the world could one day hold a trillion people, and as absurd as this may seem, Etzler was far from alone in his thinking. His basic assumptions about technological salvation, limitless resources, and universal material wealth were shared by most economists of the time, from Adam Smith to Karl Marx. With the exception of Thomas Malthus, it was overwhelmingly believed natural resources were virtually unlimited and inexhaustible, and that the *only* impediment to wealth was the speed at which technology could develop. In their final analysis, labor was the variable while nature was a constant. These were the seeds of the idea that continual economic growth should be the goal of society, which remains a foundational underpinning of the dominant economic institutions of today (Stoll 61).

The insufficiency of this worldview is now being realized as humanity appears to be experiencing natural limitations at every turn. Clearly, humans are no longer seen as the masters of their destiny, and must learn to work in concert with the natural world. As natural resources are being depleted and ecosystems are being disrupted, it seems as

though scientific and technological approaches alone will not be sufficient to deal with today's problems. This critique is even coming from some prominent figures *within* the scientific community. In *Consilience*, renowned evolutionary biologist and Harvard professor E.O Wilson writes:

> "There is [a] concern that a science driven society risks upsetting the natural order of the things of the world set in place by God, or if you prefer, billions of years of evolution. Science given too much authority risks conversation into a self-destroying impiety…Even Winston Churchill, whose country was saved by radar, worried after the atom bombing Japan that the stone age might return 'on the gleaming wings of science'" (34).

Like the pre-modern worldview, the emerging ecocentric worldview considers nature to be sacred, or having a spiritual aspect (Matthews 124). Of course, the emerging worldview does not deny scientific thought. It maintains the view that we are in fact biohistorical beings, which evolved over millions of years on a round planet that orbits the sun, which is one of countless stars in a universe containing billions of galaxies. However, the sufficiency of a purely scientific worldview to be able to address 21st century realities is in question. Though many developments in science gesture away from a human centered universe, a purely scientific view of the world maintains human separateness in a non-living universe. In contrast, the deep ecology movement seeks the centrality of ecological wellbeing, and the embedding of humanity within the natural world and its processes. Knowledge is achieved, not only through science, but also by subjective participation with nature. Hence, the appropriate response to environmental problems is not just better and cleaner technology or more responsible management of natural resources, but a melding of identities between self and the rest of the universe. Again, Arne Naess states:

> "Modern astronomy, which I have followed since the 1930's, indicates that the universe is growing, and I fell that I am growing with the universe; I identify with the universe—the greater the universe, the greater I am. Some people feel threatened when they realize that the cosmos is so immense and we are so small. But we can be just as big as the cosmos, in a sense. We ourselves, as human beings, are capable of identifying with the whole of existence" (Bodain 26-27).

Here, Naess is expressing the idea that the human is capable of living as the 'self' and yet also beyond the 'self.' This aspect of the emerging ecocentric worldview seems to parallel the pre-modern notion of a 'transhuman' or 'open' view of the universe, as described by Eliade (166). Like the worldviews of pre-modern societies, in the emerging ecocentric worldview subjective experience is considered, not just a legitimate source of knowledge, but an important way of connecting the self with the natural world.

Three Worldviews and Space

Worldviews also have great implications for how space is comprehended, and thus significantly influence the way in which space is experienced and interacted with. Shared values, appropriate behaviors, and the understanding of the functioning of the universe itself, are all demonstrated in the way in which people behave in space. The understanding of space, which seems to be such a fundamental and consistent part of reality, has in fact shifted drastically with the emergence of new worldviews. The following will further explore the view of space in the pre-modern, modern, and the emerging ecocentric worldviews.

Pre-modern societies pursue communion with the divine foremost, and are thus their lives are entirely oriented toward the notion of sacred space. This is a dichotomous understanding of space—'sacred space' in which the gods are present and where the

'real' world exists, and 'profane space' in which the world is unknown and chaotic (Stump 26). In this view, space is not infinite but discontinuous. This is what Eliade refers to when he writes, "for religious man, space is not homogenous" (20). That is to say, sacred space is qualitatively different than profane space—it is not continuous because it is something that can be interrupted by the divine. As the gods periodically puncture through from the divine realm, they do so at a certain places. Sacred mountains, burial grounds, the locations of a significant event in a peoples' mythology, among others, are seen as sacred spaces because they are considered a special point of access to the realm of the divine. Often these places are considered to be the center of the world—the point at which the world was originally founded, and where the gods repeatedly descend to 're-found' the world. Religious scholars commonly refer to such a place as the *axis mundi*—the world axis (Stump 308). Being nearer to sacred space is the same as being nearer to the realm of the divine. Hence, these spaces play a central role in orientation and organization of pre-modern society.

The basic ancient comprehension of the universe is critical for understanding the axis mundi. In the ancient view, it is commonly held that the world of the gods is above, with an underworld counterpart below—human beings live on a plane between. In many traditions the earth plane is thought of as a large disc underneath a great dome, enveloped on all sides by the cosmic waters that preceded the world's existence. The equation of verticality with divinity is found in virtually every culture (Tuan 37). With this in mind it can easily be seen that the axis mundi, which is always conceived of as a vertical axis, is a spatial expression of transcendence—a connection between the world below and the heavens above.

The worldview that emerged from the Scientific Revolution was drastically different than the pre-modern view of the universe, and significantly changed the understanding of space and the way in which people oriented themselves within it. In desacralizing the world, the scientific worldview made space homogenous. The new worldview departed from the old notions that the world was directed by the gods from an outside realm and periodically regenerated by irruptions of divine creativity. Instead, it was discovered that all things are governed by universal laws and behave accordingly. These laws describe world where everything behaves in a consistent manner at all times and in all places. As science became the dominant authority, the realm of the divine diminished as organizing point of society (Korton 25). Gradually the notion of sacred space was abandoned and replaced by a secular view of space. For if no power is perceived to come from the beyond it follows that there are no special points of access to the beyond—there is no *axis mundi*. Here, only the geometric aspects of space remain. Eliade describes these different views of space in the following:

> "Sacred space possesses existential value for religious man; for nothing can begin, nothing can be done, without a previous orientation—and any orientations implies acquiring a fixed point…The discovery or projection of a fixed point—the center—is equivalent to the creation of the world…The profane experience, on the contrary, is homogenous and neutral; no break qualitatively differentiates the various parts of its mass. Geometrical space can be cut and delimited in any direction; but no qualitative differentiation and, hence, no orientation are given by virtue of its inherent structure (22)."

Moreover, the Scientific Revolution brought about a view of space that is thoroughly anthropocentric. In the pre-modern worldview, the human alone cannot comprehend true reality. To experience what is 'real' one needs to 'see with the gods' through participation with the divine realm. This is a subjective experience, where the

ultimate reality is not grasped in a single occurrence but is sought continually through sacred space—the construction of space is a way of communing with the gods. But in the view of science, space is constructed in way that does not 'see with the gods.' Instead space is understood solely in terms of human perception and reason. Space is ordered and measured—it is even, consistent, and homogenous. Lewis Mumford writes about the shift to this view of space in the following:

> "A change in the entire conceptual framework took place. And first: a new conception of space. It was one of the great triumphs of the baroque mind to organize space, make it continuous, reduce it to measure and order, and to extend the limits of magnitude and embracing the extremely distant and the extremely minute; finally to associate space with motion and time" (364).

The shift can perhaps be seen most clearly in the medium of visual art—for artists are often the first to formulate these new conceptions of space (Mumford 364). Consider the difference between the art of antiquity that depicts symbolic and thematic perspectives, compared to linear perspective, which depicts an accurate view of geometric space from the beholders eye—as if the scene were being viewed through a window. Linear perspective rose to prominence in the Renaissance and flourished on throughout the modern eras. Like many cultural developments that emerged at this time, it too is rooted in rationalism, mathematics, and an "infinite, homogenous, and unchanging space" (Panofsky 28). Linear perspective has several pre-conditions—three-dimensional Euclidean space, a single beholder, an unmoving beholder, an unmoving world, and an unmoving mind of the observer (Antonova 32-24). It is an outlook that depicts the world without movement in time, space, or the mind.

This is strikingly different than the portrayal of space ancient art. This, like most elements of the pre-modern world, is largely religious in theme. Objects are not related by infinite homogenous space, but unified in discontinuous space symbolically and

thematically. Religious icons, for example, depict a reality outside of linear time and space. Icons, which have been a form of art for millennia, are not bound to Euclidian geometry, do not have an absolute point of view, do not show a world that is still, and do not assume the observer's mental stillness—rather, icons place different elements together by theme and symbol, requiring that the observer spend time and participate with the piece.

The emergence of linear perspective is further evidence of a shift towards an anthropocentric worldview. Linear perspective sees with human eyes—or more accurately one human eye—whereas the art of the premodern world, in what is sometimes described as 'reverse perspective,' the world is depicted outside of the individual human perspective, "with the eyes of God" (Antonova 2). In linear perspective it is the eyes of the human, in separation from other points of view, that is paramount in seeing what is 'real.' Therefore linear perspective indicates a severance of the self from the rest of the world—a "change from collective to an individual experience, from harmonic flow of sensations to a separate, precisely defined, but fragmented sensation" (Bacon 59).

While, on personal level, some today might consider certain spaces to be sacred, special, or more significant than others, society as a whole maintains this desacralized, homogenous, and anthropocentric view of space. However, if a new worldview is emerging it follows that a new understanding of space is emerging as well. It is unclear how an ecocentric worldview might differ in its view of space, however, there are several themes in deep ecology and related movements that may provide insight on the matter.

The deep ecology perspective challenges the idea that reality can ultimately be observed objectively through science. When looking at natural ecological systems, it is impossible to be detached since the observer is inevitably part of it. In deep ecology, one is embedded in the world and is always participating with the world. This may have important implications for how space is viewed. Rather than viewing space as homogenous, infinite, and geometric, space in the emerging worldview comprehends space *as a medium for connecting life*. The former is known objectively in the human mind, detached from the world. The latter is known more subjectively by participating with other forms of life that *share* space.

The notion of space-sharing gives space a certain immediacy. Hence, it is not surprising that perhaps the most prevalent spatial theme in the emerging ecocentric worldview is that of localization. Throughout deep ecology literature one finds a pervasive emphasis on connecting and participating with local systems, as well as a pronounced skepticism of large-scale social, political, and economic systems that extend beyond what can be immediately experienced. Such large systems are accused of further distancing human society from place and the nearby natural world. Instead, deep ecologists tend to advocate for strengthening connections with immediate ecological, economic, and social systems.

In his book *LifePlace: Bioregional Thought and Practice*, Robert Thayer, Professor Emeritus of Landscape Architecture at the University of California at Davis, writes extensively about the uprooting of people from place in the modern and post-modern world. Thayer claims that this has occurred not only because of the widening reach of technology, or because of economies that extend beyond local geographies, but

also because of our hopeless search for meaning in placeless institutions such as governments and corporations. He also indicates that this misplaced meaning has at been enabled, at least in part, by the Cartesian assumption that the human mind is separate from the rest of the world. All of this has left many today with a certain feeling of 'homelessness' (2).

Thayer's book goes on to explain that the way back to feeling 'at home' is through the reorientation of human cultures to the unique natural characteristics of their given bioregion—literally their 'life-place.' This perspective insinuates an alternative view of space than that of the conventional worldview. Instead of a view space that is geometrically dominated, objective, infinite, and separate, here one finds a view of space that is relational, connective, participatory, and rooting. Furthermore this sense of space is reminiscent of a pre-modern worldview—in giving priority to local or immediate space it is, like the pre-modern view of space, "not homogenous," (Eliade 20).

This focus on the uniqueness of place is a logical extension of an ecocentric worldview. For one to self-identify with nature one must belong to it—must join it somehow, *somewhere*. By rooting the self in nature, by embedding the self in the world, the self must also become rooted in place, for 'place' is the container in which the diversity of life is joined together. Poet and essayist, Gary Snyder stresses the importance of the notion of place in the deep ecology movement, stating that there should be "actualizations of the spiritual and political implications of ecology—that it be more than rhetoric or ideas—must take place, place by place. Nature happens, culture happens, *somewhere* (237)."

Furthermore, all of this has a certain transcendent aspect. In becoming rooted in place the sense of self is widened beyond the individual person, not upwards into the heavens as in a pre-modern worldview, but outward to the rest of life with which one dwells.

Three Worldviews and the City

The city is inextricably tied to the worldview of those that build it. Worldview has great influence over what is built, where it is built, why it is built, and even how it is built. The city magnifies the intentions, aspirations, and desires of its builders, be they material well-being, increasing economic activity, or communion with the divine. Perceptions of the natural world and how people should behave towards it are implicit in the city. Humans build the city from natural world, arranging the materials according to their aspirations, which are formed by their understanding of space and their larger conception of the cosmos. In this way the city can be seen as a sort of mediation between human aims and the aims of the natural world, and moreover, a mediation between a people the whole of cosmic life. Humans search for a cosmic order in the natural world, and then seek to fit themselves into that order with the environments they create for themselves (Crowe 7).

Before the invention of the city, humans lived with and within the natural environment—a world that came about not by their own efforts, but by the greater creative forces of the cosmos. People in the past, and many in the present, name this creative power ‘god’ or ‘the gods.’ But for this discussion the term ‘cosmic creativity’ will be used, in attempts to include all contemporary understandings of nature and the

universe. The natural world, the world appearing before us without our doing, reveals the modalities of the non-human creative forces—the 'cosmic creativity,' out of which humankind and human creativity emerged.

Today, the word 'nature' is commonly used in reference to scenery without human impact. When one is out among the mountains, the rivers, or the forest, it is often said that they are 'out in nature.' While this is true, a deeper look at the word 'nature' reveals something larger. The prefix 'nat-' has to do with birth. The roots of the word 'nature' are in the Latin word 'nasci' which means to 'be born; beget' (Nature). So the 'natural world' is a world in a mysterious state of *being born, being created*. With this in mind, 'nature' means more than just the non-human landscape—it refers also to the mystery and spontaneity of existence itself. In the natural environment a sort of 'cosmic creativity' abounds, which moves and creates without human effort. The changing of the seasons, the trees bearing fruit, the movement of the heavenly bodies, the emergence of new life in birth, life's receding in death, all demonstrate the creative and mysterious movements of the cosmos. Humanity too is a creation of this cosmic force, and knowing this, in experiencing the natural environment humans are often inspired to contemplate the relationship of their own lives to the whole of the universe. No matter how far human innovation progresses, the natural world still displays the creative forces that preceded and continue to undergird all human endeavors. This is why the natural world so often evokes a sense of humility, reverence, and awe, and contemplation of the mystery of being itself.

The city, in contrast, stands as the greatest demonstration of humanity's creative potential, apart from the natural world—set loose from the cosmic creativity. The

boundary of the city marks the threshold where humans become the creators of the environment in which they live. The city affords freedom from the limitations of the natural world and enables humanity to determine its own course. Here something amazing happens, this entirely human-made world takes on a 'nature' of its own. Norman Crowe, Professor Emeritus of Architecture at the University of Notre Dame, discusses this in the introduction to his book *Nature and the Idea of a Man-Made World*, in which he writes:

> "Like the natural world out of which it is created, the built world operates in response to its own rules, its own means to change and permanence, through the interaction of a host of contributing forces. Most important among those interacting forces is our human nature in all its dimensions, including our quest for meaning in the things we create, the fundamental nature of the material out of which the world we create for ourselves is built, and our idea of nature itself" (Crowe xiii).

The city, the world made by humans, is the place in which the human imagination is externalized in space—made manifest, constructed, lived in. As this human world is constructed out of natural materials, the human imagination is fused with the realities of nature. Out of this synthesis new realities are experienced and new potentials surface. As this happens humans gain a new understanding of themselves, and consequently their place in the universe. In this way, the city becomes a sort of autocatalytic chamber of human identity, where worldviews not only manifest but also evolve. Differently than emergence of life in the natural world, in the city *humans are changed by what that they themselves build*. Or as the late Lewis Mumford writes about the city, "What began as a wholesale transformation of the environment became a transformation of man" (100). Hence the great challenge of the city has, and always will be, to align the internal human world that is continually evolving and manifesting and in the built environment, with the cosmic order embedded in the natural world.

This idea of cosmic alignment gives the city a certain symbolic aspect as well. Across cultures, the human settlement is associated with human separateness, exceptionalism, and self-determination. The freedom permitted by the city also comes with great responsibility. The city adds potential to the best and worst attributes of humanity. Thus, the city has been used symbolically to express *both* a state of harmony between humanity and the rest of the world, and alternately, humanity in a delusional state of myopia where runaway human energy sends itself toward peril and self-destruction. In Western spiritual traditions, for example, this can been seen in the dichotomy of Zion, the city of life, and Babylon, the city of death. This symbolic aspect of the city gives substance to the physical city, and has been used by social movements in Western history for millennia (Newman).

Everyway in which the urban environment in envisaged, and eventually constructed, is tied to worldview because the act of city building itself is directly tied how the builders view themselves in relationship to the rest of the universe. The following will discuss the way in which the city has been affected by general shifts in worldview, as well as speculations about urban environments might change as a new worldview begins to emerge.

The idea of transcendence seems to have been at the heart of human settlement from its origins. From the beginning cities have been expressions of the human desire to seek communion with a state of existence beyond temporal human life. The earliest cities were "carefully planned to reinforce the sense of awe, and to form a magnificent background of religious ceremony." Even though many of these cities were built as

instruments for control and "psychological domination," they were also "expressions of human pride, relief, and awe." In any case, it can be seen that people were emotionally stimulated by these settlements, and that the role of the city as a 'holy place' came before the city took on the other the roles of "storehouse, fortress, workshop, market, and palace" (Lynch 9).

But the idea of a 'holy place' far precedes the emergence of large urban centers. According to Lewis Mumford, the first permanent settlements were not for the living but for the dead. Nomadic wonderers repeatedly visited fixed places with the intention to commune with ancestral spirits (6). Ceremonial production may be more responsible for permanent settling than any practical reason (95). Recent archeological discoveries bolster Mumford's notion. In southern Turkey, massive ceremonial structures have recently been uncovered with no evidence of permanent dwellings around them. Here one can see the ruins of the oldest known temple ever uncovered, built with pillars weighing over 16 tons and ornamented with precisely carved animal figures. The construction was orchestrated and erected by hunter-gatherers, *not farmers*, some 11,600 years ago. This discovery suggests religious ceremony may have been a causation of permanent human settlement rather than a merely a religious adaptation to sedentary life (Mann 35-41).

In the act of settling humans take charge over space and break from living in the natural environment. This separation from the natural world comes from the quest to create order, find relief, and further knowledge and understanding of the human experience of life. However this separation also establishes, in a certain way, a break from the cosmic creativity—a break from care of the divine. Cognizance of this break

can be found even among the most primitive human settlements, where the foundation of this new world—a human world—was not pursued without agony. In a pre-modern worldview this act of separating is felt as a loss and undertaken with a sense of guilt or violation that must be atoned for (Rykwert 174). This separation is often described in cosmogonic myths, across cultures, as the original killing of a deity that founded the world. A ceremonial reproduction of this myth frequently occurs at the beginning of a settlement or the construction of a house in order to atone for this separation. According to Joseph Rykwert this is because:

> "Building—every act of building—is necessarily an act against nature…When you choose a site, you set it apart from nature. However frail your structure, the act of choosing a site for it, of setting it up, is different from the animal's choice of nest or layer. A man knows that he is doing it, the animal does not. Therefore the setting up of it and the choosing must also contain the act explaining the action to the actor, and also—since it is also in some way an action against nature—of justifying it" (174).

This original break must not be forgotten, lest the human world loose reverence for the original creation and the greater cosmic order. To settle and build is to determine the destiny of a place, and this opens the potential for leaving the hands of the gods who enacted the first creation and maintain the natural order. Therefore, in a pre-modern worldview, the human-made world must maintain a connection to the gods if it is to be sustained—it must itself be a paradigmatic replication of the cosmic structure created by the gods (Eliade 31). It is for this reason that in so many human settlements up until the modern era, one finds an axis mundi in some form, be it a tree, a staff, a lodge, or a temple. The orientation of these settlements is towards a vertical axis—a spatial expression of the critical importance of maintaining a connection and finding harmony with the beyond—the creative forces from which all life emerges, and by which all is sustained.

Even through the many evolutions that occurred throughout urban history, the city maintained its primary role as a center for ceremony up until the Scientific Revolution. Even in a medieval context, out of which the Scientific Revolution emerged, the city, though it indeed served as a center for economic activity, it was not centered on it. Though a busy and vibrant environment of all kinds of human activity, the medieval city was above all else a stage for ceremonial processions of the church (Mumford 277).

As the Scientific Revolution swept Europe and changed the understanding of the relationship of humanity to nature, it changed the way the city related to nature as well. Larger and larger economies trading longer and longer distances allowed for cities and individuals to go beyond the boundaries of their immediate natural environment—the human world became "delocalized" (Mumford 366). As human power of nature increasingly came to be seen as something to idolize rather than to mitigate, the break from nature inherent in building was no longer seen as a sin that called for atonement, but rather as human destiny. The conversion of nature for the purposes of humankind became a righteous act that promised to make earth into a heaven of wealth and plenty, and the city became an instrument for the fulfillment of this promise.

The human world was no longer built with an attitude of reverence, but solely for material production and processes. Like everything else in the watchmaker universe, the city was gradually desacralized and eventually rendered a spiritless machine. With the dissolution of the church, the industrial role of the city grew to primacy. The city's foundation shifted from a place of ceremony, to a place of market—and eventually a mere instrument of a placeless market. The market square became the center of the city, as did the governmental and military institutions necessary to command the new

economic realities. The governmental palace replaced the cathedral, and in more recent times, financial institutions replaced the governmental palace (Campbell). The machine city, seeking political and economic growth foremost, left behind all notions of limits on numbers, wealth, population, or the boundaries of the city itself. Success became indentified with expansion of these new human realities, and everything in the city became oriented towards these aims (Mumford 366).

In contrast to the winding labyrinth of the medieval city, the architecture of the baroque city became fixated on scientific perfection, designed for efficiency, evenness, and orderliness. Streets were built longer, straighter, and wider in order to move larger quantities of goods and people further distances at faster speeds. Elaborate geometric plans were devised with grand axial symmetries, immense boulevards and avenues, even rooflines, perfectly round arches, and facades with uniform repetitions of windows, lentils, columns and cornices (Mumford 348, 366-368). The city became simplified and clarified for a life lived at a greater scale and velocity.

But with time, the increasing scale of the market and the liquefying of capital dissolved even these baroque forms. The new economy bolstered the newfound faith in humanism, and at a time of religious and monarchic hierarchy theses changes were liberating to the individual. Indeed the rebirth democratic ideals and individual human rights resulted in large part from these economic developments. However, these economic changes eventually resulted in dissolution of the individual's responsibility to the collective, leaving the individual's primary role as their function within industry instead of the fulfillment of citizen and religious duties (Mumford 343). Orienting society around the market resulted in the over-simplification of cities—turning them into

mere market instruments (Mumford 415). The pattern of the city became laid out simply for the sake of business. Blocks, streets, and avenues were organized principally for buying a selling, irrespective of historic uses, social needs, or topographical considerations. No longer was the city oriented toward the commons, the precinct, or even the neighborhood—let alone communion with the divine realm—but rather on the individual lot, the geometric unit that can be most quickly reduced to standard monetary units (Mumford 421-2).

Eventually this market-based and mechanistic conception of the city even grew beyond the boundaries of the lot, invading even the sanctity of the home. Pioneer modern architect Le Corbusier famously referred to a house as "a machine for living in" (4). As technology permitted movement and communication over greater distances, modern architectural movements eventually abandoned history, tradition, and place altogether. Their prophetic visions were predicated on the ability to go anywhere at anytime, with vast spaces between high rise buildings for the movement of high-speed automobiles and personal flying machines. Architects embarked on a quest to design with no connection to the past—a universally recognizable and understandable architecture without even a vestigial reminder of what was.

Although several reactive movements have emerged to address other aspects of the city—such as public health, historic preservation, and beautification—the commodifying of the built environment has remained a major component of economy to the present. As real estate became commodified it began to render a built environments that reflect market dynamics more than unique aspects of the place in which it is situated. Real estate increasingly became a major financial asset on par with cash, stocks, and

bonds. This caused conformity and standardization in the built environment, eventually resulting in nineteen standard real estate product types by the end of the 20th century (Leinbeger 49-50).

The power of liquid financial capital has manifested in towns and cities that are planned not for dwelling but for movement, not for locating but for departure, not for a place of ceremonial connecting across time and place but instead a place to consume and be consumed by…other places. Today, the means of building are almost entirely divorced from the places in which they are built. Structures are constructed with materials from across the globe. The building of entire neighborhoods is now commanded by financiers miles away who will likely never set foot on the properties they are developing. The result is a planet with millions upon millions living in fragmented, rootless, and placeless urban landscapes. The city reduced to material and mere economic assets has created a human-made world that is isolating, alienating, and meaningless—homelessness in what was intended an ideal dwelling place.

The seeds of this homelessness can be found in the writings of the champions of the Scientific Revolution. Descartes described his ideal city as having an anonymous and busy environment, bustling with industry and abundant with material amenities. Moreover, he preferred planned cities to organic cities for the same reason why he felt his philosophy was superior to others in the past—it was free of the "inconsistency of accretion," (Dunn 99-101). Here it can be plainly seen, the modern scientific worldview is predicated on severing ties to past and to place—those 'accretions' of memory and life that precede and shape the present.

Ecocentrism, on the other hand, strongly opposes these severances and espouses that people should see themselves as fully embedded in life and all of life's processes. One's true life cannot be experienced without full participation with other life. Moreover, this requires the engagement of place. In contrast to the placesslessness of the modern worldview, Robert Thayer asserts that without attention to place people cannot truly know who they really are. In the opening pages of his book *LifePlace* Thayer writes:

> "Somewhere in the swirl of life, each of us ponders three essential questions: 'Who am I?' 'Where am I' and 'What am I supposed to do?' We often consider the first question in isolation, as if it were the true key to our existence—as if the matter of who we are could be resolved independently of the two remaining questions. But all three of these questions must be answered in consort, as together they articulate the totality of the human condition…Questions of our existence and action are separable neither from each other nor from place—but it is place that we have most often ignored…I wish to argue that without a fundamental realization of the question 'Where are we?' human meaning is not stable, the logic of our own being collapses. We live in a dominating culture that mistakenly expects us to resolve the puzzle of our own existence through compartmentalizing our lives and separately examining each existential question. This approach has failed; many of us are more alienated than ever before. Just past the turn of the millennium, we have all become in certain fundamental ways, homeless" (1).

At its core, the emerging ecocentric worldview connects this feeling of homelessness and isolation—this placelessness—to the ecological crises facing the world today. Andrew McLaughlin writes, "the success of deep ecology or any other social movement aimed at restructuring humanity's relation with the rest of nature depends on the latent dissatisfaction of life in industrial society" (201). In this view the reconnection and re-rooting of humanity within the natural environment is deeper than sustainability or resource conservation, it is ultimately a remedy for the despondency incurred from the industrial paradox of living in places built for other places, detached from the processes of life found in one's immediate surroundings. In contrast, the emerging ecocentric worldview puts great emphasis on place—the 'where we are' and the 'who we are'

together inform 'what we are supposed to do.' The healing of the earth must ultimately come from healing the human severance from the world. This healing requires reconnecting to place so that people might live, not as untethered atomized individuals in a seemingly boundless economy leading to nowhere, but instead as a participants in an integrated community of life—*not as residents in a machine but in as members in home*. An ecocentric worldview, after all, is literally a 'house-centered' worldview.

But living in a home requires living in a place…*together.* In order to maintain a functioning household, collaboration as well as sacrifice is required from each resident. It necessitates the sharing of rooms and resources. It demands participation, sharing experiences, and mitigating conflicts. Similarly, in the ecocentric worldview, the health of the entire place takes precedence over the ambitions of the individual. Dwelling in a place, in harmony with all forms of life, becomes the central aim, rather than increasing the standard of living for humans alone. Thus, for an ecocentric worldview, the understanding of space as homogenous, even, and infinite, reduced to geometric properties, remains useful but insufficient because it over looks the relational aspect of space. In ecocentrism, space must be considered as something more than this. Space must be understood foremost as *a medium for connectivity rather than a mathematical abstraction*. Here, space is not seen as something reducible—divided into parcels to be bought and sold around the world. Rather space is seen as a life-joining intermediary—an agent through which *lives become one another*.

This worldview shift carries with it drastic implications for all ways in which the built environment is designed and constructed, from the smallest villages to the largest cities. If space is perceived as a medium for connectivity, the act if settling, locating, and

building—equates the joining and committing to a life-place. Here, the built environment becomes an *instrument to connect* humanity to the life of a place instead of an *instrument to uproot and sever* humanity from place. Yet because most contemporary urban situations reflect the latter, many advocates an ecocentrism consider cities to be, at best, a negative reality to be mitigated, much less something of critical importance to the movement. But they are. Taking a broader view of the city in history, it is seen that the process of building can be undertaken as an attempt to *harmonize the human world with natural world—a way to connect with non-human world*. Is this not precisely what is being called for by the deep ecologists and other proponents of ecocentrism? Here, the urban design professions play, not just a helpful role, but an absolutely crucial role in the legitimization of the ecocentric worldview. Architecture, city planning, and the like are fields that uniquely bring ideas forth into concrete realities. So long as the theorists and city builders remain separate, deep ecology, bioregionalism, and other ecocentric arenas of thought will remain only ideas.

Conclusion and Introduction to PART 2

The decisions made by city builders have drastic implications for generations to come. Cities, it seems, last longer than anything else created by humans. Buildings often last for centuries, roads often last for millennia, rational territories shift, and political institutions rise and fall. But cities endure beyond even these, accreting the collective story of all the peoples and influences that they encounter. It is for this reason that the fields of architecture, planning, and the like, must take a serious view of history and a long gaze at the future. They must continually be in dialogue with contemporary

prophetic voices rather than passively working solely within conventional thought and practices. Today the deep ecologists, bioregionalists, and other streams of radical environmentalism constitute one such community of prophetic voices and speak with profound insight into the issues facing the future of humankind. Like the prophets of old, in addition to critiquing the ills of conventional culture, these voices also offer a new way to understand the role of humanity among the rest of the created universe—a new worldview. The emerging ecocentric worldview envisions alternative ways of being, equipping humanity with a new paradigm that can enable a more sufficient response to the enormous social and environmental crises the world currently faces.

Yet the contemporary city-building professions have not embraced their historically prophetic position. This has left the field impotent—beholden to conventional responses within a paradigm that is insufficient and ill equipped to address the enormity of the problems at hand. Meanwhile the proponents of ecocentrism are left with very few concrete manifestations or practical applications of their proposed visions. In short, the break between the prophets and the planners has weakened both.

Nonetheless, there are small number of examples around the world where people are attempting to integrate this alternative worldview and their built environment. PART 2—A STUDY OF THREE ECOTOPIAN COMMUNITIES is an attempt to take a prophetic role of urban designer seriously, by closely examining three such places. They are: Village Homes in Davis, California; Dancing Rabbit Ecovillage near Rutledge, Missouri; and Arcosanti near Cordes Junction, Arizona. Most of the residents in these places are not formally trained architects, landscape architects or planners, however it could be said that, in a certain way, they are at the cutting edge of all these fields. Those

who consider themselves professionals are indebted to the likes of these residents and the sacrifices they have made in the search for a new and better to build. Though it is no substitute for visiting these places—each of these communities are open to visitors—this study intends to cultivate some of what has been learned in these places, providing inspiration and guidance for all people as they attempt to 'grow home,' wherever they may be.

PART 2 — A STUDY OF THREE ECOTOPIAN COMMUNITIES

This study explores the topics presented in PART 1 by analyzing three communities that were built with the aspiration of creating an environment that allows residents to live in a more ecologically responsible manner. If attempts to harmonize humanity with the natural world are indicative of an ecocentric worldview, and if the built environment can be seen as an expression of worldview, then the built environments of existing human settlements founded on the idea of creating harmony with nature can be viewed as demonstrations of an ecocentric worldview manifesting in space and design. Additionally, residents of these communities can be considered a sample population of those engaging this worldview. Moreover, general design themes can be extracted from studying such communities, which may help to guide planners and urban designers as they pursue issues of ecocentrism in the built environment more widely.

This study uses qualitative research methods to explore three different 'ecotopias'—communities that aspire to demonstrate ways in which people might live in a more ecologically responsible manner. The selected communities are situated within very different contexts and demonstrate a variety of strategies. Yet all of them share the same basic goal of harmonizing the built environment with the natural environment. Village Homes is a sub-division located inside the city limits of Davis, California, which shows an alternative design that exists within a conventional urban landscape. Dancing Rabbit is an off the grid ecovillage in rural Missouri that seeks to minimize the impact of the 'human-made' world on the natural while still meeting human needs. Arcosanti, on the other hand, seeks to salvage the benefits of the city while preserving the natural

environment through the creation of a dense, vertical, miniaturized city surrounded by pristine natural landscape in central Arizona.

The study will be presented in the following order. First, the methodology of the study will be explained by discussing why these particular communities were selected, how data was collected, and they ways in which it was analyzed. Second, a profile each community will be described in more detail along with a synthesis of the initial findings from site visits to each community. Third, a synthesis of the findings will be presented that show general themes found in all of the ecotopias. Finally, extrapolations of the findings will be discussed, including a theoretical framework explaining the process by which ecotopias come to be seen as sacred to residents, as well as a list of design themes that facilitate this sense of sacredness.

Methodology

The methodology for this study was set up to explore three basic topics of interest:

1. How is the worldview of residents in three contemporary ecotopian communities different from the conventional worldview?
2. How does the alternative worldview manifest in the built environment of the community?
3. How do residents understand the notion of sacredness, and how does the built environment pertain to this notion of sacredness?

This study uses a basic grounded theory research method, which identifies cases or populations in a substantive area, collects data from the substantive populations,

assigns codes to the collected data, and then refines the codes until they can be used in the construction of theory. This approach is different than to the scientific method, in that grounded theory does not begin with a hypothesis that is tested throughout the study. Rather, grounded theory begins with data collection, and then builds theory. Here "theory is the result, and not the precondition of research" (Bouraway 25).

Selection of the Ecotopias

The term 'ecotopia' is perhaps best known as the title of a political fiction novel by Ernest Callenbach, in which the Pacific Northwest secedes from the United States in pursuit of a more ecologically harmonious society. However, in this study the term 'ecotopia' will refer to an ecologically motivated settlement with aims to demonstrate an alternative to more conventional settlements. Though many have used the word 'utopian' to describe alternative settlements such as these, this is somewhat of a misnomer. Utopia literally means 'no-place' and refers places that are built in attempts to create or demonstrate ideal society. Though, like a utopian concept, all of the places examined in this study are intended to serve as demonstrations of alternatives. Yet they are in fact *real* places that are greatly influenced by the social, political, and ecological contexts in which they are located. None of these places are perfect, nor do any of them claim to be. But they are experiments in pursuit of a better way of living within their unique locations. They are 'topias' not 'utopias'—they are real 'places' not 'no-places.' Furthermore, the communities were selected because they are 'ecologically motivated' meaning that the primary reason for their founding is to enable residents to live more harmoniously with

the natural world. It is for these reasons the communities are called 'ecotopias' and not 'utopias.'

In addition to meeting the definition of an ecotopia, the communities were selected because they are not officially or overtly religious communities. If one of the goals of this study is to explore how the notion of sacredness pertains to ecologically motivated settlements, then a preexisting religious motivation might compromise the findings. That being said, there are a diversity of religious perspectives among the residents interviewed in each of the ecotopias, and they were not at all discouraged from discussing this during the interviews.

In addition to being unique demonstrations of alternative built environments, the three ecotopias were also selected because together they represent a wide variety of approaches. This follows a strategy of case selection in qualitative research called 'maximum-variation' which is particularly important in a grounded theory approach. (Bouraway 25). The strategy seeks to select a sample comprised by a variety of distinct and extreme cases. This is based on the notion that common patterns among differences

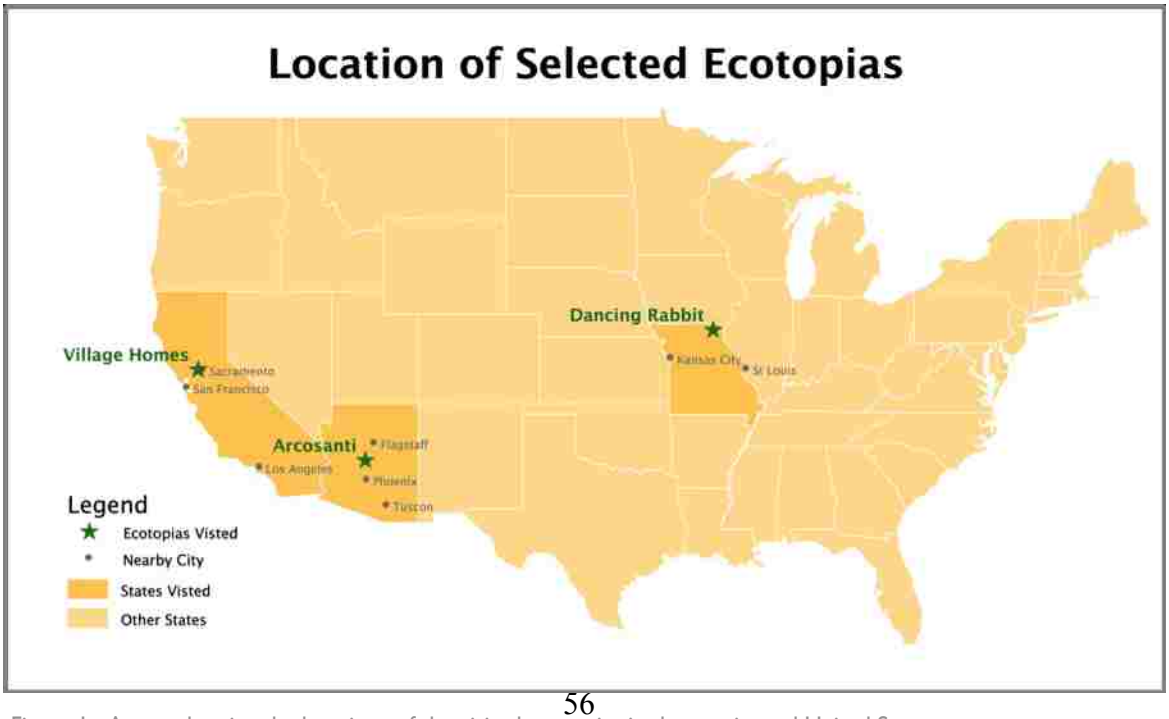


Figure 1: A map showing the locations of the visited ecotopias in the continental United States

show more generalizable conclusions than patterns among cases that are similar to each other (Patton 167-172).

Related to this, the communities were selected because they are either geographically isolated from other urban settings or are the first wave of urban development on the land. Thus each community demonstrates an uncompromised manifestation of the ideas behind the ecotopia. This is unlike efforts to 'green' existing urban areas where the layout of the built environment was designed in a different time period of time by a community with different worldviews and aspirations. This, of course, does not mean to imply that studying such efforts is not worthwhile; to the contrary, one goal of this exploration is to find design themes that can transfer to other contexts, including existing urban environments. But for the sake of this study, which seeks to understand more directly how an ecocentric worldview manifests in the built environment, communities that are in the first phase of development offer a clearer view.

From these criteria, three communities were selected for this study. Village Homes is a sub-division built with sustainable principles. Located within the city of Davis, CA, Village Homes serves as an example of ecotopia within an existing municipality. Dancing Rabbit is an off-the-grid ecovillage in rural Missouri. This community seeks to minimize the impact of the 'human-made' world on the natural world while still meeting the needs of the people that live there. Arcosanti, is a demonstration of renowned architect Paolo Soleri's theory of 'arcology'—architecture and ecology. Located in a pristine natural environment near Cordes Junction AZ, Arcosanti seeks to demonstrate how a dense urban environment can exist side by side with the natural environment. In contrast to Dancing Rabbit, Arcosanti seeks to retain the

idea of a city, separate from the natural world, enhancing both human interaction with one another as well as with nature.

Data Collection

The goal of this study was to understand the ecotopias through the perspective of the residents. Analyzing only the physical patterns or "impersonal forces" such as policy or the market are insufficient ways of understanding the complexities of human settlements (Lynch 36). To get a full understanding of a place, one also has to examine it through the eyes of the people that live there. Renowned urban planner Kevin Lynch writes:

> "One must uncover—by inference if no better source is available—why people created the forms they did and how they felt about them. One must penetrate into the actual experience of places by their inhabitants, in the course of their daily lives" (36).

For this reason, this study's main instrument of data collection was the semi-structured interview, which guided all the other forms of data collection. The three topics of interest were deliberately explored through the interview questions. The worldview of the residents was explored by asking about three keys areas: the significance of their community, how and why they came to live in the community, and the shared values of the community. The built environment was explored by asking residents how the significance and shared values of the community are expressed in the built environment. Finally, the topic of sacredness was explored by asking residents about sacredness specifically: the notion of sacredness, sacred feelings, and sacred places both within and outside the settlement. Residents were permitted to use the term sacred in whatever way seemed appropriate to them, but since 'sacred' is a word to that can be used in many

ways, some residents asked for a definition. When this happened, interviewees were told to think of sacred places as 'places of the heart.' The notion of sacredness was explored less directly by asking residents about transformative aspects of their community. This was explored because transformation, transition, passage, and initiation are central themes in sacred ritual (Eliade 209). Therefore, understanding how residents have been transformed by living in the ecotopias offers another way to investigate sacredness.

The ecotopias were visited during the months of September and October in 2010, and each was visited for five to seven days. Announcements about the study were sent to each community ahead of time. Some of the interviews were arranged before arriving to the community, however the majority of interviews came through recommendation from other interviewees—this is sometimes referred to as the snowball method (Patton 176). It is important to note that in each community, sampling began by engaging several unrelated people in a deliberate effort to start 'several snowballs rolling.' On the day of arrival in Village Homes many interviewees were recruited at an annual potluck to which all residents were invited. Dancing Rabbit and Arcosanti were much smaller communities and opportunities for participation were announced at meals and other routine meetings involving the entire community.

A total of twenty-four interviews were conducted, plus a round of questions at a public forum with Poalo Soleri, the founder of Arcosanti. This forum along with the other interviews, were recorded and transcribed for further analysis. In the first phase of transcription the interviews were summarized—not transcribed word for word. When a summarized portion of an interview was found to be significant it was then transcribed in full. Each section of the interview questions was written with a specific topic of interest

in mind. Yet because the interviews were semi-structured and conducted in a conversational manner, the questions often evoked responses having to do with another topics of interests. This sometimes changed the order of the interview questions. For example, when residents were asked how they came to live in the community, some responded by describing the built environment. The interviews lasted anywhere from thirty minutes to nearly two hours, with a typical interview lasting approximately one hour. During the interview, information about the personal identity of the interviewee or other community residents was discouraged to ensure anonymity.

Though the interviews were the primary data source for this study, data was also collected through direct observation, which also served as an important part of the exploration of each place. These observations were recorded primarily by digital photographs, but also included diagramming and note-taking.

Data Analysis

The recorded interviews were transcribed using transcription software '*F4*.' The transcribed interviews were analyzed with qualitative data analysis software called *MaxQDA*. This software allows for indexing sections of the interviews through the creation of a series of codes and then provided several ways to explore the relationship of the codes in order to uncover recurring themes across the data. From this, emerging themes can be identified for use in the final analysis, and the building of theory.

Direct observation of the built environment was guided in large part by the interviews and further explored through the creation of diagrams and revisiting of photos

and notes. The diagrams were created using *Quantum GIS* software, satellite photos from *GoogleMaps*, and photos taken at each site.

The basic outline of the process used to analyze the data goes as follows: first, the collected data was coded and refined into synthesized results for each individual ecotopia; next, the data from each community was further refined into a synthesis of data pertaining to all three ecotopias; finally, extrapolations were made from the final synthesis, which were used in the construction of theory and the compiling of generalized built environment design themes [see Figure 2].

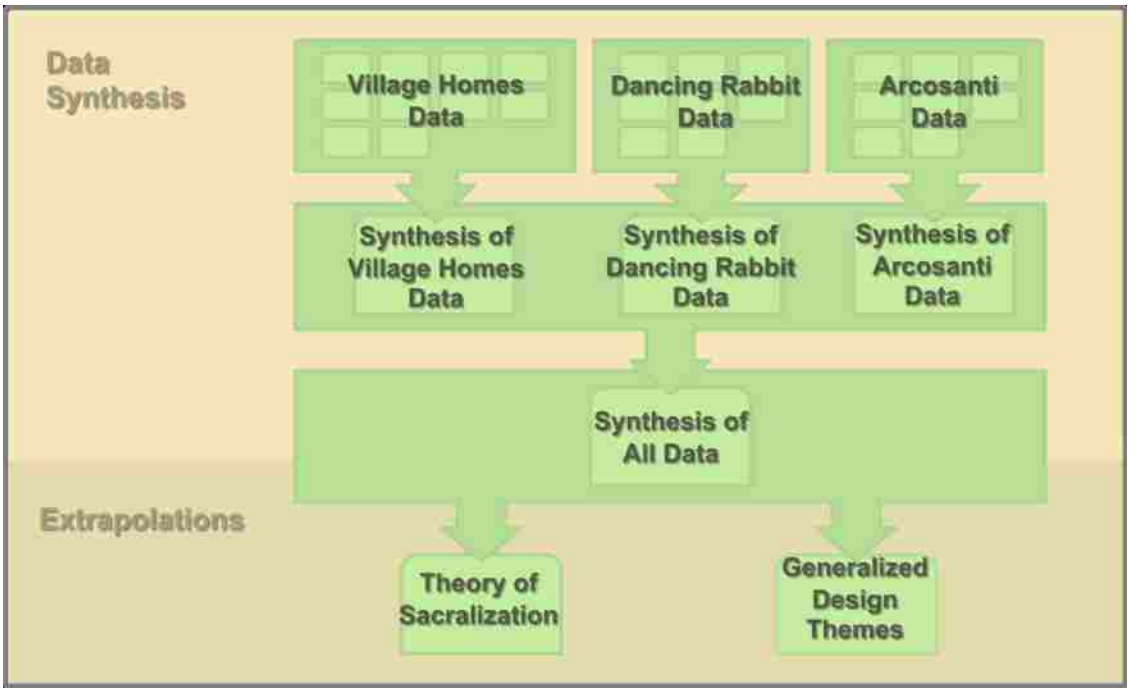


Figure 2: A diagram outlining the basic methodology of the data analysis

The Ecotopias and Initial Findings

The purpose of this section is to introduce each ecotopia and to convey the synthesized findings of each individual community. This section will follow the chronological order of the site visits, beginning with Village Homes, and ending with Arcosanti. First, each community will be briefly introduced. Then findings from the interviews will be discussed in the following topical order—Worldview: explored by asking about motivation for coming to the ecotopias, significance of the ecotopias, and shared values among residents; Built Environment: explored by asking how aspects of worldview are expressed in the built environment; Sacredness: explored by asking what residents consider to be sacred places or sacred feelings, as well as transformative aspects of their community.

It should also be said here that each of these communities has its shortcomings, and residents interviewed frequently offered criticism of their community. Yet, it must be understood that, even if some residents conveyed dissatisfaction with certain aspects of their community, all indicated that the themes being discussed were playing out in a more positive and healthy manner in their community than in conventional urban settings.

Village Homes

When construction of Village Homes began in 1974 in what was then a tomato field, many in the town were skeptical of its unconventional design. But today, because of the high quality of life the community affords, the houses are among the most desirable in Davis. Rarely do they go on the market and when they do they often don't

need to advertise ("Eco Homes"). Village Homes is designed not just to facilitate a lifestyle of low energy consumption but also neighborliness and close social connections. Studies have shown that this is true. Village homes residents drive less, bike more, use less energy, have less crime, know more people, and have more 'best friends' than their suburban counterparts (Bainbridge).

The site is located at the outer edge of the city. Davis, home to University of California Davis, is a small city of around 70,000 people, just west of Sacramento. It is surrounded on all sides by flat agricultural land typical of what you would find in the rest of California's Central Valley. To anyone familiar with the area it should be no surprise that a place like Village Homes is located in Davis. A city notorious for its progressive environmental values, Davis is known for its focus on preservation and energy conservation issues, double-decker buses, and extensive bicycle infrastructure ("City of Davis Profile").

In many respects Village Homes is the most 'conventional' community in this study. The community is comprised of 220 single-family homes, 20 apartments, a housing co-operative, and a small amount of commercial space (Bainbridge). Unlike the other ecotopias in this study, Village Homes is situated within municipal limits. From the air, its cul-de-sacs and curvilinear streets seem to resemble the patterns of its neighboring conventional suburbs that border it on three sides.

But upon entering Village Homes at ground level it becomes apparent that this is *not* a conventional place. One immediately senses that something is different. It is somewhat disorienting at first, as though one is somehow in the wilderness and civilization at the same time. There is vegetation growing everywhere, some places more

manicured than others, which draws the houses into the background. The shade causes the temperature to drop noticeably. The curving paths that meander about the place lead around trees, through orchards, and behind houses, creating a temporary seclusion—a mobile sort of privacy. This mysteriously creates the effect of being enclosed but not bounded.

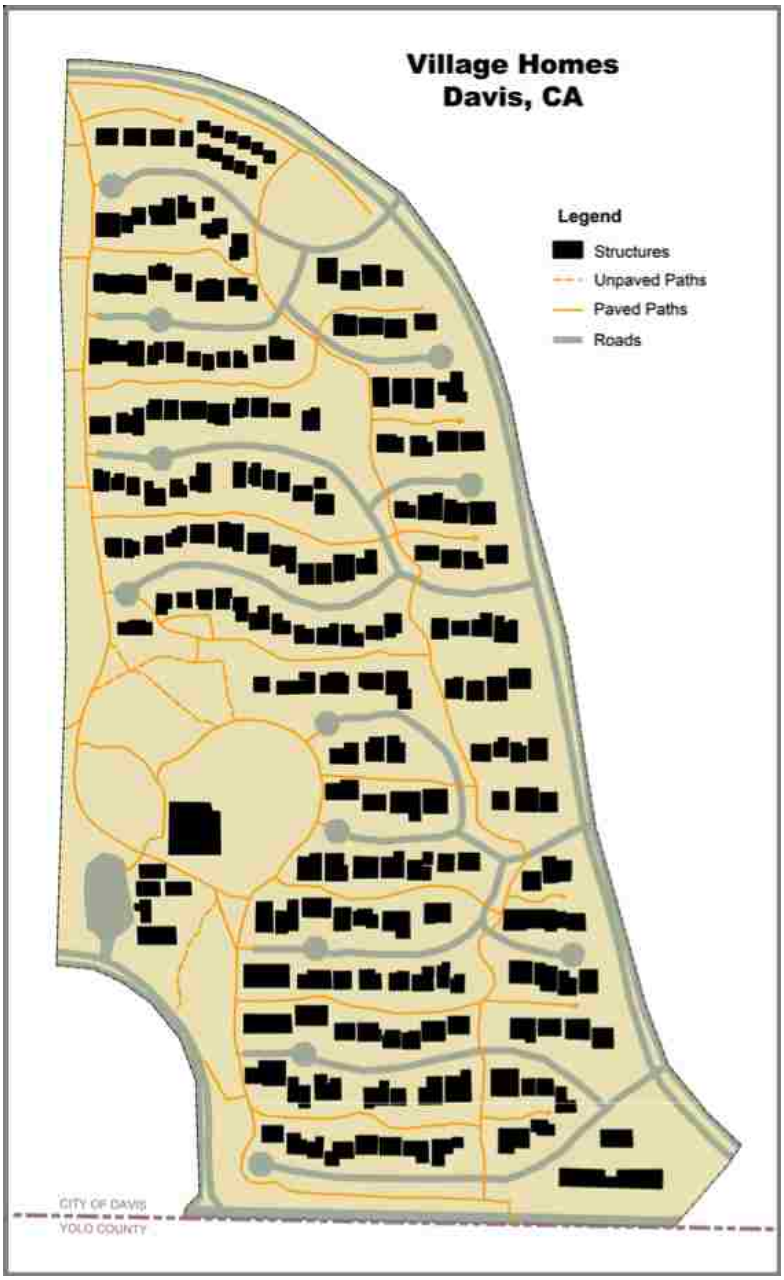


Figure 3: Circulation at Village Homes

The streets are narrow and curvy and end in cul-de-sacs, which severely limits automobile movement. While the cars are restricted the people move about freely. The place is incredibly permeable for pedestrians and bicyclists with walking paths and greenways crisscrossing every which way. These paths lead to a variety of unique spaces, causing one immediately feel drawn to explore and discover. A new visitor to Village

Homes is constantly bombarded by the thought ‘what’s around this bend?’

The houses clearly belong together, sharing a similar architectural language. But like the trees, they are all unique. Most all of them are oriented for passive solar gain with large windows facing south. They sit close to one another and are hard to see in their entirety behind all of the vegetation. Like everything in Village Homes, they are

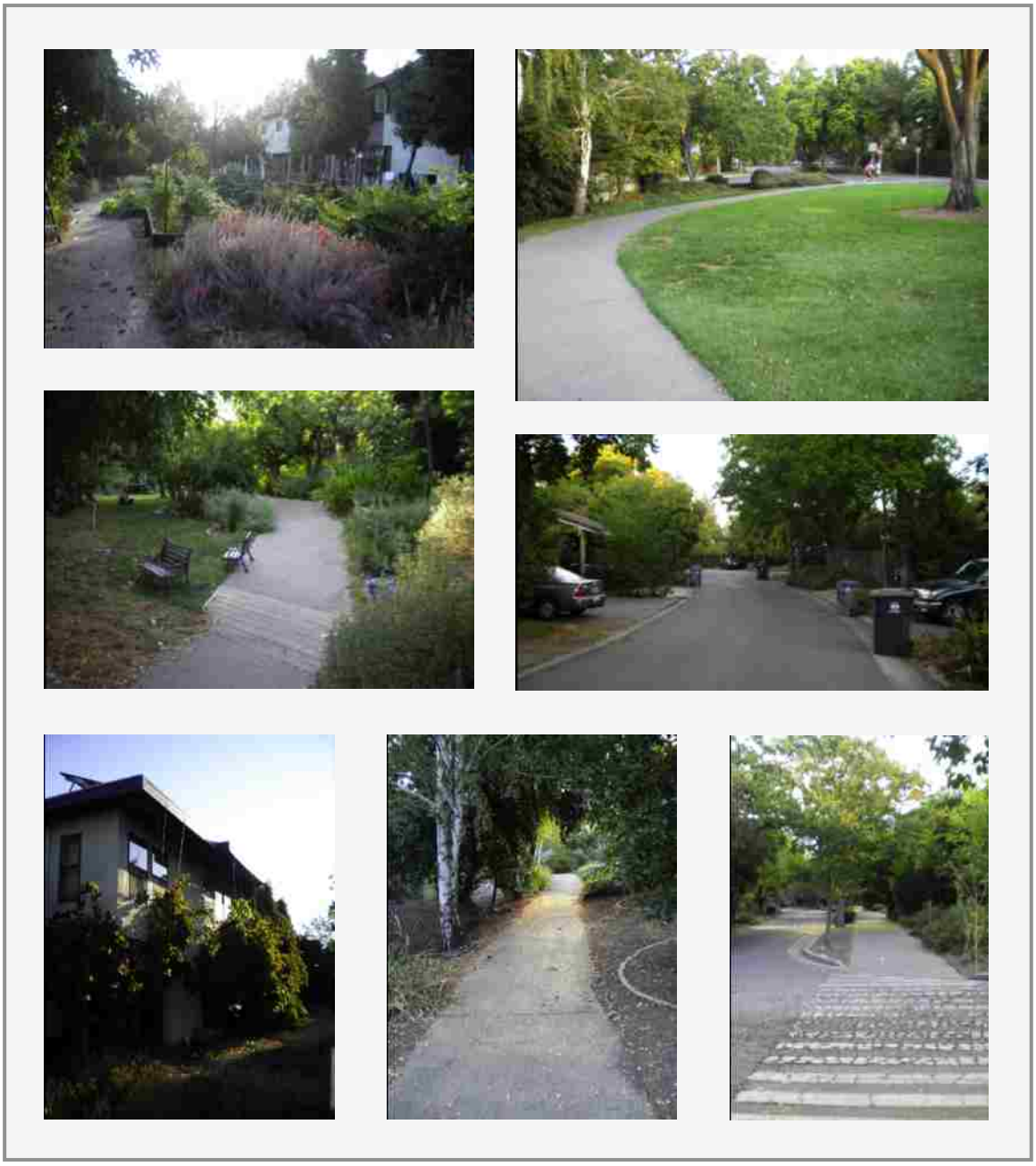


Figure 4: Selected Pictures of Village Homes

individually identifiable yet blur together. The fabric of the community is highly integrated. Most of the houses share a small common space with six or seven others, though the boundary of where these areas stop and start is indeterminable. There are almost no fences and no hard delineations between public and private. People are everywhere, walking their dogs, riding their bikes, stopping to talk to one another. Children can be seen popping in and out of the small patches of 'wilderness,' sometimes carrying sticks. They splash around in standing water when the rainy season fills up the ditches that make up the above ground drainage system. The wild 'forest' feel of Village Homes opens up into orchards, gardens, vineyards, and common areas big and small that are strewn all about the place. The potential for new discovery seems inexhaustible.

Village Homes Findings

Worldview: How did you come to live at Village Homes?

Most residents interviewed said they came to live in Village Homes because they liked the unique quality of life it offered. Residents were specifically attracted to the place because of the relaxed and peaceful feeling it gives them. They continually referred to the beauty of the place, especially the presence of the natural life, the ability to walk freely and experience it. They also indicated that they were attracted to the social dynamics of Village Homes. Some stated that even before they moved in, they were aware of the fact that Village Homes is a place where people have strong connections to neighbors, and that this was a motivation for moving to the community. Those currently with children or who had children when they moved in often stated that Village Homes seemed to be the ideal place to raise kids, and that this was also a big attraction.

VH #9: "When I moved back [to Davis] I was looking around for something to buy and Village Homes just felt right…the project is set up to encourage neighbor interaction, waiving at everyone in the morning and knowing their names. A lot of us say that when you take off a day from work you don't even have to go on vacation, you don't have to leave the joint, you can just stay home and it feels like vacation. When you walk the place you will see all the colors and smells and say hello to everyone in the whole world, and it just feels like a very comfortable environment."

VH #3: "[the people we bought the house from] had a very active 10-year-old boy who was climbing all these trees around here when we were looking at it. I guess they wanted a bigger place, but I tell ya, it sure worked for us. Our daughter was one when we moved in, and our son was born a couple years later when we were here, and they have totally enjoyed living in Village Homes, which is high praise from your kids…This just had a lot more trees and natural habitat like right there in your back yard. [We] knew about the community…and we liked the house, so we decided to buy it…In terms of space it works extremely well for families and kids, kids have a lot of freedom to just move around between the yards and the common areas."

Residents frequently stated Village Homes matched well with environmental values they held prior to moving in. They were attracted to the idea becoming a part of a place that stood for something they felt was positive. Village Homes was seen a place that would allow them to live out such values by better facilitating a lifestyle that is more responsible towards the earth's ecosystem, including: lower energy consumption, walking and biking, and gardening, among others.

VH #8: "It had the values and it was intended to be an energy conserving community and I was teaching energy conservation and was interested in the notion of community so it was a very nice fit when I moved in."

Worldview: In what ways is Village Homes significant?

The residents typically conveyed that Village Homes is significant because it's a demonstration of a functioning alternative environment that is more sustainable and more socially connected. An important part of what makes the place stand out compared to other communities is that, in Village Homes, some sense of privacy is sacrificed for a greater sense of community. Here the interviewees referred specifically to the common spaces, the lack of fences, and the ability to move through the place even if it isn't nearby

your house. Some of the interviewees also stated that it's significant that the community was developed with a greater purpose than just making money.

VH #2: "It signifies nationally and internationally that you can actually have differently designed built landscapes, that you can have a place that's not all compartmentalized or privatized, there's so much public space here or semi-public space, that you can also have a place that's ecological, that at least intends to be as sustainable as it can be, though that term wasn't used when they were building it. It's a very powerful alternative model or example, and we need more of those…No other developer would give this much common space, you'd just build wall to wall houses. It was basically built by people, particularly Mike and Judy Corbett, who weren't in it for the money, which is radically different."

VH #7: "I think 1/3 of the 72 acres is open green space, and needless to say, in a regular subdivision, that would all be houses. There are probably 100 fewer houses here than could in a regular subdivision, and that was the plan. The shared green space is more important to the quality of life than just having more public buildings or more houses with bigger lots, the lots here are much smaller than they would be ordinarily."

Residents overwhelmingly stated that Village Homes is significant in the wider Davis community and is well known around town as a desirable place to live. A few mentioned that, due to the high cost of housing, Village Homes is somewhat exclusive and hard to get into. Some also indicated that people around Davis consider Village Homes to be a sort of headquarters for alternative ideas and environmentally progressive values. In any case, being from Village Homes means something significant in the wider Davis community, and forms part the identity of residents.

VH #4: "Almost every time I've mentioned [that I live in Village Homes] people say 'you sure are lucky.' People in Davis are familiar with it, they walk through it because it's a nice place to walk through, and they know it's a nice place to live.

VH #6: "[people think] it's the coolest place to live, if you are into sustainability"

VH #10: "There's definitely a connotation that goes with it. [Growing up] we jokingly referred to ourselves as like the 'Village Homes posse' and we were just a close-knit group of friends all from there who have stayed friends…In the community people know about Village Homes.

AG: "Was it a cool thing to be from Village Homes?"

VH #10: "Yeah. No one ever made fun of you for being from Village Homes. They might say, 'oh that's that hippy place,' but there was never any negative connotation with it. People were definitely interested."

Worldview: What are the shared values among Village Homes residents?

The interviewees were always careful not to speak for others in the community and each communicated that there were a variety of people living in Village Homes that might hold a diversity of values. However, all of that considered, the responses of the interviewees tended to be quite similar. Interviewees commonly stated that they believe most residents hold politically progressive or left-leaning values, and in the rare case that they don't, they would still be likely to hold progressive views on issues of the environment. They expressed that many people in Village Homes value intentional living both in terms of ecological responsibility and in terms of community, though some are more private than others. Interviewees also feel that most residents highly value individuality and freedom.

VH #3: "I would say probably it's a pretty liberal place, but other than that. Not everyone is open, I have immediate neighbors that are actually quite private, but they still choose to live here"

AG: "So there's a variety of people that live here?"

VH #3: "Most definitely…but the ecological principles are shared, so even my private neighbors is really big into ecological stuff. I would say that's definitely common."

VH #1: "Almost all of us are politically liberal, I don't know anyone who is conservative. There might be some, but we do often advertise for causes…even if there are conservatives, and I don't personally know any here that would be of that ilk. So that's one core value, that we all care about the environment. I think there are a number of people who are interested in exploring a slightly more broad lifestyle, just the way they raise their kids and that kind of thing, they are more open in many ways."

Finally, everyone interviewed at Village Homes agreed that nature has intrinsic value, and that humans need to live more responsibly towards the natural world. Though they were reluctant to speak for the entire community, they believed that this view of nature is likely share by many Village Homes residents.

VH #2: "Some people are really coming from a deep ecology point of view, really not as much into private property and that sort of thing, much more into collective living,

definitely much more into green living. But there is a range as I said, and you don't have to subscribe to that to move in here."

Built Environment: How does the built environment of Village Homes reflect the worldview of its residents? How does it facilitate living out of shared values?

Interviewees conveyed that the built environment of Village Homes greatly facilitates social connections, which are highly valued in the community. Residents frequently stated that the design of the place makes it easy to connect with people. The environment is inviting and implores one to move through it, and this causes people to informally and incidentally interact with each other, continually building and strengthening social bonds. This was attributed specifically to the safe and attractive pedestrian environment that is created by several aspects of the community: the abundance of greenways that permeate the community, the limited car facilities, and the pleasant aesthetics of the natural environment along the paths. The large amount of dedicated common space also bolsters social connections, serving as special nodes of interaction. Finally, social connections are encouraged by the de-emphasis of private property. This can be seen in the lack of fences, the relatively smaller size of the houses, and the uncertainty of exact location of property lines.

VH #3: "Because the walkways are so close to the yard I see many more people, and talk with them. I see people getting fruit off the trees and you go and talk with them...you'll just naturally run into your neighbors in a way that might not happen in a more 'rectangular' kind of a neighborhood."

VH #7: "It was designed to emphasize day to day society, it's designed so you kind of have to run into your neighbors, you don't hide behind your fence because there aren't any allowed. Your yard melds into the yard next door, and all that common area is the responsibility of the shared houses. If you can see it then you are partially responsible for it. Anybody who has walked through Village Homes, whether from Davis or from somewhere else, knows immediately that this is different."

VH #2: "When we were looking at the house we got told three different things about where the property line is, I still don't know where it is."

The built environment also reflects the value of freedom and individuality in a number of ways. Interviewees frequently conveyed that they enjoy the fact that everyone's home is a little different, and some of them stated that this reflects something larger that Village Homes stands for. Several residents also implied that the unmanicured vegetation of is somehow emblematic of the free spirit of the place.

VH #1: 'Each one of these [houses], even though they are similar, are quite different, they all seems to be kind of experiments…that's important…there seems to be a lot of intentionality"

VH #2: "Village homes is not manicured, the open spaces is not manicured the way that city parks and greenways are, and it's not under surveillance in the same ways…its threatening to mainstream views of control and behavior."

VH #8: "I'm a landscape architect, and you can look at something as mundane as people's front yard or side yards and you can tell that people [at Village Homes] feel that [they can be themselves] because there are more weeds and more tuftiness, people just don't care about manicuring their landscape, they are not behaving for others"

Interviewees also expressed that the built environment at Village Homes allows them to live out their values of ecological responsibility. Here they mentioned the bicycle and pedestrian facilities, energy efficient homes, the above ground drainage systems, and the intentional use of space. They also conveyed that the environment of Village Homes keeps them in a state of appreciation for the natural world. This was attributed to the variety of vegetation in the landscaping, gardens, and orchards. Furthermore it is not only that there is an abundance of natural life, but also that the vegetation is well integrated with other systems and structures throughout the community. This integration contributes to the uniqueness of different spaces in the community, and makes the natural world a part of virtual every aspect of the place.

VH #9: "The place was built to care about the environment. It just makes sense. The narrow streets so you don't have heat gain from the asphalt, the trees on the streets to reduce heat gain during the summers, the grape arbors on the south-side [of homes] to cut the summer heat and shed in the winter, the north south configuration to get the delta breeze, the mostly stucco tile [roof] structure."

VH #1: "But I guess I need to emphasize that it's a feeling about it to which all these things contribute. I mean the open space, If it were just open space, there are parks all around Davis; If it were just big trees well there are older neighborhoods downtown that have big trees. So it is this notion that everything that was done was done with some sort of rational plan in mind, that it wasn't just slapping a grid of subdivision out there with identical houses."

VH #5: "This place is special because it's intentional. Somebody made it special on purpose and it's otherwise just a regular old place."

Sacredness: How do Village Homes residents understand and experience sacredness? How does Village Homes specifically relate to sacredness?

Village Homes residents described sacredness in a variety of ways, but most commonly associated sacredness as having to do with nature or coming out of an experience with the natural world. Typically this was described as being awestruck or overwhelmed at a 'bigger' sense of nature. This is usually felt in a solitary experience in grand natural settings where a longer sense of time or a larger sense of space can be encountered. Several residents, for example, mentioned that they have felt a sense of sacredness in the redwood forest. Others conveyed having similar feelings looking up at the night sky. Feelings associated with this kind of sacredness included being awestruck at the vastness of the world, accompanied by reverence and humility.

VH #7: "It will humble you, if you ever been in any kind of natural situation, among trees, at the ocean, in a wind storm. There's no doubt about who is going to win this fight. Man is nothing and nature is way bigger, and unconcerned, it's just doing what it does and if you get in the way, oh well…I feel that nature is my God…it's all there, and if you go you will be in the cathedral of your dreams."

Many also described the sacredness found in nature as something that brings about a sense of serenity, peace, and comfort. In addition to grand natural settings, this feeling of sacredness may also be experienced in smaller more intimate settings, including Village Homes.

VH #10: "Basically I always feel best when I'm outside, deep in nature…in places like Yosemite or the in the Redwoods…when I get can to a place that's as natural as can be is when I feel most…at home, or a very strong emotional connection, or wellbeing...peace…in the right place."
AG: "Does Village Homes evoke any of those feelings for you?
VH #10: "Certainly"

VH #2: "[I feel] solace, groundedness, calm, being outside the crazy social world that we have… Nature in general, nature is of a huge continuum, lots of places are sacred in different ways at different times. Sometimes you want to be out on a mountain top, sometimes you want to be in a very sheltered secluded place…I look at it a whole lot of different ways depending on the context. This whole development is a sacred place in one respect just because it's such a different statement and a different feeling to me than any place else."
AG: "Do you feel a sense of belonging here that you might not in other places?"
VH #2: "Yeah. I'm really happy being here, I just feel really lucky almost every day."

Residents also described sacredness as having to do with family, friends, and community. Feelings in these experiences had to do with of a sense social wellbeing such as inclusion, caring, harmony, acceptance, belonging, and a deep sense of rootedness. Interestingly, during these responses some interviewees mentioned some egalitarian values as if they too had something to do with sacredness.

VH #3: "Here in Village Homes we have had bonfires at the Winter solstice… and those have been wonderful gatherings…the musicians would come out, and we would even get the teenagers…that gathering of people and music has been extremely special… I would say it celebrates community, and I've also experienced this in smaller potluck settings, a real acceptance of everybody regardless of what job they have, regardless of what money they have, so it would cut across any class lines. Its actually a breath of fresh air for me compared with the economics department sometimes where there's a certain way of thinking...and this is much more of a just caring for each other...also just a celebration of being alive, being here, being in good health, being able to listen to this music."

VH #1: "For me part of sacredness is friends."

Sacredness: How is Village Homes a transformative place?

When asked about the transformative qualities of Village Homes, residents commonly stated that since moving to Village Homes they had become more social, open, and trusting of others. Some even indicated that when people come to Village Homes they have an elevated desire to be friendly.

VH #7: "When I first moved here I had all of those negative traits of suburbanites, 'I don't want anybody to know me, I don't want to be accosted on my way to the mailbox, I just want to come and go.' So I've changed a lot. I'm much more of a meeter and greeter now that at any point in my life."

VH #10: "It does feel pretty good to just take my dog for a walk around Village Homes and say hi to anyone on the sidewalk. Whether I know them or not, when you are in Village Homes you say hi to the people you pass by, but that doesn't happen outside of Village Homes. It's one of those things where, you don't know why, but it just feels right to acknowledge the person walking by you or something. They could not even be from Village Homes."

Interviewees also mentioned that living in Village Homes has been transformative in that they have gained an elevated understanding of natural processes—that they feel more rooted and in tune with nature. Though it is facilitated by Village Homes, some shared that this deepening connection with nature goes beyond the boundaries of the place—that this feeling of rootedness with nature is wrapped up somehow with the feeling of rootedness in the immediate community, the wider community, and even the larger bioregion.

VH #7: "Its indoctrinating you into the flow of nature, now after five years of being here I know the fruit seasons, I know when things are going to begin to happen."

VH #8: "The specific thing about this place in terms of it's meaning for me, is the way it integrates several levels of meaning...it actually does do good things for the environment, we consumes less energy, we use less water here, we grow more food here, we have more friends here...quantifiable things...That is combined with a heightened sense of community and a heightened sense of place…The other thing I can say about my affection, it's kind of nested. I love this house, I love our immediate neighborhood, I love the greater Village Homes neighborhood, and I really love Davis I think it's a wonderful town with tremendous values. I have developed an affection for this bioregion...the area roughly between the foothills and the delta and Mt. Shasta and the Sacramento River. So I feel like I have a nested sense of place at many scales"

AG: "And this is kind of the epicenter of it?"

VH #8: "Right here in this living room [it goes out] like a series of concentric donuts, and all of those things move in and out."

Dancing Rabbit

Dancing Rabbit Ecovillage was started by a small group of people who desired to live out their convictions around issues of sustainability and ecology but were unable to do so in a conventional urban environment. Unlike Village Homes, the objectives of

Dancing Rabbit require a level experimentation that a conventional urban environment cannot afford. The remoteness of rural Missouri, as well as the lack of building codes, permits residents of Dancing Rabbit the freedom they need to experiment and learn as they attempt to live more harmoniously with the natural world. The types of buildings, the materials used, farming and land management techniques, as well as their social systems, have evolved organically according the needs of those that come to live there.

The youngest ecotopia in this study, Dancing Rabbit officially began in 1997 with the purchase of 280 acres of land in rural northeastern Missouri by the DR Land trust. The community has grown significantly in recent years and currently has approximately 50 permanent residents. However, the community usually feels even larger than this with a constant flow of interns and visitors who visit for extended periods of time to learn natural building techniques, farming techniques, and other unique aspects of life in a community such a this. The community aims to one day be home to 500 to 1,000 residents ("About Dancing Rabbit").

Dancing Rabbit aspires to be a radical example of ecologically sustainable, low-impact living. It is a community quite different from the mainstream. Dancing Rabbit seeks to inspire others by pushing the boundaries of what seems possible. Power is generated from renewable energy sources, water is harvested from rooftop runoff, food is grown onsite. The use of automobiles is discouraged, as is any other use of fossil fuels, even for heating buildings. New construction must be built from locally harvested wood, natural building materials, or reclaimed materials ("Ecological Covenants").

One feels a peculiar sense of freedom at Dancing Rabbit. There are interesting and dynamic people there. The place is not manicured, vegetation is untrimmed, trees

and gardens are interspersed. There are stacks of building materials at every turn. But there's a sense of organic wildness in the place, felt even in the things that are human made.

One of the most noticeable characteristics of the village is the mixture of a wide variety of dwellings. Considering the small size of the village there is an incredible range of structures, including small shanties, single-family homes, and multi-story buildings. Perhaps most striking is what these structures are made out of. Wood and straw-bale are seemingly the most popular materials, but in a quick stroll around the place one can see buildings made out of all kinds of things—a grain silo, a school bus, one house is made of cob with a living roof. The community's 'Common House' makes this variety of structures possible. Fitted with a kitchen, bathrooms, showers, and a clothes washer, it facilitates the sharing of resources and keeps personal dwellings from requiring unnecessary amenities.

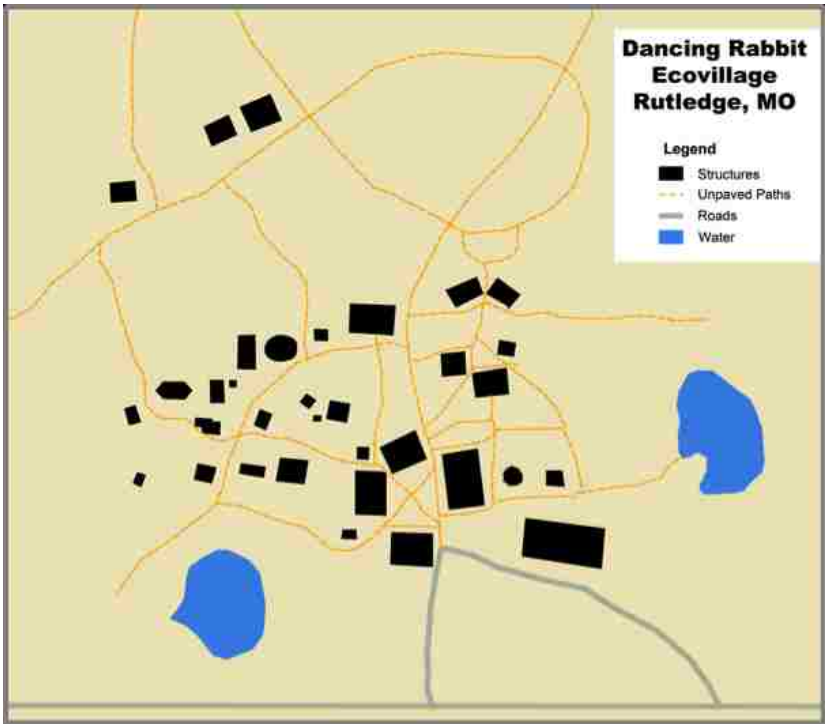


Figure 5: Circulation at Dancing Rabbit

The layout of Dancing Rabbit shares some similarities with Village Homes. Houses are close together with virtually no walls or fences. Public and private space can be sensed, but the division between the two is blurry. The environment is entirely pedestrian. Cars are not just restricted, but outright banned from inside the village, with

Figure 6: Selected Pictures of Dancing Rabbit

the exception of materials occasionally being delivered by a collectively owned pick-up truck. The paths run throughout the community, wide and narrow, formal and informal, connecting virtually every structure.

The village is dense. While this is largely due to the absence of the space required for automobile facilities, the density of the settlement also comes from the fact that residents highly value propinquity—both in terms of spatial and personal closeness. The density of the built environment allows for easy access to the surrounding natural landscape. The same web of paths that connects different places inside the village also leads out to its surroundings—a beautiful rural prairie setting of rolling hills, grassy meadows, and riparian woods. The community is actively engaged in restoring ecological systems in the land outside the village. They are allowing grasses to grow back on the meadows and are enlarging the forested areas on what was formerly agricultural land.

In addition to ecologically responsible living, Dancing Rabbit seeks to create an alternative social structure. It is common to hear residents say that they are also working to create a 'different culture.' Their social systems seek to honor the diversity of individual needs while also keeping with the community's shared goals and values. This allows, even encourages, people to experiment with different ways of living. For example, within the community several sub-communities and cooperatives have evolved to accommodate a diversity of lifestyles. This results in a tightly knit social structure in which people are connecting in variety of ways and developing sensitivity to the needs of others. At Dancing Rabbit people freely share ideas and experiences, and listen with sincerity. Hugs are frequent and people 'check-in' with each other often. Residents commonly trade labor and help each other on projects. Most people choose to cook and eat together with others—some even share income. These social systems are integrated into the development processes. For example, the community makes the majority of

decisions about building through a consensus process. This allows locally learned knowledge about things such as drainage, soil, construction materials, building methods, and siting, to accumulate and help direct the process of development. As a result, each successive structure is typically built with greater integrity than those built prior. Through these formal and informal social systems, the knowledge of the community is continually increasing, and residents become further embedded into the land and each other's lives.

Dancing Rabbit is one great experiment compiled from the efforts and visions of many. It is impressive in its ability to maintain close connections yet honor, even encourage, individual experimentation and freedom. The environment of the community demonstrates a remarkable commitment to living sustainable and ecologically responsible lives, and it inspires others to do likewise—but in their own way, so long as discoveries are shared.

Dancing Rabbit Findings

Worldview: How did you come to live at Dancing Rabbit?

Residents came to Dancing Rabbit in attempts to live out their values in a way that was not possible in conventional environments. A large part of this was a desire to live a more sustainable lifestyle that uses fewer resources and is more in tune with local ecological systems. Prior to moving to Dancing Rabbit, many residents had tried to live out these values in variety of other settings. Some had tried to organize their neighborhood, others had lived in cooperative housing, and some had even tried living these values in a rural environment by themselves. But these settings were, for the most

part, insufficient for the lives they wanted to live out. Eventually they concluded that living sustainably could not be done alone—it requires community and experimenting with different ways of living with others.

DR #1: "This is a place where I didn't have to have a job, and I didn't have to drive everyday, and I didn't have to go shopping. Instead of trying to be responsible within the system it felt better for me to be away from the system as much as possible. Dancing Rabbit allows for the opportunity to do something along those lines."

DR #2: "I was looking for that union of cooperative living. Farming [by myself] was really great. I was really into it, but it was a very lonely existence. There's not that many people on a farm. You might have apprentices, but it's pretty quiet. I wanted more community… I really wanted to live with close cooperation between people and also on the land, so [Dancing Rabbit] seemed like it fit that pretty well...it has continued to feel like the right choice for me."

DR #5: "I finally got to experience the 'American Dream.' We had the house the cars, the nice American life, the two kids, and I started to really sense that it was disconnected…I thought 'really, this is it? This is what people work 30 years of their lives to get? This is what I have to look forward to? This is ridiculous.'…I planted a garden…and doing things just within the site, however it was pretty obvious that the typical American neighborhood [wasn't really going to work]...So I had reached as far as I could possibly reach and started looking into intentional communities."

Many also mentioned that had experienced conventional urban environments as depressing and unhealthy. Living there had made them fell stressed, fearful, and hopeless toward the world's environmental crises. At Dancing Rabbit, on the other hand, they feel a sense of hope and well being that they don't feel in other environments, and that this was a big motivator in making the decision to join community. Several even expressed that the hopefulness goes beyond Dancing Rabbit—that they feel more hopeful about the larger world because of what they feel at Dancing Rabbit.

DR #7: "The city really depressed me and I really wanted to get out…my original idea was to go away and be as far from humans as possible…While I feel so much more at peace [in] the so called 'pure natural world' I just embrace that humans are part of that, and humans need some radical change in order to be a part of the community of life…. before, [the natural world] was all that I wanted, I didn't want anything to do with humans, but now I'm merging the two."

AG: "Is that what Dancing Rabbit is to you, your quest to connect to humans and ecology at the same time?"

DR #7: "That's a really big part of it for me."

DR #3: "I liked that it wasn't a survivalist kind of thing, it wasn't based out of fear. The intention was to really see if there was a different way of living that could be sustainable and could give hope. I think I was coming from a real place of hopelessness with everything that I was reading. It just felt like 'we are so screwed up, we are so lost, as humanity we have thrown ourselves of a cliff and now we are just falling. It really felt desperate for me and I was going into a lot of depression. For me, to come here and see that people were really banded together to do something...it gave me real hope…the idea of living with other people who had the same values, the same ideas, that were really counter cultural in many ways, felt extremely positive, like I could live. I could live and not feel despairing."

Worldview: In what ways is Dancing Rabbit significant?

Like Village Homes, Dancing Rabbit was described as significant beyond the immediate community. Most residents described Dancing Rabbit as a significant place because it stands out as an example of an alternative way of living with far reaching affects. As the community develops, much effort is made to actively share their experiences with the wider movement interested in alternative sustainable living. From its beginning Dancing Rabbit has never been isolationist. Researchers, writers, reporters, and the like have always been welcomed and encouraged to come see what is going on in the community. Additionally, Dancing Rabbit has maintained a strong presence on the web. Though residents conveyed that it's a significant place in their personal lives, it's contribution towards addressing wider environmental problems is also very important.

DR #6: "I try not to be too self-congratulating about what we are doing here because I like to be critical and not complacent…but we are a good example of a lot of alternatives, we are a good repository for a lot of skills and information … and we provide a good experience for hundreds of people who come through every year, so I think that's real important…You spoke of the ecological crisis, to the hugeness of it, and there's some immediacy to it too. By working together and creating projects like this, to share information with people around the world, I think we put the focus on the scale of what's going on."

DR #2: "I feel like there is clearly, in some sector of the population, a desire for other opportunities, for other things that are like this, that are different than what is 'normal'…It's been a part of two documentaries, and I feel like it's gotten enough currency to grasp more and more, the web traffic is going up all the time that I've lived here…it has a pretty decent following given that we live in the middle of nowhere in Missouri. I think the way it grasps people's imagination is what suggests to me that [it's significant].

Some residents also commented that Dancing Rabbit seems to be significant even among other existing intentional communities focused on ecological responsibility. Dancing Rabbit was described as being comparatively freer towards experimentation than other communities, and that this openness to experimenting with different ways of living is unique. Related to this, some commented on the fact that someone with very few resources can come the Dancing Rabbit and make something happen. This openness to experimentation is something special, and quite valuable to the community.

DR #6: "I think by living with other people in pursuit of our ecological values, we are doing something really important and necessary in that humans need to be communicating these things to one another and working on them together to solve common problems."

DR #7: "The financial piece of it is important, here they charge you for your warren a penny per square foot per month. You don't have to put money down when you come here. At [the other eco-village I was a part of] there was a joining fee, which was $4,000 and then when you become a member you have to lease your site for $20,000 for a 99-year lease…If you live 99 years, this is not a better deal than that, but without that money to put up it becomes a barrier. And if you do somehow pull that money together…you are invested there, and you can't get out...and [some people there] are angry and bitter and trapped…Here, although transience has its impact on the ability of having this core group of people that keeps it going, somehow it allows for people to not feel trapped. This is a place where they can come and try it out and experiment and if it's not right for them they haven't lost their whole life savings or made this huge commitment…I think that's huge.

Worldview: What are the shared values among Dancing Rabbit residents?

Similar to Village Homes, residents conveyed that the community highly valued individuality, freedom, and respect for differences. But even more so than Village Homes, residents at Dancing Rabbit frequently described individuality and freedom as a means of learning about how to live sustainably. Residents also expressed that living in intentional community is a shared value.

DR #1: "I think that there's a tremendous amount of respect for individuality…you see a lot of things here that you wouldn't see many other places. Part of that you can attribute to the comfort that people feel in being here."

DR #2: "You can think of it like a body, things coming and going and moving between…the more points of connection you have the more complex and rich your system is. The whole is greater than the sum of its parts...The farther we grow, the more people we have here, the more energy of different sorts and different skill-sets interact, and people work for each other and are friends with each other and party together. It's all sort of this social continuum that takes place in a tapestry that is very physical."

In regards to sustainable living, residents at Dancing Rabbit seemed to express that minimizing their impact on the natural world is a shared value, even more than residents in Village Homes. They also conveyed that most people in Dancing Rabbit likely hold that nature has an intrinsic value, and that human beings should not view themselves at the center of the universe.

DR #3: "Our shared values are to have a small footprint on the planet, not being primitive but using technology [appropriately]. They are based on a knowledge that this planet is our home, it's finite, and the balance is being tipped by human activity, I think most people here would believe that."

DR #4: "Nature is valuable for nature's sake and it's not all about us. I definitely think that's held here…if not held universally I think it's pretty darn close."

Built Environment: How does the built environment of Dancing Rabbit reflect the worldview of its residents? How does it facilitate living out of shared values?

The interviewees shared a variety of ways that the built environment at Dancing Rabbit facilitates living out values of ecological responsibility, especially the minimization of the use of resources. This can be seen in the buildings themselves, which are required to be built from sustainably harvested or reclaimed materials. Living in close proximity enables residents to share many basic facilities, this also reduces material and energy use. Also, the way in which the built environment integrates human systems with natural processes is seen as a reflection of these values. This includes growing food in an organic manner, generating electricity with renewable technologies, harvesting rainwater, and composting human waste.

DR #4: "Dancing Rabbit has a batch of what we call the 'ecological covenants' which spell out what the basic, lowest bar of ecological responsibility that you can have in order to live here…they include things like all lumber has to be reclaimed or locally sustainably harvested, and then we have ones about our power usage, we recycle materials including human waste so there are not flush toilets allowed, we primarily collect water off of our roofs…any agriculture here has to be done in an organic fashion."

DR #5: "We've chosen at Dancing Rabbit to try to minimize duplication, for the longest time we had one washing machine on the farm because it was ridiculous to have more than one, we didn't get a second until we reached 35 [people]. Systems like that, whether it's washing machines or showers or kitchens or social spaces…Dancing Rabbit is striving to be pedestrian so you won't be in car once you set foot onto the property, you walk everywhere. Because we are doing that we want things to be as close together as possible, we don't want it to feel like you can't walk from one side of the village to the other, so suddenly we are dealing with density…and what ever spaces there are between buildings are encouraged to be utilized for social spaces or for growing food."

The variety of structures, facilities, and building projects at Dancing Rabbit also reflect the values of individuality, freedom of expression, and experimentation. Each person is allowed to build according to their needs as long as they meet the basic standards of the ecological covenants.

DR #4: "All of the houses are different, there is no cookie cutter, there are no architectural guidelines that we make people dance to, so we have everything from the shack which is a metal structure which is really hard to heat in the winter and is total bare bones and you can see it third world countries…and [the man that lives in it] is totally fine with it, to this [house] which is like a full home where it's really comfortable in the winter. I don't feel like anyone gets flack for making the decisions that are right for them as long as they stay within the ecological guidelines and as long as their neighbors are okay with it."

The general layout reflects the shared value of living closely in community through such aspects as density, common space, connected pathways, shared resources, and a blurred sense of public and private space. This is also emphasized through discouraging of physical features that isolate the individual such as automobile infrastructure, large lots, and privacy fences.

DR #2: "Every year the paths that are established...you could just see all of the pathways. You could see from how worn they were, which paths were used, how often, how many people were traveling on them. It was like this physical representation of these bonds that we are weaving actively, day after day."

DR #3: "I like how densely things are built… fences would not feel nice at all to me, there are no bounds. The road is right there, lots of times I'll be outside processing food or hanging laundry, and it's really rich to me that I can be doing something like that, whereas before I'd being doing that alone. Lot's of times people pass by and they say 'how are you doing' or 'I have to check in with you about something' or 'have you been able to do this' or 'hey you look sad, what's going on' or 'would you hug me.' There are a lot of hugs and a lot of support and a lot of human have fences if you have your own space."

DR #1: "we are a creating, rewarding, and nurturing society. We know everybody and the well being of the people is important just because of the proximity we share…If we were set up in a style that had our buildings hundreds of yards apart then we probably wouldn't be out and about as much as we are, and so we wouldn't be seeing as much of each other, and having those opportunities to share a conversation or ask a question or borrow this thing or whatever, and I think it would be more isolating."

The built environment at Dancing Rabbit allows residents to experience nature and connect to its natural surroundings. Having a dense village allows easy access to the surrounding landscape, which is being preserved and restored to a more wild condition. Nature is also incorporated into the village in the form of gardens, trees, and wild grass. Some interviewees even commented how even the use of natural materials in buildings makes them feel more connected to nature.

DR #2: "A lot of the buildings [feel right] in their settings, the [cob house], especially this year, he established all of these gardens around it, that setting and that natural looking of a house and the living roof and all that, it feels like it fits in."

DR #5: "We go [pretty far] towards the idea that we should preserve nature, often times we will make land-use decisions based on favorite trees. We have this landscape that was pretty barren, [there were some trees around the ponds and the creek] but we have actually planted thousands of trees to try to extend that belt of trees and create woods. So we've worked really hard to create green spaces close to our village and out on the land. We've even done some prairie restoration to try to get it back to what it was before farming came in…we pull invasive species and we do prairie burns…we do a pretty good job of understanding the value of wild lands, in fact we are trying to minimize our overall human impact to the village and keep as much of our land wild as possible, that's another reason for our density."

Sacredness: How do Dancing Rabbit residents understand and experience sacredness? How does Dancing Rabbit specifically relate to sacredness?

Interviewees at Dancing Rabbit described sacredness in very similar way as those in Village Homes. Sacredness is most frequently has to do with nature, and most

commonly this is associated with being awestruck at nature in a larger sense. This is typically experienced in solitude in a natural setting, where there is a sense of something that has endured a long time. Feelings associated with this kind of sacred experience include awe, appreciation, and gaining a greater perspective and respect for life. This was sometimes experienced in the landscape around Dancing Rabbit.

> **DR #2:** "What it all sort of boils down to is 'how do I feel in my landscape, what are the things that are important to me, what are the things that represent the unknown the more powerful the larger longer-lived than I?' It's a diffuse kind of belief for me…trying to keep an eye open for the idea that something else may be more important than what I want…I definitely feel more capacity for the sacred in my life being here…The sweep of the land, the shape of it, The longer you live on it the more it feels like a body, like a thing or a person that you interact with, and that is so much bigger than you are. And that feels like a sacred connection between people and place. Which is definitely keeping with what I want my life here to be like."

> **DR #7**: "I'll walk across the prairie and see the carpet changing colors all spring and summer long, and that is sacred to me…connection is the biggest word, seeing those invisible spider web lines of lines of the ecosystems, it becomes really vibrant for me, and then sometimes it's a feeling of 'I can't take it in it's just so awesome'…it's more than I can appreciate."

Again, similar to Village Homes, many expressed that a sacred experience with nature can bring a sense of peace, clarity, and a feeling of being grounded.

> **DR #4**: "For me nature is where I feel grounded and where I feel like my thinking clears and where my heart rate slows down. I think there are physiological things that are really good for me about it. If there's any pure expression of anything in the spiritual world it's definitely in the natural world for me. I think it's beautiful and amazing that people try to imitate that and capture that in what we do, but I think we almost always fall short of what the natural world does effortlessly and I think that's really amazing."

Many Residents at Dancing Rabbit also associated the sacred with community life, or expressed that community can create sacredness with a certain kind of focus or activity. Feelings that accompany this sense of the sacred include being connected, a sense of harmony, belonging, acceptance, and being at home. Some interviewees conveyed that they have had certain experiences where they have felt community and nature together, and that this creates a heightened feeling of sacredness.

DR #4: "I think for me, what Dancing Rabbit is, is my best attempt as a human with all of our imperfections, at holding space for people sacred stuff and the natural sacred stuff to get along. Whether they are completely in harmony or not, I don't think we are at total harmony here with the natural world. But for me that is sacred work, getting the people stuff and the sacred stuff integrated. I think that that's the best we can do, and that's a really high expression for me of whether you want to call it God or spirit or the sacred or however you want to call it...it's like right relationship, which is sort of a Buddhist way of talking about things...That's what I hope for here."

Sacredness: How is Dancing Rabbit a transformative place?

Interviewees stated that life at Dancing Rabbit is transformative in that it transforms the way people understand their connection to the natural environment. Living at Dancing Rabbit causes one to reevaluate what they truly need in order to live a healthy and meaningful life, and this often results in becoming more comfortable with a less consumptive lifestyle. Through building, gardening, or just the rhythms of life in the community, people who come to Dancing Rabbit expand their knowledge of alternative ways of living.

DR #5: "Anyone who comes here for any amount of time is transformed…there is often a strong reaction to coming here…it is like going to a different country…we put it out there, without any holds bars, our reality. We talk about humanure, we encourage people to lick their plates to save water. We can be overwhelming. Usually people need three days to adjust, and if they make it past the third day no matter how long they stay…they will say 'this place has changed my life.' It could be little things…that start the wheels turning."

DR #4: "I think that natural building and owner building has made a real big difference for a lot of us in our consciousness about the environment. I think you also get more real about nature. Part of my roof blew off this spring in this really intense storm…the natural world is not all nice and not all friendly…I think you get more in touch with what nature really is instead of what you fantasize about it being, and I think that's really good for us…In [mainstream culture] our housing is built for us and we don't ever think about what goes into shelter…you just turn the air-conditioning up a little when it gets really hot. We don't have that here, it's a less protected life than most people have."

Interviewees also conveyed that, in addition to learning how to live more sustainably, transformation at an interpersonal level was an enormous component of living at Dancing Rabbit. In fact, some stated that this kind of transformation was deeper than transformations that had to do with sustainable living.

DR #2: "Most of [the transformation for me] has been in the interpersonal realm. I think I would have done some shade of what I'm doing regardless of where I lived and how I lived but living is such close concert with so many other people, many of whom end up being not a perfect fit for you socially or otherwise, and having to learn to stretch and grow, and working with consensus. Whether or not you get along with somebody you still have to live with them and make decisions together, and that's a pretty key thing. So I think interpersonal communication and emotional intelligence are the two things that I've learned more than anything living here. But, certainly I've gained lots and lots of experience in natural building and in gardening and food, things like that."

DR #5: "Interestingly enough the way that I have been transformed the most is that I had to deal with personal growth in a huge way. I thought I was coming to community so that I could become more sustainable, and sure I did that, but it's not hard to work towards sustainability here…yet what I really had to do here is learn to live with other people…Dancing Rabbit has been constant personal growth since moving here."

Arcosanti

Arcosanti is an urban experiment based on the concept of 'arcology'—the architecture of ecology—an idea developed by renowned architect Paolo Soleri. In arcology, Soleri proposes an alternative model for cities as dense three-dimensional mega structures surrounded by and responsive to the natural environment. This contrasts our conventional two-dimension sprawling urban environments that waste space and time, and separate humanity from the nature. Arcosanti is an outgrowth out of Cosanti, the studio and residence of

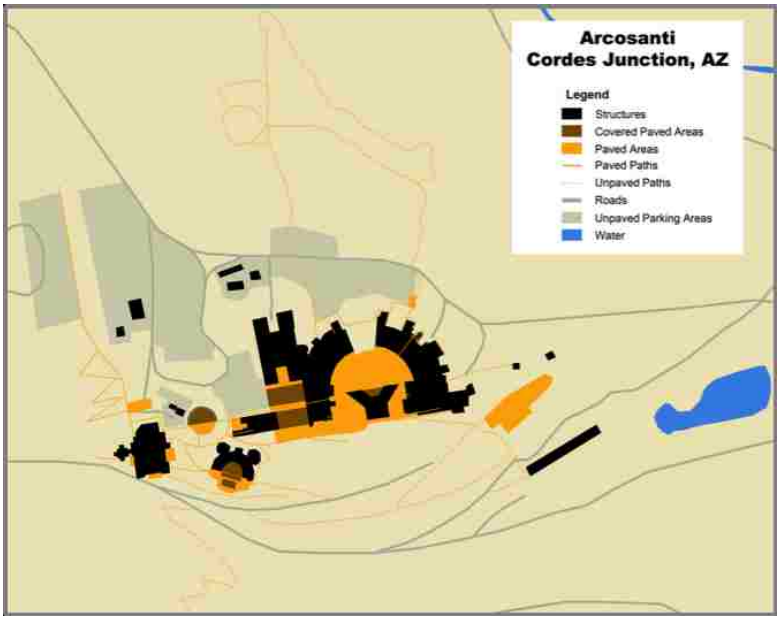


Figure 7 Circulation at Arcosanti

Soleri in Scottsdale, Arizona, where many of his architectural and philosophical concepts were developed. This sculptural heritage can be felt at Arcosanti. In many ways the place feels like a giant sculptural art piece in which people live. Arcosanti residents have been working on this conceptual art piece for decades, and much of remains to be envisioned as the piece continues to emerge.

Located about 70 miles north of Phoenix, Arizona, Arcosanti is situated on a mesa overlooking basalt cliffs in a lush desert valley near the Agua Fria River. Arcosanti was started in 1970 by the Cosanti foundation, and hopes to one day be home to 5,000 people all living on 60 acres. During the visit to Arcosanti, there were approximately 50 residents, but at other points in its history it has been home to nearly three times that amount. Though there has never been a large population living at Arcosanti its influence is widespread. Over 6,000 Alumni of building workshops now live all around the world ("Arcosanti Project History").

Because it is at an early stage of completion, Arcosanti cannot be analyzed as a fully functioning arcology. However many principles and intentions of arcology are present in the nascent community, and the unique environment that has already been built creates a window to imagining what a more developed Arcosanti might feel like. Soleri's concept of arcology considers the city to be a critical development in the story of humankind, and therefore must be a part of any future solution. Hence his critique of the conventional urban environment does not result in abandonment of the city, but rather a major reformulation of the city as an extreamely dense, hyper-connected container of human energy that exists side-by-side with the natural world. On October 29, 2010, during a weekly question and answer session with Poalo Soleri, someone in the audience

asked Soleri. “what makes good architecture today?” The following is part of his response, in which he addresses the significance of the city:

> "There are so many good architects now...many architects who are excellent form-givers. But architecture is something more than that. I call those very good architects orchid-makers, they want to make buildings which are beautiful and irresistible, like an orchid, which is fine, but seven billion people need more than orchids, they need the forest, so I'm interested in the forest, which has orchids scattered around. But the forest is the urban phenomenon, and the urban phenomenon is the one that has defined culture in the past. No matter where you look, you find that there is a kind of triumphal blossoming over cities, and that's an education, that the city is where man's need is exalted or is able to transcend its own limitation, because of the excitement that surrounds it, generally in the city. The magic of the city is the growing within each person of this condition which is no longer the 'me' but is the 'us' condition. We happen to be seven billion personas, seven billion! And orchids do not do the task."

So the concept of arcology is envisioned as a way to save the city and civilization. It entails harmonizing the human built environment with the natural environment, not by blending the two—as is the case in Village Homes and Dancing Rabbit—but by intensifying the two environments and putting them beside one another. At Arcosanti there is a clear demarcation between the built and natural environments. Two world’s distinct worlds together—side by side. The human world is built out of concrete, the landscaping is manicured, and the structures, though responsive to climate and organic in aesthetic, are clearly a manifestation of the human imagination. The structures all run together as the architecture of the whole of the city is given the highest consideration. One cannot easily tell which is a house and which is an office, or a library, or storage. Everything is together, in three dimensions. Yet, in all the variety found within the built environment, one element ties them all together—the view of the surrounding landscape, present everywhere. At Arcosanti the city is an organism, human made, growing in nature.

The influx of people at Arcosanti determines a lot about community life. There are some that have been living there for many years, and there are also

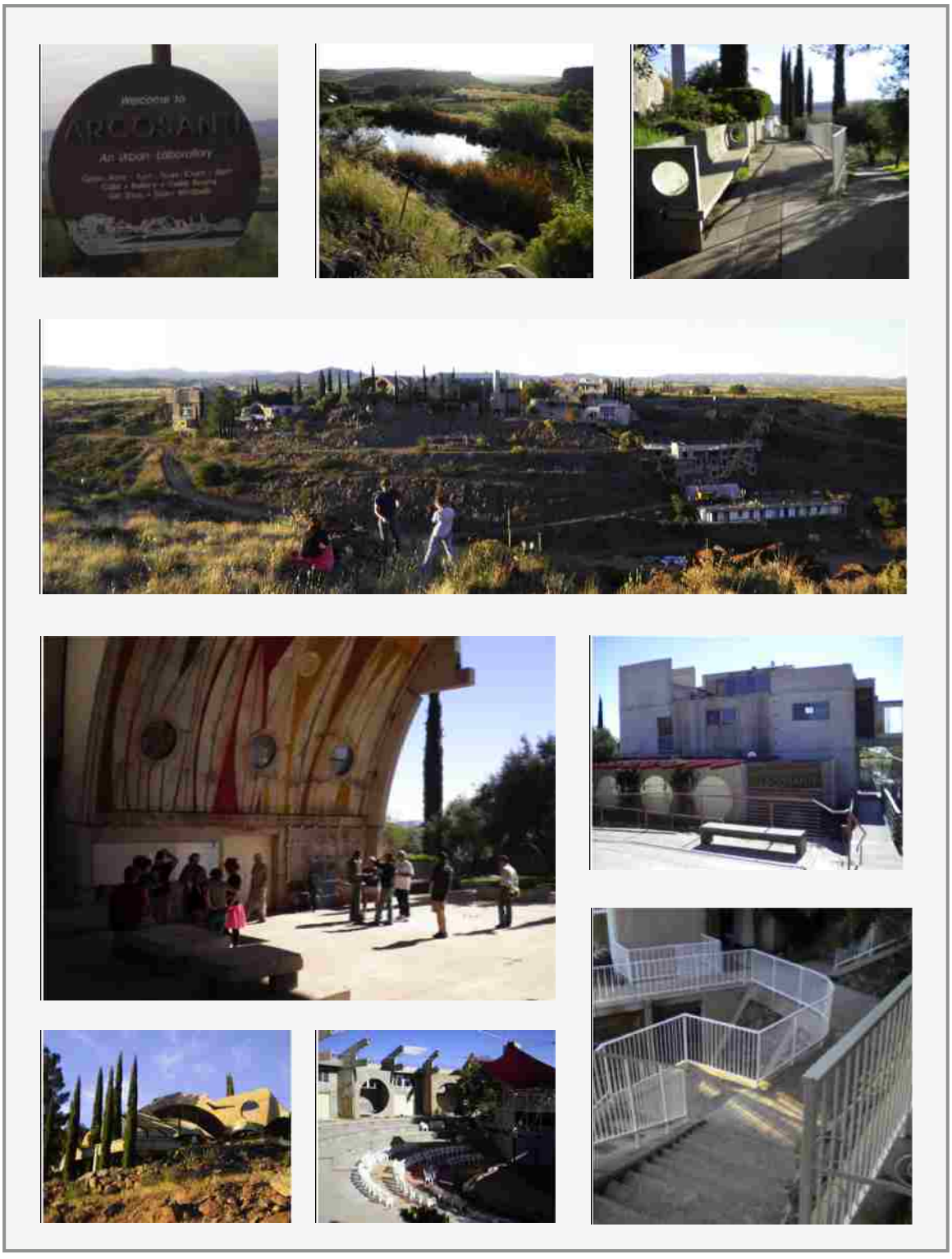


Figure 8: Selected Pictures of Arcosanti

those that stay only for a short time working as interns on different building projects. There are daily visitors and tours of the place. Time at Arcosanti can be short, but it is always intense. It is a highly social environment. Most people eat their meals together in the cafeteria. In the evenings they drink wine, exchange ideas, debate politics, or gather together for a spontaneous creative undertaking. The arts are central to the life the place. In addition to being home for residents, Arcosanti also frequently hosts lectures and live performances.

Living up to its claim as 'an urban laboratory,' one of the most powerful aspects of being at Arcosanti is the feeling of participating in something completely new. This is unlike Village Homes, which is a sustainability-focused modification of conventional settlement patterns, or Dancing Rabbit, which in many ways feels like a return to a village life in a past era. At Arcosanti the strange concept of Arcology—something the world has never seen before—is still being dreamed and realized by the residents who live and work there. People are continually figuring out what this place is truly about, and this imaginary quality of the place is its magic. Regardless of how successful Arcosanti has been or will be, it is intentionally exploring an entirely new way for humankind to live alongside in nature, and the feeling of possibility that accompanies this experiment is freeing and exciting.

Arcosanti Findings

Worldview: How did you come to live at Arcosanti?

Most of the interviewees came to live at Arcosanti because they were interested in the concept of Arcology and in expanding their skills in building and architecture. Many

of the residents have worked in the fields of architecture and urban planning, are students in the fields, or have otherwise become well studied in them. All of these residents came to Arcosanti because they were motivated to address the ecological problems facing the planet through design of the built environment.

AS #2: "I came to Arcosanti with three big ideas, one of them was to work on my portfolio and use the resources of this college campus-like environment, I wanted to work with Paolo Soleri,…and I wanted to work in construction to get hands on experience…Arcology was definitely a big interest [of mine]."

AS #5: "My original interest, interestingly enough, there's a component to the theory which has to do with this rather dense urban environment, and then another component which has to do with the fact that this dense urban environment leaves the rest of nature, to be nature or farming. Growing up in Phoenix I had seen suburban sprawl just take up the countryside. So my interest in Arcology was not so much from an urban perspective, promoting the urban effect, people coming together. It actually had more to do with limiting the impact of the human species from being the absolute dominate species on earth. Later on I got intrigued with cities.

Some residents conveyed that one of the motivations for living at Arcosanti was simply a desire to experience something different or take a break from the mainstream way of life. Some described that the opportunity to live closer to others in community makes it distinct from conventional places, and that this was an attraction.

AS #1: "The community-life aspect really attracted me to Arcosanti"

AS #3: "I don't think I was too sophisticated in understanding what Paolo was doing, other than that he want to create this alternative urban environment. I was just thinking about the place in terms of, maybe it would be a good place to go for a little while, to get away. I didn't feel like going the conventional career route."

AS #2: "Probably the most honest answer [to why I have stayed] would be that I just didn't have anything else to leave for. I didn't have the motivation. [I came in] my early 20's, and I guess at the time I really needed this isolation in order to see some things about myself, about my life that is much easier seen from a distance…a little escape from the expected path in life in order to have this perspective."

Worldview: In what ways is Arcosanti significant?

Like in the other communities, many residents described Arcosanti's significance in terms of its demonstrative aspects. Interviewees commonly stated that Arcosanti is significant because it shows an alternative to conventional cities. But unlike the other

ecotopias in this study, it seeks to provide a creative solution to environmental problems *while also* retaining the benefits of a dense urban environment. The interviewees were very open to critiques about arcology, but they were quick to say that the city is immensely important to human culture. Furthermore, given the large global population, the city cannot be abandoned and must be part of the solution to the planet's environmental crises. Unlike many other communities that are attempting to live more sustainably by abandoning the city, Arcosanti takes this reality seriously, and is willing to experiment with new ideas for what cities could become in the future.

> **AS #2:** "The people who are residents here have a very worldly view, they are not stuck in onto 'we believe in this, we believe in composting, etc.' Paolo Soleri said it's very global, it's for the whole world, its not about isolating yourself. He's giving a solution to the problem of over population, which is a very serious problem...so he's given a very neat answer to that problem. It's not an idea like these days you can see, 'let's live off the land independently, off 5 acres, let's grow our own food, take care of our own animals, which is the style of agricultural society'...of course we will always have the urban problem, overpopulation, and health improvements, now we live longer...so there is this problem. Some people are like 'we are going back to the land.' It's like saying no to the sin of modern life. But Paolo Soleri gives another idea."

> **AS #1**: "It's a landmark in prototyping a different way for community life. And the Arcology concept, although there is plenty to criticize, I still think it's a very significant experiment."

> **AS #6:** "Arcosanti is an experiment. We experiment with planes or cars or whatever, I think we should be experimenting with our habitat, how we should develop our cities"

Arcosanti is also considered significant because of its emphasis on the arts and culture. This was emphasized a great deal more at Arcosanti than in the other ecotopias. The residents here celebrate human creativity by itself, apart from nature, and see it as something critical for human culture.

> **AS #2:** "I think Paolo's solution is more appropriate to modern day, to the reality of today, compared to the solutions of 'lets go back to the land.' There have been times in history when cities have come apart and then there is the Dark Ages again, and culture is lost…I kind of like Soleri's solution better because it preserves culture more."

AS #5: "The thing with Arcosanti is that is was really an artisan, artist, architect, that being Paolo Soleri, who very much, going back to Cosanti, in a very sculptural way, wanted to experiment…Coming up to Arcosanti was to extend that to a larger concept."

Worldview: What are the shared values among Arcosanti residents?

Residents at Arcosanti didn't convey having a strong sense of shared values, except for freedom of expression and individuality.

AS #5: "On a good day the place is pretty much believes 'to each his own'...generally the idea is to not constrain people…Generally speaking, in this place there's a healthy skepticism about any kind of overt mandate, any kind of party line of belief. So I would say in some ways what's agreed upon here is that people don't have to agree all the time.

AS #2: "Freedom is one [shared value], that would be the one that unifies people. I think that everyone who comes here has come because they want to not be put in a constrictive environment, and they find a very 'open to everything' environment."

Though some indicated there could be a variety of opinions in the community, almost all of the interviewees viewed nature as having an intrinsic value, and that it is important for humanity to be exposed to it and learn from it. However, using natural resources for human needs is considered to be somewhat more acceptable than in the other communities. Related to this, the human created world—technology, modern materials, etc.—is generally seen less negatively than the other communities. The value of self-sufficiency is present at Arcosnati, but is comparatively less central to the vision of the place.

AS #6: "I don't know what people think in general, I think we should use nature as much as we can, as much as we should, as long as we are thinking about the future…the idea of densifying here makes it a moot point almost, by using less land you are protecting the land so you don't need to use it. You have a smaller footprint and the rest is nature. I enjoy being able to go into nature how it is. Here you just walk a few minutes and you are in nature.

AS #1: "Everyone has their own opinion, I would guess there is a variety of opinions. There is environmentalism for our own survival, like we are shooting ourselves in the foot…and then there are the people who are at a whole other level, where nature itself is something to learn from and be a part of and that our artificial environment that we are creating around ourselves is sort of without any anchor.

While community living is valued and Arcosanti facilitates more opportunity to live out these values than conventional settings, long-term social connections seem less established at Arcosanti than in Village Homes or Dancing Rabbit. Some residents stated that this might have something to do with the transience of the community, while others reported that there isn't a well-establish social system in place. Several interviewees stated that community life at Arcosanti is akin to a college campus. Also, intentional living at a personal level is more emphasized at Arcosanti than in conventional environments, but is not as highly emphasized as it is by residents in the other two communities.

> **AS #1:** "A lot of people keep to themselves, and they've got their friends, but there isn't this blossoming social scene here. [The young people especially] are just here on vacation, they have somewhere else to go to afterwards…I don't feel a sense of cohesion or sense of unity that I kind of expected. Part of it could be the transitory nature of this place."
>
> **AS #2:** "The place had an appeal to it that was similar to a college campus but a little bit more like a summer camp too. Like more free. Like you don't have homework for example to do after you are done with work."

Built Environment: How does the built environment of Arcosanti reflect the worldview of its residents? How does it facilitate living out of shared values?

Arcosanti makes room for individuality and alternative lifestyles by providing a variety of spaces to inhabit and interact in. People live all over the place, in different rooms and apartments. The different structures have unique names, and people trade rooms frequently, as if the place is one big house. The uniqueness of the environment attracts a diversity of people, and this is highly valued. However, at Arcosanti individuality is expressed less in the built environment than in the other ecotopias. This is because the construction of Arcosanti—being a large unified structure—requires a more a unified decision-making process. While the interviewees shared that residents

have many opportunities to give input for what is built at Arcosanti, this is ultimately decided by the Cosanti foundation. This seems to contrast the other communities, especially Dancing Rabbit, where most of the residents design and build their own homes, and where this was seen as a way of deepening the community's knowledge base. Nonetheless, many of those interviewed at Arcosanti expressed that the newness and the uniqueness of the setting engenders a certain free-spiritedness in the place, that is very distinct from conventional urban settings.

> **AS #2:** "The very important aspect is the freedom people are given here, that freedom to speak your mind or say whatever you feel like. At 'morning meeting' you can say whatever is on your mind together with a very important business meeting…So a lot of people who are a part of American society or any other society, they live in an expected environment they already have the steps written for them…It's very cosmopolitan, and so there are no expectations about behavior, no openly stated expectations about living here…so it is a very free environment here, and that can give you a fresh start...there is a social collective decision [about what is built] and then there is the veto power [of the foundation]. But the community council is pretty respected, the construction managers [also have influence]."

Interviewees mentioned several ways the built environment at Arcosanti bolsters community interaction, with many of the same themes as Village Homes and Dancing Rabbit. They frequently stated that density is very important for community interaction simply because it puts people into close proximity with one another. Shared facilities such as the cafeteria and the swimming pool also bring people close together. In fact many described the cafeteria as the heart of community life. Arcosanti is not designed for automobiles, and the absence of car infrastructure allows the environment to be designed exclusively for the pedestrian. Sidewalks and stairways connect the various spaces within Arcosanti, meandering along the edge of the mesa, or through narrow passageways between buildings. These paths are also places where people connect to each other.

AS #2: “There's a sense of neighborhood here, you can walk outside your door and find someone to chat with.”

AS #6: "At this scale, everyone knows each other, a lot of people eat together most of the time. There are times and places where people can mingle and learn from each other, and hopefully influence each other. “

AS #1: “People live a lot more close together, so we do see each other all the time. I think the time that I would rally a bunch of people together would be at lunch time or at dinner time.”

In contrast to the other ecotopias, the built environment of Arcosanti exposes its residents to the natural world, not through building with natural materials, but rather by designing the built environment in a manner that is responsive to the surrounding landscape. Arcosanti is designed in such a way that people are frequently outside. All of the walkways are outdoors, and many workspaces are outdoors also. The ‘foundries’ that make the communities famous bells are situated under very large asps that are oriented in such a way that they shield the sun in the summer and harness it in the winter. The view of the surrounding landscape is also given priority in Arcosnati’s layout. The major walkways go along side the edge of the mesa, and the main gathering spaces—the vaults, the amphitheatre, and the swimming pool—also have wonderful views of the landscape. Lastly, like Dancing Rabbit, the density of Arcosanti has allowed for the preservation of the pristine surrounding landscape.

AS #5: "A lot of people watch the sunset, watch stars. Here you really notice the difference between a full moon and a new moon. The birds. One of the interesting things about these buildings and the mesa is that even though you are inside, you are in and out of buildings all the time. In a city a lot of times you'll disappear into a building and be there for the day. Here you go from building to building to building. You are always in and out. There is always the breeze, some line of sight. You always know what the weather is like. The air is good up here, there is that feeling of a natural state. Where we are sitting right now we can look across and see the mesa and the trees and rocks and basalt. I personally find that to be terrifically rewarding."

AS 4: “It gives us the opportunity to see how beautifully architecture and the environment can be brought together; technology, the environment and people.”

AS#2: “The structures are built with respect for nature, the solar orientation, the wind turbines, the greenhouses, so they are built with respect for nature…wild animals make shelters, but yeah these structures, they are difficult because they are made

with concrete and steel and those are materials that we have to hurt the land in order to build"

Sacredness: How do Arcosanti residents understand and experience sacredness? How does Arcosanti specifically relate to sacredness?

Like those in the other ecotopias, the interviewees at Arcosanti primarily described sacredness as having to do with nature. Some described this as humbling experience of understanding or experiencing something greater, while others described having to with an experience of retreat or a break from daily activities. Sacredness in this sense was experienced in solitude and human activity seemed to interfere with it. Arcosanti facilitated experiencing this sacredness more than conventional urban environments, mainly because of its proximity to a serene natural environment, its quietness, and minimal human presence. Sacredness here evoked a feeling of calmness, peace, and confidence.

AS #2: "Times of the day are sacred, definitely the morning is sacred to me, and sometimes the first human interaction I have kind of stops that sacredness…the morning in the desert, and I guess everywhere, but here in particular seeing this vast nature around you is really sacred…the 'Minds Garden' is sacred, I like to go there and…it really helps me to reach a state of calmness in my head…that's the place for me to go and let go of the physical, the material and kind of find a peace inside. The roofs of the buildings are sacred, the river bed…I really enjoy this walk here that makes a full circle around the mesa and it really gives a progression of the elevation and the site, from the flat desert up, going through beautiful views, going along the river, so that's really a great experience for me, it connects me back to something primal or calmer nature of mine…feelings of peace, calmness, knowing that you can do what you need to do to get where you want to get…acceptance of the past…It depends, sometimes sacred means reverence and a little fear, awe understanding of how a little pebble you are, and understanding how life can be."

AS #6: "I don't have a special place I go to meditate or anything although sometimes I would like that, but I will go to nature, that would be my place where I would meditate, so nature is sacred to me and that's where I'd go."

Some described sacredness as being found in human structures and the built environment, or even that the works of humanity can enhance the sacred quality present

in nature. There was a mixed response as to whether or not Arcosanti is in fact such a place, though it has attracted some people that are pursuing a sacred experience. In any case, quietness, leanness, and a gesture to the natural world are important elements in creating a sacred quality in the built environment.

AS #5: "Arcosanti generally avoids the concept of sacred space being a created thing, something that we make. Like we don't have a meditation room, we don't have an ashram. We have a classroom with nice carpet to do yoga…now mind you, in the early design of Arcosanti there was a monastic part of it. Paolo Soleri has this idea that you want to have a monastic side, or a very very very lean aesthetic. One of the other things that I think is generally commonly held here is the idea that leanness is a solution. People equate leanness with being impoverished or something, but you can be very proactively intelligently lean. That's not necessarily leading to a sacred space, but it gets back more of that attention to nature and that position within nature. We will have mediation groups that will come stay here on a workshop. We've had yoga groups come here and stay, we've had writing workshops where people come and do writing. It's generally a very quiet place at night, there's not a lot of lighting. Though there is a lot of things going on it doesn't have that perpetual buzz that you would have in a Manhattan where it never unplugs. This place, people tend to value a certain amount of leanness. So one could argue that the whole site reflects a certain amount of that. That's on a good day. Halloween is tomorrow night, that's going to be a little more robust."

Some residents at Arcosanti referred to sacredness in terms of community or human connection. But this was a far less pervasive attitude at Arcosanti than in the other communities. Sometimes this kind of sacredness is created when people build or work on something together.

AS #4: A sacred place for me is when family and friends are present, it's not a place or a structure that represents anything other than people, and I feel that people are sacred."

AS #1: "The sacredness in other places, for myself personally, need to be cultivated…maybe to a lesser degree they are intrinsically [sacred], and maybe its just because its so meaningful to so many people. It's a sacredness that exists because of peoples belief in it and the people that are around it."

Sacredness: How is Arcosanti a transformative place?

The interviewees thought that Arcosanti was a transformative place in a wider sense, because of the forum it creates for discussing new urban possibilities. In this way Arcosanti is thought of as outwardly transformative. It also serves as node or an anchor

point for people with alternative concepts to exchange ideas and information. The experimental character of the place is attractive to people with these interests, and this creates a place rich in ideas and knowledge. Like an art piece, the place serves as a focal point of discussion. Hence, it is not surprising that many interviewees expressed that they had mostly been transformed by learning from others.

AS #3: "The seven thousand people that have done workshops here, they've projected their dreams onto this place."

AS #1: "The intention of people coming here, the types of people that come here, there are so many heads that are into environmentalism."

However, transformation at Arcosanti seemed to mostly occur at the individual intellectual level rather than at an inter-personal level. Again this reflects the notion that the social dynamic is more like that of a college campus than a fully developed, or well-rounded community. Unlike the other ecotopias, where residents commonly experience transformation at the personal and interpersonal level—becoming more social, more open and trusting of others, growth in practicing intentional living—this was less commonly reported at Arcosanti. Those that did express having a personal transformation tended to attribute it mostly to the fact that Acosanti has given them a chance to take a retreat from the mainstream world, and to figure out something about themselves. The manner in which this was described insinuates that some residents consider their time at Arcosanti a vacation of sorts. This is different than residents in the other communities, whose personal transformations result in making them feel more at home and rooted in a place. In this respect Arcosanti was not conveyed as especially more transformative than other situations where people might live closely together in a unique environment.

AS #6: "[At Arcosanti] I'm not caught up in this craziness of making money and spending money and being in that whole consumerism deal, where you become totally in it. You don't have any time for yourself to think about other things…This place allows you a little bit more of the possibility

to do these kind of this because you have a lot less to deal with, you are living close to each other, you don't have to drive to work, you don't think about buying things all the time because you aren't making a huge amount of money, but you have what you need to live. In that way it's transformative, to me.

AS #2: "It is a very free environment and people do loosen up a bit here which can give you a fresh start, to think about your life, what you want to do…finding confidence about doing what you really want to do."

AS #5: "Some of the people coming here, come here having visited 10 or 15 or 20 different nations and have a lot of global experience, so it might no be as transformative as you might think, it's instructive more than transformative…In the sense that everything is transformative, sure it's transformative. In the sense that this is a wildly different place that you can't experience anywhere else, I don't think so…there was a young woman who was living here from New York City…who had been in all kinds of interesting situations and she said that Arcosanti was the most regular place she had lived in [laughing]…some of the antics that go one here remind me of a freshman dormitory more than this ultra transformative place."

Synthesis of Findings

The previous section introduced the ectopias and explained the general findings from each community. This section will attempt to synthesize those findings into generalized themes. While most of these themes convey what is playing out successfully in the ecotopias, others convey certain ideals that might not be playing out in full in each community, but are nonetheless aimed for or desired by all three. Frequently, what was reported as lacking in one community was found to be successful in another and thus when analyzed together, the communities work in concert to more fully demonstrate these themes. This section will follow in the same topical order as the interview questions—worldview, built environment, and sacredness.

Worldview: How do residents come to live at the ecotopias?

Residents generally come to the communities because of the feeling that the world's ecological situation requires humanity to find a better way to live than what a

conventional urban situation affords. Residents tend to view many aspects of conventional urban environments—more specifically suburban contexts—as ecologically unsustainable, wasteful of resources, and disconnected from nature. Such environments are also viewed as unhealthy not just for the planet but for people as well, and many feel they are disconnected, personally isolating, and suppressive of diversity and individuality. In response to this, the ecotopias are viewed as offering a positive alternative to these wider problems, and in a way that is also personally rewarding—giving a sense of hope, connection, and freedom over the feelings of fear, disconnection, and suppression induced by the negative aspects of conventional urban environments. In short, residents in each of these ecotopias were attracted to their respective communities because they offer an environment where they can live out their values, more freely experiment with alternative lifestyles, live more closely to natural world, and live more closely with other people.

In Village Homes residents frequently stated that they feel close to many people in the community, that it is easy to connect and make friends, and that the natural world is accessible and beautiful. Many also conveyed that there is a certain relaxedness and openness that they feel in Village Homes. Many interviewees stated that Village Homes has a reputation for being this way, that this attracted them to the place and is an important reason for wanting to stay.

> **VH #9:** "This environment fosters communication between neighbors, I tell people I have 250 neighbors...we all consider ourselves neighbors even if we're 4 blocks or 5 blocks away…the sense of neighborhood is just naturally big…somehow there's this mentality that changes when you're here."

Interviewees at Dancing Rabbit expressed a very sharp distinction between life in their community and that of conventional environments. Residents come to Dancing

Rabbit seeking an environment that facilitates alternative lifestyles. Interviewees frequently articulated that Dancing Rabbit has different pace of life that gives the opportunity to live out a different set of values. This pace also allows for opportunities to grow closer with other people to and to nature.

> **DR #3:** "In addition to being captivated by the beauty of the space looking up and actually seeing the stars, the milky way, the coyotes and the owls…when I came here there was this slowness to the pace where people actually had the time because they weren't commuting to work, because they weren't putting all of their energy in to making a lot of money so they could afford a lot of things. People worked together on projects, and so there was this lovely sense of shared lives, shared thoughts, shared respect, this basic human comfort of being with others of your species that didn't feel commercial…it just felt so human and sane."

Interviewees stated that they were attracted to Arcosanti because they were interested in learning about Soleri's concept of Arcology through hands-on experience with building and design. They were also attracted to living with others in an open and free environment, as well as being surrounded by a pristine natural landscape.

> **AS #6:** "I studied architecture…I took a trip with some friends and we went to Arcosanti and I just fell in love with the place right away…I was also concerned with the environment, it was always something I took seriously and felt like, as an architect, I should make effort to think these problems through and see what I could do as a professional."

Worldview: How are the ecotopias significant?

Residents overwhelmingly expressed that their communities are significant places in their lives and in the lives of the other community members. But beyond this personal significance, residents also feel that the ectopias are significant because they stand as positive examples for the world at large. The ecotopias are seen as part of a remedy to wider social and ecological problems beyond their immediate context. Therefore, residents feel that contributing positively to their community also contributes positively to world at large. In this way, the ecoptias are viewed as having both internal and external significance.

Residents feel that Village Homes is significant because it is a unique community that is known nationally and internationally as an innovative development in sustainable living. They stated that Village Homes is also known as a headquarters for progressive environmental politics and organizing, and that it has influenced the City of Davis as well as the wider central valley region.

VH #8: "Absolutely [it's significant]…Village Homes became sort of a beacon or icon [in the early 80's], and people came from all over the world. The French president, and Roselyn Carter as firstly lady came in…People came from Europe and Japan and Russia."

In Dancing Rabbit, residents conveyed that it is very important that their community puts a lot of energy into engaging the wider world, be it through visitors who take what they learn back to their home communities, through posting information on the internet, or through other media projects.

DR #6: "I think the most significant thing for me might be that we are trying, that we have that intention to take good care of this place and be an example about how others can try to do that too."

DR #4: "As a model [it's] a very significant community. We have a lot of traffic on our website, a lot of people get exposed to what we are doing, we are very pro-media, pro-interviews, a lot of researchers have come through. So we are willing to not only be the experiment about how to be sustainable but to actually show up and share what we are learning with other people."

In Arcosanti, external significance is central to the community's identity. The contribution of the "urban laboratory" to the wider discussion about building cities in an ecologically responsible manner was central to Arcosanti's founding and continues to be of central importance today.

AS #4: This is carried by the force of humans working together collectively toward establishing something, similar to what cathedrals were centered on. Cathedrals established communities around them. Many of the major cities in Europe were established around cathedrals. This is not a brand new feature of human urbanism...*but we are taking it a step further*, we are introducing it at a time when we need to reconsider or reformulate society all together.

AS #3: "Arcosanti is holding the space for that unique idea that could be relevant or could have some ramifications for the future of urban development."

Worldview: What are the shared values among residents of the ecotopias?

Residents in each community expressed that they hold a set of values different that of the surrounding dominant culture. Residents in the ecotopias highly value nature, and tend to think of nature as having an intrinsic value—something to be experienced for what it is and that not to be thought of solely in terms of resources for human use. Residents also value living in community, being connected socially, and sharing resources and experiences with one another. Individuality, variety, and freedom are also highly valued in each ecoptopia, and considered to be an essential part of strong community.

The dynamic of these core values is complicated, as the values of individuality, community, and the intrinsic value in nature seem inherently conflicting—the individual is in tension with the community, the community is in tension with nature, etc. But viewed in consort, all of these values further convey an idea that is pervasive in all three ecoptias. That being, the pursuit of a lifestyle where the individual is less isolated than conventional living requires difficult sacrifices, but these sacrifices are outweighed by the ability to achieve greater connections with the larger social or ecological body. Here the individual does not simply amalgamate with the larger community identity, in fact the opposite is true. Unique individual identities are uplifted in these places *along with* the greater identity of the community. The connections between the individual, community, and nature can be achieved *only by maintaining* the integrity of the individual, the community, and the natural world, and then *by harmonizing* these different identities. In this way, values that at first seem contradicting are actually mutually affirming.

Harmony between the individual and community is exemplified by the way in which the ecotopias treat issues of privacy and ownership. In each of the ecotopias, residents are, in some way, willing to sacrifice some privacy and individual ownership in order to facilitate stronger community connections.

The layout of Village Homes—including a large amount of common space and lack of privacy fences—indicates less privacy that a conventional suburb. But the physical openness of the place facilitates person-to-person interaction, and this allows people to naturally grow closer to each other. Interviewees at Village Homes conveyed that, since moving in, they have opened up to neighbors more than they would have in a conventional suburb. Some also stated that they feel safe and more truly themselves when they are in Village Homes. This personal openness allows for strong and authentic community connections to be made in a way that uplifts individuality rather than suppressing it.

> **VH #8:** We don't do a lot of things to show off to our neighbors, because our neighbors know who we really are. My neighbors know all my faults as well as all my good points. We know all the Achilles heels of everybody around here. I'm sure you could go around the neighborhood and find out the trouble with [me], or I know that this guy has a bad temper or this guy is terminally shy or this guy is a pack rat, or whatever."

In Dancing Rabbit, the sacrifice of privacy can especially be seen in the sharing of resources. This willingness to share enables more diverse ways of living, and thereby allows for different lifestyles be expressed and to coexist. More than the other communities, residents at Dancing Rabbit articulated that diversity and experimentation is a major asset to the community, and an important part of pursuing a more sustainable lifestyle. So long as people stay in close enough relationship to share their experiences with one another, they are encouraged to experiment and build a life according to their

unique needs and preferences. Experimentation along with a commitment to community participation contributes to a sense of closeness and acceptance of the individual.

> **DR #7:** "It feels very fluid, that was hard at first, but have gotten used to it, people are very different here and so everyone has their own level of comfort and need for space and that's what I really like about dancing Rabbit is that is does seem like there's a spirit of accommodation for all those different gradients"

Arcosanti feels, in many ways, like one big house. Residents, in a sense, live as housemates, in very close quarters and with very little privacy. In one aspect or another, most everyone lives in and works on the same single arcology project. This closeness creates many opportunities for sharing and collaborating with the larger community, and the unity of work makes the affects of one's efforts more noticeable.

> **AS #1**: "Anyone that has something they can offer can just make a time to teach it and announce it, and have an impromptu class, an event, or a teaching or something. You can do that anywhere but somehow it's more normal here. Also if something's broken and you see it and you fix it, within an hour someone will notice and be benefitted by it. So the return on your effort is really direct...whereas if you live in a city and take it upon yourself to fix a pothole in the road no one cares."

Related to this, many residents conveyed that the shared values of their community counter or trump certain values associated with the currently dominant economic system—such as consumption, growth, and maximizing profit—as these do not promote sacrificing privacy or private ownership for the greater community. The sacrifice of privacy can been seen clearly in the way in which private property is treated in each community.

Built Environment: How do the built environments of the ecotopias reflect the worldview of its residents? How do they facilitate living out of shared values?

Residents in the ecotopias articulated shared values pertaining to individuality, community, and the intrinsic value of nature. All of these values are reflected in the built environment of each community, but manifest in unique ways.

The built environments of each ecotopia express the value of living in community through the creation of human scale, pedestrian friendly environments with a large amounts of land dedicated to common space. These environments are dense, have a blurred distinction between public and private space, are permeable and well-connected for the pedestrian, and intentionally limit features that isolate the individual from community—such as privacy fences and the automobile. In Village Homes the pedestrian moves freely on walking and biking paths that wind and cut through the community every which way, while automobiles are restricted to narrow streets and cul-de-sacs. There are few walls and fences and no clear demarcation of property lines. There are also many large and small common spaces found throughout the community. Lack of privacy fences and interwoven pedestrian trails can also be found at Dancing Rabbit. Arcosanti, being one large structure, does not have individual lots. Automobiles are outright banned in Dancing Rabbit and Arcosanti, barring a few delivery routes.

The value of individuality and variety are expressed in the built environments through the creation of a variety of unique and intentionally designed structures and spaces. The various structures and spaces not isolated but connected by a web meandering pathways. This creates environments that hold together a sense mystery as well as discovery. In Dancing Rabbit, this is most evident in the uniqueness of the structures, varying in size and materials used. Though each house in Village Homes is unique, all are built in a similar architectural vernacular. Here the variety in the built environment is most apparent in the plan of the whole community, which creates a variety of spaces *between* the structures—large and small open spaces, secluded intimate spaces, and everything in between carved by orchards, gardens, and thick vegetation. In

Arcosanti, every aspect of the built environment is unique, each of the buildings and the spaces between them are easily identifiable and unlike any other. Yet, at the same time there is a physical and aesthetic unity about the place. In one way or another, this unity within variety is found in the built environment of each ecotopia.

Figure 9: Structures at Dancing Rabbit are unique and experimental, but all follow the community's ecological covenants, which require the use of natural or reclaimed material

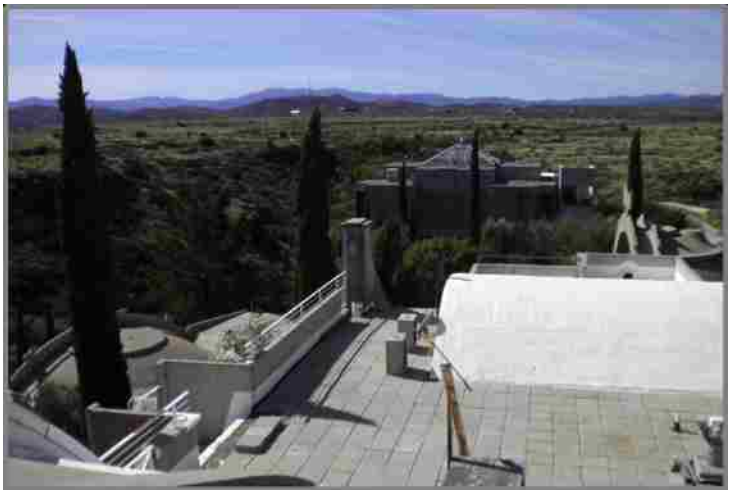


Figure 10: Some of the unique structures and spaces at Arcosanti can be seen in a view from on top of 'The Vaults'

The intrinsic value of nature is expressed in the built environment of each ecotopia, but in many different ways, as each community is situated in a different context and natural setting. Each community includes a sense of wilderness into or alongside the built environment. In the case of Arcosanti and Dancing Rabbit, in which the community is surrounded by natural landscape, paths and views are used to create a sense of connection from the center of the community outward. In the case of Village Homes, where

Figure 11: Diagrams and pictures showing the incorporation of 'wilderness' in each community. Situated in a rural setting, Dancing Rabbit and Arcosanti are surrounded by wilderness. Village Homes, on the other hand, is situated within the city of Davis, and creates a sense of wilderness within.

the built environment is surrounded by a larger urban environment, a sense of wilderness is found within the settlement, created by clusters of vegetation.

Residents conveyed that structures and systems designed to tie in or to be sensitive to local ecological systems can also contribute to a sense of connection with the natural world. This is commonly achieved through the visible use of sustainable utilities and natural materials. When the sustainable utilities are transparent they can facilitate participation and awareness of the unique aspects of the local climate and ecology. For example, each ecotopia has structures that are suited with photovoltaic solar panels.

Figure 12: Most houses in Village Homes are oriented to utilize passive solar energy

Figure 13: At Dancing Rabbit, structures built with natural materials have excellent thermal mass to control temperatures. Many are also suited with photovoltaic panels.

Dancing Rabbit, generates all of its electricity onsite with photovoltaic panels and wind turbines. Passive solar energy is widely utilized in Village Homes through the south-facing orientation of most houses, as well as in Arcosanti where very large apses create ideal temperatures for outdoor gathering spaces. An above ground drainage system that recharges the groundwater is integrated into the design of Village Homes, and this accompanies several of the main pedestrian paths. Using natural building materials also gestures towards a connection with the natural world. This was especially the case in Dancing Rabbit, which requires

natural or reclaimed building materials to be used in all of its structures. The experience of building in this manner is highly valued by the residents of Dancing Rabbit, because it is seen as a way to connect with the land.

> **DR #4:** "There is something about when you build your own home, which has been true for almost everybody here ... you are much more in touch with the elements. You have to think about how the building relates to water flows and the wind and the temperature changes, and you just have to get more in touch with what is happening in nature."

Sacredness: How do residents of the ecotopias understand and experience sacredness? How do the ecotopias specifically relate to sacredness?

Though the interviewees in each community described a variety of sacred feelings and sacred spaces, sacredness is most generally associated with certain kind of blurriness between the distinctions of self, community, and the natural world. Every resident interviewed in this study expressed that nature is closely associated with sacredness or sacred feelings, and many expressed that feeling a connection to community has to do with sacredness as well. A few interviewees described a sacred place as one that is tied to an important personal memory of some kind. A few also stated that structures or built places that had endured a long time can evoke a feeling of sacredness. Residents in each community consistently described awe, peace, confidence, and a connection with something larger as sacred feelings.

Though residents in each ecotopia hold places outside of their communities as sacred, when asked, many stated that their community also feels like a sacred place. Residents typically described the built environment of the ecotopias a sacred in as much as it facilitates a sort of 'blurring' experience between self, community, and nature.

Though all of these expressions of sacredness are found in each community, their prevalence varies. The feeling that sacredness is connected to nature is consistent in each community, while residents of Village Homes and Dancing Rabbit expressed more clearly that connection to community is also sacred. More than the other ecotopias, residents in Dancing Rabbit clearly articulated sacred experiences as moments when they feel a strong connection between their whole community and nature.

DR #7: "[A sacred feeling] is also sometimes when we are in a circle, we are circling and we are singing, sometimes when we sing certain songs it gives me goose bumps because I feel that connection like 'wow we really are standing on this earth, and we are trying really hard, and we are doing what we can to make the change that we think we need to make, and we are all here doing it' it feels pretty awesome."

Arcosanti residents most often described sacredness as a connection between self and nature, but less commonly described feeling sacredness in terms of community. Interestingly, residents in Village Homes and Dancing Rabbit more commonly described their community as a sacred place than did residents at Arcosanti.

AS #1: "I think that [nature] is the closest thing to a religion that I've got on a personal level… [Sacred feelings] are peace, inner peace, acceptance, awe, belief in myself and sort of empowerment and trust in myself that I won't hurt others or do something wrong."
AG: Does that feeling ever happen in Arcosanti or around Arcosanti or from it?
AS #1: "I don't know if it's happened because I'm at Arcosanti. I think in some ways yes because, if you are having a sacred experience or something there is less people around and more nature to go to. So you can have that...in that respect it's more conducive to that, but in my personal experience I don't know if I've ever felt something really special here that I would have experience anywhere else…except for the access [to nature]."

Sacredness: How are the ecotopias transformative places?

The interviewees conveyed that the ecotopias are transformative places, or potentially transformative places. The ecotopias were described as transformative in two basic ways—transformative to the larger world, and personally transformative. Residents in each ecotopia feel that their community has a transformative affect on the

larger world. By providing an alternative to conventional ways of living the ecotopia influences wider culture. This perspective is strong in all three communities, however it seems particularly strong in Arcosanti. By proposing such a drastically different concept than anything that currently exists, Arcosanti seems particularly oriented outward. It as though it Arcosanti is an art piece being observed by outside world, instigating different responses and provoking discussions.

Residents also considered the communities to be personally transformative. This kind of transformative quality exists because of to the various connections the communities facilitate. This is especially the case for Village Homes and Dancing Rabbit where residents commonly stated that they have been transformed by connecting with other people while also deepening their understanding of the natural world. Residents of Village Homes and Dancing Rabbit also more frequently conveyed that their community is uniquely transformative at a personal level.

VH #9: "It is transformative in terms of people interacting more and being friendly."

DR #5: "It is a complete re-evaluation of your life and the way you relate to yourself, to others, to the planet."

In terms of transformation, Arcosanti seems to be a slightly different case than the other communities. Arcosanti residents typically described potential for personal transformation as having to do with the space away from a conventional life rather than being transformed through inter-personal relationships. In fact, some residents interviewed at Arcosanti stated that the community could be doing a better job at encouraging this kind of transformation.

AS #1: "I've given this a lot of thought, and the more I've thought about it the more I realize how little I understand it. I see a lot of talent come in here and I see a lot of talent leave before it really applies itself very much. I also see a lot talent immediately get to work and good things happen, but it seems like Arcosanti is constantly waiting for its ship to come in…Maybe if there were something a little more formal…Arcosanti is such a ripe place for experimentation

> and yet a lot of residents here just want to go watch movies after work, or do what people want to do anywhere else, they want to watch some TV show and have a beer and go to bed. And there's nothing wrong with that. But…there are people who don't recycle and don't want to, they throw stuff away because it's easier…It's not a big deal but it counteracts value systems in an obvious way to visitors and everyone, and that isn't frowned upon or even talk about because there isn't a collective communication system."

Extrapolations from Generalized Findings

In a more comprehensive view of the findings explored in the previous section, patterns can be seen in all of the ecotopias that pertain to three levels of identity: the individual, the community, and nature [see Table 1]. The shared values in each community generally have to do with individual freedom, living in community, or the intrinsic value of nature. The built environment reflects these values through the creation of a variety of unique spaces and structures, the creation of infrastructure that facilitates connections among individuals, and the incorporation of the natural world into the design of the built environment. Finally, sacredness among residents is generally felt as a connection between two of the three levels of identity: self to nature, self to community, or community to nature. The built environments of the ecotopias reinforce these sacred feelings in as much as they facilitate connections across the different levels of identity. These connections engendered feelings of rootedness, belonging, awe, and peace.

LEVEL OF IDENTITY	SHARED VALUES	BUILT ENVIRONMENT	SACREDNESS
Individual	Individuality, Freedom of expression	Variety of structures, Uniqueness of spaces	Connecting self to nature or self to community
Community	Living in community	Abundant common space, Permeable and well-connect pedestrian-oriented environment	Connecting community to nature or self to community
Nature	Intrinsic value of nature	Incorporation of nature into the built environment	Connecting self to nature or community to nature

Table 0: Themes of shared values, the built environment, and sacredness organized by three levels of identity

This section seeks to extrapolate and expand on these findings in ways that might be generalized beyond the ecotopias and applied elsewhere in different of contexts. They are the distilled and expanded themes from the fieldwork of this study. Therefore, these extrapolations should be taken as a more general articulation of what is *shared* among the communities yet *distinct* from conventional settings. They are the outcomes of the study that may be generalized beyond these communities and applied elsewhere to create built environments that aim to engage an ecocentric worldview. As stated earlier in this study, ecotopias are real places not utopias (no-places), each greatly influenced by their surrounding contexts. Therefore, these extrapolated guiding points should be mindfully integrated with the nuances of the contexts wherever they might be implemented.

This section will first explain a theoretical process by which the ecotopias come to be considered sacred by residents. Second, a list of generalized design themes will be presented that enhance connection between self, community, and place, thereby facilitating the process of sacralization.

The Ecotopias and Sacralization

Several themes and patterns emerged as interviewees shared what they considered to be sacred, how this notion of sacredness pertained or didn't pertain to their communities, and how they have been transformed by living there. These patterns constitute the theoretical process of sacralization being introduced here. This process of sacralization is meant to outline the general process by which ecotopas, such as the communities visited in this study, have become sacred, or have the potential to become sacred in the perspective of residents.

This process of sacralization is theoretical, and has *not played out in a full sense in any the three ecotopias visited*. Rather, this process should be seen as something that is playing out in varying degrees among residents in each community. The notion of sacredness itself was articulated strongly by some residents and not so strongly by others, and its intensity varied from community to community. It is also important to note that this theory was extrapolated not only from what residents conveyed as sacred or meaningful, but also from what was conveyed to be lacking or deficient.

This process can be summarized as movement from a state of rootlessness, fear, and isolation, to a state of peace, belonging, and confidence. It is a restorative process, where the self, the human community, and the natural world are felt to be in right relationship. This occurs through a process of transcendence or self-identification with the larger. This transformation happens *through immediate place, but extends beyond place*. Out of the research, four basic phases of this transformative process were determined.

1. *Longing for connection*
2. *Finding connection*
3. *Transcending self through the connections offered in the place, permitting self-identification with the larger.*
4. *Being transformed through self-identification with the larger, cultivating feelings of belonging, rootedness, confidence, and peace.*

The following will explain this process in greater detail.

1. Longing for connection:

This process begins from a state of isolation and a longing to live in a way where one feels more connected to their world. This longing is the underlying motivation for one to build or move to an ecotopia. Residents conveyed this in a number of ways. Many conveyed that they moved to the ecotopias out of a desire to more intentionally live out core values. Many also expressed they felt dissatisfaction, a lack of hope, or an inability to live out these values when they lived in a conventional urban environment. From this it can be extrapolated that the underlying motivation for moving to an ecotopia is a desire to live with a greater awareness of the social, built, and natural systems to which one is connected.

VH #8: **"**I moved in because I wanted to practice what I preached. I was already thinking along these lines."

DR #3: "Before we moved I remember thinking 'Is this it? This is not the life I want.' I tried to make things happen in my old neighborhood but it just was really difficult because not everybody wanted that. People appreciated the stuff I did, but it wasn't enough for me."

DR #5: "I [moved] because I really didn't want to be separated from the different aspects of my life…I didn't want work and livelihood and social dynamics and cultural appreciation for my kids to all be separate, and Dancing Rabbit offered that."

2. Finding connection:

Ecotopias facilitate connections between self, community, and nature. These connections are experienced in a variety of ways, and deepen over time. Feeling connected in these ways underlies sacred experiences. Residents often described a sacred experience as finding a connection between self and nature, self and community, or community and nature. This theory extrapolates that if a place can facilitate connections in *all three* of these ways then a greater sense of sacredness will be attributed to the place. This greater sense of sacredness is not felt in one instance or a single event, but is rather

an aggregation of multiple connective experiences that occur over an extended period of time.

VH #4: "For me certainly the natural environment has a sacred quality and I do feel much more connected to that in Village Homes than I did living downtown. Just the beauty of Village Homes, the natural beauty, is just a great reminder...of what for me is sacred space. [I feel] appreciation, gratitude, and respect for the natural world"
AG: "Would you ever call Village Homes a sacred place?"
VH #4: "Certainly"

DR #3: "Connecting with other people through work or play or daily life or shared experiences felt to me like it fed something in my soul that was crying for connection."

AS #4: It's about all people coming together for an experience, those are the sacred moments.

DR #4: "Our dinner routine where we circle up and we hold hands…All these people connected, and we take a moment of silence. Our moments of silence, at least during the parts of the year when we are outside are really a moment of being in the natural world, quiet. What you hear is the wind and the birds and the bugs, and children occasionally. It's this moment of really connecting with the natural world, and then singing together…I love that ritual…something about it feels very grounding to me."

This notion that a greater sense of sacredness will be felt when a variety of opportunities for connecting self, community, and nature are available is further supported by the case of Arcosanti. For most interviewees, there is a lesser sense of a unique sacredness at Arcosanti, particularly in regards to community connection, and most of the feelings of sacredness towards the place are due to its close proximity to nature. It is extrapolated here, that a greater feeling of sacredness might be felt at Arcosanti if there were a more intentional focus on connecting individual identity with the identity of the larger community. Individuality at Arcosanti is highly valued, but harmonizing the individual within the larger community seem to be given less attention than in Village Homes, and especially in Dancing Rabbit.

It is also important to note that the sense of sacredness is associated with connecting to community *cannot be achieved by coming together through the elimination of individuality*. Rather, the opposite is true. *Individuality is a critical part of any sacred*

experience because such an experience is a harmonizing of differences, not an elimination of differences. This process of sacralization cannot be a process of homogenization, and accordingly, a sacred place cannot be a place where everyone is the same or every structure is alike. This explains why the value of individuality and freedom of expression is so prevalent in each community. Moreover it is the *variety within* the ecotopias, along with *the opportunities to connect with these various parts* that allow for a heightened level of connection and a greater feeling of sacredness.

3. Transcending self through the connections offered in the place, permitting self-identification with the larger:

It is through finding connections between self, community, and nature, that one comprehends that they are a part of something larger, or in the case of connecting community with nature, that there is something larger than the community. The sense of this 'larger something,' is often felt when residents of the ecotopias are oriented toward a grander scope of time or a vast expanse of space, especially in a natural setting. Sometimes this identification with the larger is experienced when residents feel strongly included into the life of the community.

VH #6: "[In a sacred experience you feel] a sense of purpose, a sense of meaning, and a timelessness. The time that we are here as humans is really short, but if you experience sacred thing you kind of move beyond that in a way. You are still a human and you are still going to die eventually but the span of time that you are interacting with is more cosmic, well I don't know what I'm talking about here. If you really grasp your insignificance for a minute its really expansive of time, it kind of expands your time to where you almost can tell how insignificant you are and how much larger everything else is and how, you're connected to a bigger thing. I guess that's is the simplest way to say that."

DR #6: "Definitely you can loose yourself by expanding that sense of community, and being and belonging to all living things. Then you realize sort of who your friends are, and who your neighbors are, and how rich it is to be alive, that's a good feeling."

DR #4: "[In a sacred experience] the boundaries between 'me' and 'it' soften."

AS #2: "There are times of the day that are sacred and places too, sometimes the first human interaction I have sort of stops that sacredness. So the morning in the desert, and I guess everywhere, but here in particular with this vast nature around you it is really sacred…[sacred] places are [where I] reach a calmness in my head of the many things I have to do…to let go of the physical the material and find a peace inside."

The ecotopias do more than just facilitate of connections within the community, they serve as vehicles for identifying the self with the world. This is similar to the concept of self-realization found in deep ecology. Here, the individual identifies their 'self' with the whole of life. As the sense of self is broadened, the wider evolving world is seen as an expansion of life's potential (Bodain 27).

4. Transformation through self-identification with the larger, cultivating feelings of belonging, rootedness, confidence, and peace.

Experiencing this identification of self with the larger may be temporary, but the affects of such experiences are lasting. They are transformative, both to one's feelings towards the immediate place as well as their feeling toward the *world beyond* the immediate place. Transformations in the ecotopias occur via the connections within the community, but also transform feelings toward the world at large. This 'self-identification' can occur at greater intensities in the ecotopias than in conventional urban environments because of unique environmental aspects that facilitate a variety of connections, and thus an increase of sacred experiences. This is why many residents interviewed consider their communities to be something more than merely sustainable urban alternatives—using less energy, consuming less material, minimizing ecological contamination, etc—they are also seen as sacred places. In addition to many pragmatic achievements, the ecotopias are considered by many residents to be potentially

transformative places that can help to open, deepen, and uplift the people towards a state of harmony with each other and the larger world.

> **VH #7:** "Yes, it is very much a transformative place...this is what everybody is needing, its about health and well being…I have felt safer here, day and night, than I have felt anywhere else, ever. Not that I need to feel safe [I'm a big guy], but it's that feeling of cosmic or psychic safety."
>
> **DR #7**: "[Dancing Rabbit] a place where I think that a lot of human spirit is lifted, and that has the makings for a sacred place I think… At [the other community] it was very fear based, and [Dancing Rabbit] is much more hopeful, and that's why I'm here. That encapsulates the real reason why we came here.

These transformative experiences help to heal negative experiences incurred from the isolating aspects of conventional urban environments. By inviting the individual to participate with the greater life in the community, a greater sense of self is experienced. These experiences create a growing sense of 'home,' where one's whole being is validated, but also expanded. Over time, this diminishes feelings of fear, isolation, and hopelessness, while augmenting feelings of peace, harmony, hope, empowerment, belonging, and rootedness.

This sense of rootedness is so strong among some of residents that it has engendered a feeling of peace towards the most difficult of all human transitions—the death of the body. The topic of death came up to some degree in each of the ecotopias, but there are two examples that illustrate how the topic of death might be dealt with differently in the ecotopias than in conventional society. One example is from the perspective of a resident planning for death, and the other comes from the perspective of the larger community as it processes the death of one of its members. The first example illustrates the idea that a strong sense of rootedness is cultivated over a long period of time. This contributes to a peace towards death and a contentment to remain in the community for the rest of one's life. The second example shows that when a community

as a whole responds to the death of one its members it bolsters a sense of completeness and rootedness for the larger community is bolstered.

One Village Homes resident talked extensively about his willingness to live the rest of his life in Village Homes and to die there. He stated that the significance of Village Homes has evolved through many stages over the years, from a place to put sustainable living into practice, to a world-renowned icon, and finally to the tightly-knit and well rounded community that exists today. Today, many people are getting older and are planning to stay in Village Homes into their retirement and perhaps for the remainder of their lives. He was ecstatic at the idea that he has found the place where he is comfortable living and dying. This sentiment seems to have emerged from his continually deepening relationship to the place and all the life within it. Furthermore, this interviewee articulated very clearly that his rootedness in Village Homes has also engendered a feeling of rootedness in the bioregion and the wider world. Below are two excerpts from his interview in which he describes these feelings and how they have emerged [for extended excerpts, see Appendix]:

VH #8: "We are anticipating the next, perhaps final phase of our lives in some communal fashion that would probably be here at Village Homes. My wife and I have bought long term care insurance that allows us to stay in this house until we kick the bucket…what it says is that we are planning not to move and that we are going to stay here until the end. It's a wonderful feeling to realize that you've been in a house 30 years and you might be in it another 30 years, you have no desire to move."
AG: "So this is a place, if I can say, that you would like to die in?"
VH #8: "Very good. You know I never really quite thought about it, but yes. Let's put it this way, I'm content to spend the rest of my life here. I have no dreams or anticipations of leaving…And if I were to kick the bucket tomorrow, burn me up and throw my ashes in the common area or dump them into Putah Creek or something like that. I'm into that, and I feel totally comfortable with it. That concept, though it might sound weird to some people, is very reassuring to me, it feels right, it feels like I'm home and I want to stay there."
AG: "Could you say it feels like you've found your appropriate place among creation?"
VH #8: "Yeah. Absolutely"

AG: "Can you tell me about sacred places?"
VH #8: …For me, a sacred place is a place where you have decided that it would be okay to die. A factoid which I tell people in relationship to this, if I'm doing a lecture or something like that, is that more people have their ashes shipped out California for burial somewhere else than any

other state, as if California didn't matter, as if the places in California were only temporary, as if they came here to make a living like migrant workers and they are going to go back to the homestead to be buried in the family cemetery. I'm here. I'm here for the duration."

AG: "Does Village Homes play a part in that feeling rooted?"

VH #8: "Absolutely…You can look at a community in its nested bioregional niches as soil where roots can go down and grab. So emotionally this is nice loamy soil, you live in this place and boy your roots can go down pretty easily. I think without this place, without this specific place I wouldn't feel rooted to this bigger ecosystem…I would have to say that without the centroid, without the taproot, there wouldn't be the other root."

Shortly before the visit to Dancing Rabbit, one of residents of the community died. This was fresh in the minds of the residents and the feeling of loss could be felt at strongly at certain times during the interviews. What seems to be most significant is the sense of village unity that accompanied the death and burial of one of their own. Though the process was incredibly difficult, the event was conveyed as somehow having a grounding affect for the community at large—that it completed the place in important way. The following are two excerpts from interviews at Dancing Rabbit that tell the story of how this community dealt with this loss, and how it has impacted the feelings of residents towards the place [For and extend excerpt, see Appendix]:

DR #3: "Another time that felt really connecting to me, we recently had the loss of a friend a few weeks back. We had healing circles for her before she left where a lot of the community came and just laid hands on her, and listened, and sent her healing energy. I just felt, looking around the room at a bunch of women at one time, and I was like "I know there are differences between these people, that there are conflicts that flare up, and how beautiful it is that we can all come together and be here for this person, and simply be together. It felt really holy, really transcending of the crap that happens in everyday life. Her burial, that whole day as we dug her grave together, this was a good friend of mine, a very dear friend, one of the closest friends of mine that has died. Her dad brought back this box with her frozen, and there were six of us that moved her body from the box onto this beautiful litter that [a community member] had made, it was created out of all wood and joined together and put tall grasses on. It was lovely and we took the sheet off of our friend and just thanked her for her life. We tied her in the shroud, I was a pall bearer, and during the ceremony we carried her up. Just the ritual, it was the first time that I had ever been part of a death or burial that was so real for me. I actually touched her frozen body and kissed her head saw her swollenness from her suffering and actually lowered her into the ground and covered her with dirt and read something and cried, and that felt amazingly connective, and I don't think I'll ever be the same after that."

DR #2: "She's buried under an oak tree just across from the kids play set up there by the playing field. She was very specific about wanting to be in a fairly central place that would be visited and tended."

AG: "She wanted to be buried here?"

DR #2: "Yeah, I mean she lived here for ten years, longer than anywhere in here life, and, yeah, she wanted to be here."

AG: "Was there a ceremony here?"

DR #2: "Yeah, the whole thing was amazing…She was prepared for burial here by all of us, by her friends. [A community member] who works with wood and does everything with hand tools made this incredible litter out of osage orange like hand carved and woven, and grasses from the prairie lining it. She was wrapped in a shroud made by [another community member], and there were all these flowers. Everything about it represented the sum total of the social, like 'yes we do live this close with each other, we can do something sacred like that, that doesn't have to be done by a funeral home, in this particular way that doesn't cost hundreds or thousands of dollars.'...Going through that process, I felt strongly that the community had the capacity for that kind of thing but until you experienced it, when it happened it was like 'of course, this is how we would do this, but having never seen any example of it before I didn't know for sure. That was definitely a sort of sacred moment for the culture here, to recognize that we have the capacity to care for our dead and every stage of life in that way…the kids participated in digging the grave, and we all dug that grave. The whole thing was just overwhelmingly positive, the best possible manifestation of loosing somebody that I could imagine."

The emergence of the topic of death in this study, though it was not thoroughly explored, could be a significant indicator that the ecocentric worldview is evoking past sacred themes. Paralleling early human settlements that were built near burial grounds and perhaps founded on the idea of communing with the dead, the ecotopias may also be attempting to live in a way in which that honors the reality of human mortality. Regardless, the presence of a different attitude towards death in these communities might reveal that death is a topic in which the ecocentric worldview diverges from the conventional worldview, and which may be an important topic in the creation of sacred space in contemporary society.

Generalized Design Themes

If sacredness in the ecotopias is experienced through connecting with the wider community and the natural world, then the ecotopias are sacred places in as much as their environments enhance those connections. The design of the built environment can facilitate or hinder the sacralization process previously discussed. The following is a list

of generalized design themes, compiled from the fieldwork of this study, which show how the built environment can create or enhance strong connections between the individual, the community, and the natural world.

1. *Intentionality, purpose, and transparency*
2. *Variety and individuality*
3. *Connectivity and propinquity*
4. *Mysteriousness and discoverability*
5. *Dynamic harmony—facilitating participation at three levels of identity*

These design themes, if integrated into a local context, can be used to guide the development of the built environment in a way that might engender the sense of sacredness expressed by residents in the ecotopias of this study.

Theme 1. Intentionality, purpose, and transparency

In order for place to be sacred, it must be seen as a place with special meaning and purpose to those who live there. This sense of 'specialness' results from intentionality—mindfully considering the unique aspects of place and deliberately responding to them. For instance, in Village Homes vegetation is strategically placed to cool the environment, shade the streets, and also create a sense of privacy without the use of fences. In Arcosanti, as the boundary between the built environment and the natural environment is important in the theory of Arcology, the edge of the mesa was dedicated to walkways and gathering spaces. The attitude toward intentionality, more specifically the intention of joining and learning about the unique aspects of a particular place, is

foundational for each of the ecotopias in this study, and residents highlighted this as a major attraction to moving there.

> **VH #6:** "This place is special because it's intentional. Somebody made it special on purpose and its otherwise just a regular old place."

Intentionality, in this sense, entails living with a sense of purpose, mindfulness, and deep understanding of many aspects of a place. This sort of intentionality is contrary to an objective understanding of place, which seeks an understanding of the place apart from the place. Knowing a place through intentional living, on the other hand,

In Village Homes heavy vegetation is used to cool the environment while also creating a sense of privacy among homes that are close together.

A drainage ditch in Village Homes is also used as a gathering space when dry.

At Arcosanti, development at the edge of the mesa is almost entirely dedicated to pathways and gathering spaces, exposing the public to the surrounding pristine landscape.

Dancing Rabbit residents are encouraged to build according their individual needs and lifestyles. This allows for a variety of thoughtful and creative structures.

Figure 14: Examples of intentionality in the built environment

understands through dwelling—a subjective participation with the place over time, which constitutes an active and deepening relationship to place.

The design of the built environment can reflect or inspire intentionality by minimizing wasted space, by integrating systems, and by using appropriate materials in buildings with a variety of applications. Furthermore, these things must not be hidden, they must be able to be experienced by the residents so that they can build connections to the unique aspects of place. Some examples of this include building and designing landscapes that create a sense of privacy without excessive lot sizes; finding alternative uses for 'undevelopable' spaces—such as areas used for infrastructure, dead-end corners, or difficult topography—in ways that enhance the understanding of a place; allowing opportunities for residents to adapt space to their own needs—landscaping, gardening,

Houses in Village Homes are oriented south in order to take advantage of passive solar technology.

Many houses at Dancing Rabbit are suited with photovoltaic solar panels.

An apse at Arcosanti creates an ideal outdoor working space throughout the year.

Figure 15: Solar energy collection is visible is each of the ecotopias.

and building—thereby encouraging mindful participation with their place.

The built environment can also encourage intentional living by creating opportunities for residents to understand their place. This can be achieved by designing buildings and infrastructure systems—such as waste disposal, water collection, drainage and flood control, energy generation, and food production—in ways that are transparent. This enables residents to understand how these systems work, which can help them better comprehend their use of resources. This is especially the case when such buildings and infrastructure systems are integrated with the immediate natural environment.

A good example of this integration is the above ground drainage system in Village Homes. Ditches and swales guide the water out of the community while also allowing the water to permeate the ground. What's more, many of the greenways follow the water drainage system creating beautiful meandering trails to explore throughout the community. One resident describes how the transparency of this system is part of a larger set of shared values that encourage participation with place.

> **VH #8:** "In this community, what you see is what you get, transparency can be about physical systems, one of which is the fact that when it rains the water collects into ponds, this was the first conspicuously successful open natural drainage system...so that's a kind of engineering transparency. There is also a sort of social transparency, you could say that it encourages participation, it makes it easy for you to participate."

Theme 2. Variety and Individuality

Intentionality will result in the creation a variety of unique spaces. Variety and individuality is a critical aspect of sacredness. For, as stated earlier, sacredness does not eliminate diversity for the sake of unity, but rather it harmonizes individual parts into a larger whole. The built environment of a sacred place must likewise encourage variety in order to harmonize its various parts together into a greater whole. Thus in a sacred place,

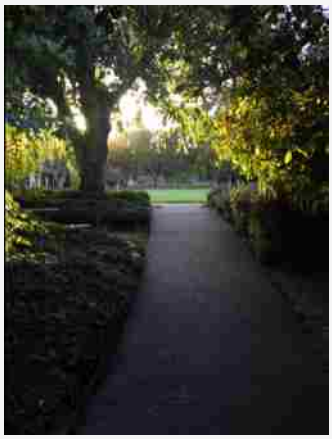
structures and spaces will be varied but share a common language—open spaces will fit together with compressed spaces, private spaces will fit with public spaces, the built structures will fit with the natural.

All three ecotopias held wide variety of spaces and structures, although this variety manifested differently in each community, depending on their local context and strategy. Village Homes has large open spaces, small gathering spaces, and other unique spaces created in large part by the abundant vegetation. This, combined with a well-developed trail network, creates an environment that seems to be inexhaustible in terms of discovery.

> **VH #1:** "What you've got in an environment like this is more experiences than an orange has sides"

Dancing Rabbit's variety can be most clearly seen in the uniqueness of its structures, which are built for a diversity of lifestyles and from a wide variety of materials. Arcosanti, although aesthetically unified, forms unique spaces out the

At Arcosanti a variety of compressed and open spaces are formed with built structures rather than vegetation or landscaping.



In Village Homes a variety of spaces are formed from different intensities of vegetation and landscaping.

In Dancing a variety of structures exist but are all bound by strict ecological covenants which require the all buildings to use reclaimed or natural materials.

Figure 16: A variety of spaces and structures in each ecotopia.

placement and design of the built structures themselves.

A varied environment deepens relationship to place because an environment with variety is an environment that can be known more deeply. *As the various aspects of a place are made present, more ways of understanding the place are made possible.* This is true both in terms being able to know a place intimately, as well as gaining practical knowledge about how to best live in a place. Therefore, a varied place is a more knowable place and also a more resilient place.

Theme 3. Connectivity and Propinquity

Individuality does not mean individual isolation. A variety of spaces can only be experienced together if they are well connected. *Therefore a sacred place, where the individual parts are harmonized together, must also be a well-connected place.* Strong connections are built over time, and occur though repeated and frequent encounters with various aspects of place. This can only be achieved with at least a modest level density, openness, and connectivity in which the various elements of the place—the people, the natural environment—are accessible and easily participated with.

Achieving optimal levels of density and connectivity is not a simple task. There are conflicts between privacy and publicity, openness and intimacy, clarity and mystery, human space and wild natural space. These conflicts have to be mediated strategically to create an environment in which different aspects of a place can become connected. But when these conflicts are successfully mediated, the result is an environment with a strong sense of propinquity both in terms of proximity and relationship.

Furthermore, there are some aspects of conventional urban design that are detrimental to achieving this kind of connectivity. For example, large lot sizes and

privacy fences were discouraged at each of the ecotopias because they are isolating and thereby discourage participation with place. A well-connected community can only make small accommodations for the automobile, if any at all. Automobiles isolate the individual inside a closed vessel and move at speeds that do not permit interaction with place. It is for this reason that automobiles are severely restrained in Dancing Rabbit, and outright banned in Arcosanti and Dancing Rabbit. On the other hand, walking and pedestrian facilities create well-integrated environments because this type of movement occurs at slow speeds and encourages the individual to connect with the various elements of place. The lack of automobile infrastructure allows for an integration of structures and spaces at a human scale. This encourages smaller lot sizes and housing density, and leaves more contiguous areas to be designed for the pedestrian.

Houses at Village Homes are very close together with few privacy fences. Well-connected walking paths permeate the entire community.

Dwellings at Arcosanti are not only dense but also attached and integrated into larger structures.

Prohibiting automobiles at Dancing Rabbit results in a network of dirt roads and footpaths. This allows houses to be built closer together

Figure 17: Examples of density at each ecotopia.

Theme 4. Mysteriousness and Discoverability

A varied and well-connected environment creates sense of mystery and discoverability—variety creates the mystery, and connectedness allows for discovery. Such a place provokes exploration. In an environment such as this, one is always finding new dimensions to the place, continually prompted to seek and find out something new.

This sense of mystery and discoverability is present in each of the ecotopias. Village Homes' winding greenways lead through housing shrouded by heavy vegetation, periodically opening up into open common spaces, gardens, and orchards. At Dancing Rabbit a web of formal and informal footpaths connect unique structures with the surrounding prairie and riparian woods. At Arcosanti sidewalks and stairways lead around, through, and over a jungle of distinct concrete structures, providing multiple perspectives of the place and gorgeous views of the surrounding landscape.

Environments such as these cannot be understood objectively or instantaneously. Rather these environments can only be understood through participation and a deepening relationship with the place *over time*. One must abide and endure *with* the place in order to learn its many dimensions. This ever-growing relationship to place engenders sacred feelings, as it through these connections to the life in a place that one feels a part of a larger life.

Theme 5. Dynamic Harmony—Facilitating Participation at Three Levels of Identity

What has been described thus far is an environment that is dynamic, not static—*one that inspires movement, connection and participation with a variety of spaces.* These environments have the makings of a sacred place because they facilitate multiple connections.

AS #3: "It's a rediscovery process…I don't want to say that's all it is, but yes, from my personal experience…What we have is a desire to rethink modern experiences and realities and create a sacred space that's helping facilitate that process…to create an urban space that's very well integrated with nature and is very comfortable for human beings… How do you create a space so people feel can feel union, that idea of helping people to create that union with each other and nature? That's the idea of organic architecture—reconnection…Its more than just 'oh I want to create this unique space using organic architecture'…existing [conventional] architecture is not working because it's based on this model that is looking at the world that does not appreciate nature for it's intrinsic value."

As previously discussed, a more comprehensive sense of sacredness is not achieved by connecting self, community, and nature all at once. Rather, *it is achieved by making a variety of these connections over time*. This means that, in order to create a greater sense of sacredness, the built environment must facilitate participation with place *in multiple ways,* including: individual participation with nature, individual participation with community, and community participation with nature. The built environments of the ecotopias provide several examples for how these different levels of participation might be encouraged.

Gardens, 'wilderness' spaces, views of the surrounding landscape, and the use of natural building materials can help to facilitate individual participation with nature. In Village Homes a large amount land is dedicated for garden space. Vegetation grows abundantly in many spaces throughout the community, creating a sense of wilderness within. Dancing Rabbit also has many gardens within and at the edge of the village, however the sense of wilderness is strongest in the surrounding landscape. Here, the use of natural building materials deepens the ability to participate with the natural environment. In Arcosanti participation with the natural world comes easily, as the surrounding natural landscape is immediately accessible and always in view.

Individual participation with community can be facilitated through high levels of density, common gathering spaces of various sizes, gradual transitions between public and private spaces, well-connected pedestrian and bicycle trail networks. Village Homes has articulated small and large gathering spaces that can be used for a variety of community gatherings. Dancing Rabbit has a well-defined central courtyard situated in front of the common-house, which is open to all residents. Arcosanti has many spaces that accommodate large gatherings, such as the vaults, the amphitheater, and the cafeteria. All three of the ecotopias are relatively dense, and have pedestrian networks

Located along a major bike and pedestrian trail, garden activity in Village Homes is experienced by the public.

Arcosanti is built in such a way that the surrounding pristine natural landscape can be seen from most vantage points in the community.

Many homes in Dancing Rabbit, such as this cob house, are built with local natural materials.

Formed by the largest structures in Dancing Rabbit, this courtyard is considered the heart of the village by residents and is a common place for community gatherings.

Figure 1: Aspects of the built environment that encourage participation with nature and community

that permeate the entire community.

Integrating gathering spaces with wilderness spaces, and building shared structures out of natural materials or in a manner that is responsive to local climate conditions are ways to facilitate community participation with nature. The common spaces in Village Homes are mostly surrounded by abundant vegetation. The common house at Dancing Rabbit is the location for many large community gatherings, and is suited with solar panels and water harvesting equipment. The vaults and the amphitheater at Arcosanti are both oriented towards the surrounding landscape.

Surrounded by heavy vegetation, gardens and orchards, the 'Big Green' at Village Homes provides space for recreation and large community gatherings under an open sky.

At Arcosanti, outdoor meetings are often held under the 'Vaults' which frame in the surrounding landscape.

Residents at Dancing Rabbit circle up before sharing a meal at the common house.

Figure 1: Community gathering spaces

Viewed together, the theoretical developments extrapolated from the findings begin to describe some of the basic elements of sacred space in the context of an ecocentric worldview.

CONCLUSION

As an ecocentric worldview emerges more broadly, the ecotopias visited for this thesis demonstrate how this worldview might shape the built environment and understandings of sacred space therein. While the residents interviewed for this study consistently expressed there may be a diversity of perspectives present in their communities [see PART 2—A STUDY OF THREE ECOTOPIAN COMMUNITIES], their responses generally reflect the main aspects of the ecocentric worldview discussed in PART 1—THREE WORLDVIEWS ON NATURE, SPACE, AND THE CITY. Of great significance is that the notion of sacredness expressed by residents closely resembles the concept of 'self-realization' outlined by Arne Naess and others in the deep ecology movement, in which the individual identifies with the larger life outside the body (Bodain 29-30). Extrapolated from the findings of the study, the theory presented in PART 2 begins to explain how ecotopias—communities that are founded with the intention of harmonizing the built environment with the natural environment—can serve as vehicles for a process of self-realization, and thereby become 'sacred.' This theory refers to a kind of sacredness that parallels sacredness in a pre-modern context—promoting the restoration of the relationship between the human community with the non-human world—yet maintains contemporary understandings of the universe and its structure.

PART 1 outlines how an ecocentric worldview differs from the modern anthropocentric worldview and reflects some aspects of the pre-modern worldview, more specifically regarding how ideas about nature, space, and the city are comprehended in

these three worldviews. In an ecocentric worldview nature is seen as having intrinsic value rather than being valued solely for human use, and space is a medium for connectivity rather than only its geometric aspects. Many proponents of ecocentrism criticize the city for its role in uprooting humans from nature. However many emphasize localization and attention to immediate ecological systems (Snyder 237). Since the act of building mediates the realties of the natural world with human aspiration, the process of building under an ecocentric worldview might actually *enhance* identification with the immediate natural world, thereby becoming a means to 'self-realization.' That is, through the creation of the built environment humans have and opportunity to join themselves to the life of a place.

In the study presented in PART 2, many of the interviewed residents expressed perspectives that are congruent with an ecocentric worldview. Although residents expressed environmental concerns that are widely held by the broader environmental movement—such as the future availability of materials and energy resources, or the ill affects of industrialization on human health—many of their responses indicate that life in the ecotopias allows people to engage environmental issues at a deeper level. Congruent with an ecocentric perspective, almost all of the interviewees indicated that nature has an intrinsic value. Residents also frequently insisted, in one way or another, that humans should limit themselves in order to preserve non-human life. Some even expressed that nature is something 'larger' which they seek to identify with, both as an individual and as a community. Residents in the ecotopias also expressed that individuality and freedom are important aspects of a healthy community. This resembles the deep ecology perspective that diversity should be increased, not only for the sake of a community's

resiliency, but also, at more philosophical level, to expand the sense of 'self.' If one identifies with the larger, diversity increases potential ways of being (Bodain 29-30).

Moreover, the interviewees pointed out how many aspects of an ecocentric worldview, discussed in PART 1, can become manifest in the built environment. For example, the view of space as a medium for connectivity instead of a commodity can be seen in the lack of fences, the abundance of common space, the blurry transition between public and private space, and comparatively higher density than conventional urban development. Reflecting the emphasis on localism held by many advocates of ecocentrism, the ecotopias are built with a sense of openness to their surrounding environment, be it natural or urban. The value of diversity is reflected in the built environment through the variety and uniqueness of spaces, houses, and other built structures, which are well-integrated and mixed together. The incorporation or proximity to 'wild' natural space expresses a willingness to limit human activity for the sake of non-human life, and perhaps even more significantly, expresses that these communities don't just emphasize *preservation* of nature, but *participation* with nature.

What residents generally referred to as sacred, or described as a sacred experience, resemble the beginnings of the notion of 'self-realization' as it is articulated in deep ecology literature. Residents in the ecotopias generally expressed that sacred experiences have to do with a sense of closeness or melding with the natural world, community, or both. Sacred feelings include awe, peace, belonging, connection, and confidence, among others. These notions of sacredness describe an interaction between at least two of three levels of identity—the individual, the local human community, and the larger natural world. In this way the resident-defined aspects of sacredness resemble

self-identification in the context of deep ecology, where the individual identifies their 'self' with other people, non-human life, the larger ecosystem, and beyond.

Two theoretical developments are drawn from these findings. First, a theory of sacralization, which seeks to explain the process by which residents come to consider the ecotopias to be sacred. Second, a list of generalized built environment design themes that facilitate this process.

The theory of sacralization describes how, by engaging place, an individual gradually grows from a state of rootlessness, fear, and isolation to a state of belonging, peace, and confidence. By experiencing a place that is intended to facilitate connections with community and the natural world, the individual expands their identity with the other human and natural life in their immediate environment, which results in the uplifting of the human spirit and feeling of 'right relationship' to the larger world. The theory is described in four basic phases.

1. *Longing for connection*
2. *Finding connection*
3. *Transcending self through the connections offered in the place, permitting self-identification with the larger*
4. *Being transformed through self-identification with the larger, cultivating feelings of belonging, rootedness, confidence, and peace*

In the first phase, the individual feels disconnected from the natural world as well as from other people, and feels unable to make these connections in a conventional built environment. In the second phase, the individual moves to a location, such as an ecotopia, where the built and social environment fosters these kinds of connections and is

able to deepen them over time. In the third phase, after having deepened many connections in the place, the individual begins to self-identify with other life in the place and the place as a whole. Finally, the individual is transformed by this greater sense of self, engendering feelings of belonging, confidence, and peace towards the immediate place and extending to the wider world.

The ecotopias visited for this study demonstrate several design elements that facilitate the connections to community and the natural world that are discussed in the theory of sacralization. From these design elements several themes are extrapolated which provide the basis for a new set of design principles for the creation sacred space in contemporary ecocentric context. Here one does not find strict hierarchical space, though local space is emphasized. In this worldview, sacred space is not understood as nearness to an axis mundi where one transcends upward towards the heavens. Rather, since *this* world is seen as the enduring reality, the individual experiences transcendence through recognizing their self among the whole of cosmic life, which is continually unfolding—a contemporary 'transhuman' experience where, as in the pre-modern worldview, one sees their life as human as well as cosmic (Berry 8, Eliade 166). Therefore sacred space in an ecocentric worldview will be comprised of spaces that facilitate this recognition through participation and identification with life beyond the individual. The following are five design themes extrapolated from the field research that help to create this kind of sacred space.

1. *Intentionality, purpose, and transparency*
2. *Variety and individuality*
3. *Connectivity and propinquity*

4. *Mysteriousness and discoverability*

5. *Dynamic harmony—facilitating participation at three levels of identity*

Sacred space in an ecocentric context is founded on an intentional effort to engage the unique and specific aspects of place. For example, the unique aspects of climate were engaged in Village Homes by the careful placement of vegetation to cool the environment as well as the passive solar design of houses. In Dancing Rabbit residents engage the place through the use of locally harvested materials in the buildings, such as earth from onsite or wood from riparian areas. In Arcosanti the surrounding landscape is emphasized in the dedication of the edge of the mesa to public pathways and common space. Moreover, the outcomes of this intentionality should be exhibited in some sense—transparent, demonstrative, explicative, and accessible—as though the uniqueness of a place is being harvested and made more visible and understandable.

Intentional engagement of place results in the creation of a variety of unique spaces and structures. This variety can be created in many of ways and depends on the place's unique context. In Village Homes, the placement of vegetation and landscaping create small winding secluded trails that open up to large parks. Because residents at Dancing Rabbit are encouraged to experiment with different building methods, the structures vary dramatically. In Arcosanti, unique spaces are formed from the space between built structures. Pronounced variety and individuality is critical to the creation of sacred space, because the sacralization is a process creating of harmony not homogeneity—an alignment of the various parts rather than their amalgamation.

Yet for the variety individual parts to be harmonized, they must exist in close relationship. Thus, in ecocentric sacred space unique spaces and structures will exist

close to one another and be connected through a permeable environment. This is demonstrated in all three of the ecotopias, which are relatively dense and have pedestrian trial networks that are pervasive. The communities also discourage certain features that isolate the individual from the community. For example, in Village Homes cars are severely restricted through curvilinear roads and cul-de-sacs, while they are outright banned from entering Dancing Rabbit and Arcosanti. Privacy Fences are also uncommon in Village Homes and non-existent in Dancing Rabbit and Arcosanti.

A varied, well-connected, and relatively dense environment will create a sense of discoverable mystery. A sense of mystery that can be discovered creates an invitation to explore—to deepen a relationship to place over time. This is characteristic of the built environment in each of the ecotopias. In each place one fells compelled to investigate what's around the bend. The winding greenways in Village Homes lead to parks, orchards, and gardens of various sizes. The informal footpaths in Dancing Rabbit cut from one distinct home to another. The sidewalks and stairways at Arcosanti lead over, around, and through a jungle of concrete structures. This allows for the potential to continually discover and participate with place—the ability to deepen ones relationship to place *over time*. This truly sets the ecotopias apart from conventional environments, and is a critical part of engendering a sense of sacredness. Environments such as these are not understood objectively, but through abiding—dwelling and enduring with a place through time. In this way as sense of a sense of sacredness is built. For *as one discovers place they become the place,* and thereby expand their sense of self.

The environments that have been described are dynamic. They inspire movement, connection, and participation with place at many levels of identity. If the

function of ecocentric sacred space to facilitate an expansion of the sense of self—harmonizing the individual with community and with the natural world—then the built environment of such places should provide spaces for engaging multiple levels of identity including individual participation with nature, individual participation with community, and community participation with nature. For example, gardens, wilderness spaces, views of the surrounding landscape, or building with natural materials can allow the community or the individual to engage the natural world. Dedicated common space, common facilities, and gradual transitions between public and private spaces can facilitate the individual to participate with community. All of this levels of participation are bolstered by density and a well-connected trail network that permeates the entire community.

In summary, sacred space in a contemporary ecocentric context is found places that are designed foremost with the intention of connecting life on many levels—the individual to the community to the local ecology to the wider natural world, and perhaps even to the larger cosmos. Here the process of building is recognized as a means for humans to realign themselves with the natural world, though without denying their unique creative potential. Therefore these places, like pre-modern sacred places, seek to redeem humanity by restoring the relationship of humans to the non-human world. This is a much different view of the built environment than is sometimes found among radical environmentalists in which the city is seen as causing the uprooting of humans from nature. Yet it is critical for the movement. If the radical environmentalists are correct in their assertion that the environmental crises must be engaged at this 'deeper level,' then

the communities explored in this study can help guide planners, architects, and other urban design professionals that seek to address our environmental crises in this 'deeper way' through better design of the built environment.

These communities are speaking to a critical aspect of the urban design and planning fields, resurrecting the very old idea that has been greatly overlooked as built environments have become desacralized—that *reverence for the non-human world is a critical aspect of building a viable human-made world*. That the act of building can actually be a way for humans to *connect* to the natural world rather than isolate themselves from it—to harmonize their efforts with the larger world of nature rather than break free from it. Built environments *can* be constructed in way that engenders a feeling of a harmony or even identification with the natural world. The ecotopias in this study provide insight to what they might look like, and demonstrate how finding harmony between the natural and the built worlds will prove to be healing for both.

LIMITATIONS AND RECOMMENDATIONS FOR FURTHER STUDY

This study was limited to communities that are built on land that was previously undeveloped so that a clearer and less compromised view of the built environment could be observed. However, a greater intention of this study was to uncover general design themes that may be applicable in a variety of contexts. Therefore, further investigation as to how these same themes are manifesting in attempts to change conventional urban environments to reflect and ecocentric worldview would add considerably to the findings that emerged in this study. Should such and investigation be pursued, the use of qualitative research methods similar to those use in this study are encouraged, so that the various aspects of place can be analyzed from the perspective of the residents.

Lastly, this study is aimed at the urban planning professions and other design and 'place-making' professions. It is for this reason that so much emphasis was placed on the built environment. However there are many other interesting aspects of the ecotopias that emerged from this study that may be of interest to those in other disciplines who are interested in alternative communities. For example, the unique social and governance systems of each community may be of particular interest to those who desire to research alternative examples to conventional social systems. In the case of further study, if a particular disciplinary approach is used to research issues of ecocentrism, a special effort should be made to make the findings understandable to those outside the field. The various disciplines have much to learn from each other on this topic, and it is only through cross-disciplinary collaboration that grounded conclusions can be made and appropriate solutions be found, which address the current environmental problems in their totality.

GLOSSARY OF TERMS AND CONCEPTS

Anthropocentrism and Ecocentrism: Anthropocentric, literally meaning 'human-centered,' is the view that humans are the central factor of the universe, while ecocentric, literally meaning 'house-centered' is the view that the concerns of the health of the larger ecosystems should take precedence of over the needs of humans.

Axis Mundi: The 'axis of the world' is a point at which there is a special connection between heaven and earth. At this axis, those in the earthly realm may ascend upwards to the heavenly realm, or visa versa.

Bioregionalism: The view that human social and political organization should be geographically based on areas that share natural ecological characteristics.

Built Environment: Human-made environments that create the setting for human activity.

Cosmic Creativity: As articulated by Gordon D. Kaufman, the serendipitous unfolding of the cosmos manifesting itself in many trajectories, working themselves out in longer and shorter stretches of time, including that trajectory that eventuated the emergence of life on earth and human beings.

Ecotopia: A community that is founded with the intention of harmonizing the built environment with the natural environment.

Hierophany: Literally meaning 'sacred appearance,' the breakthrough or physical manifestation of the sacred.

Linear Perspective and Reverse Perspective: Linear Perspective is a system of mathematically representing three-dimensional objects on a two-dimensional surface with a vanishing point on the horizon, depicting the perspective of the viewer in a fixed position. Reverse perspective, on the other hand, objects enlarge and diverge as they approach the horizon, making the vanishing point near the viewer and implying a perspective from outside the viewer.

Modern: Referring to the era after the Middle Ages. This era can be further broken down into the *early modern period* and the *late modern period* beginning at the end of the 18th century with the industrial revolution.

Pre-Modern: Referring to periods before the modern era.

Sacralization and Desacralization: Sacralization is the act of imbuing something with a sacred quality. Desacralization is the act of removing sacred quality from something.

Sacred and Profane: Mircea Eliade describes *the sacred* as something that is extraordinary, something wholly other than is experienced in the 'ordinary' *profane* world. Furthermore, to the religious, the *sacred* is seen as the 'true' reality while the *profane* world is fleeting. It follows that *sacred space* is a space where this extraordinary reality is encountered, and *profane space* is where it is absent. In a sacred experience, people transcend their own ordinariness and see themselves as cosmic also. In this study, little definition was given for the word 'sacred' and interviewees used it in many different ways. When further definition was asked for, the phrase 'places of the heart' was given.

Scientific Revolution: A was an enormous paradigm shift that occurred at the end of the Middle Ages due to many groundbreaking scientific discoveries. This drastically changed religious and scientific thought, and set the philosophical underpinnings of Europe's early modern period.

Self-Realization: A term used by deep ecologist philosopher Arnes Neass where the sense of 'self' is expanded to include the rest of nature.

Transcendence: In a religious context, this refers to a going above or outside the material world. In this study the terms is expanded referring also to exceeding the ordinary limits of the concept of 'self.'

Worldview: The comprehensive conception or image of the universe and humanity's relation to it.

REFERENCES CITED

"Arcosanti Project History." *Arcosanti.* Cosanti Foundation, n.d. Web. 1 Jun. 2012.

"About Dancing Rabbit." *Dancing Rabbit Ecovillage.* n.p. n.d. Web. 1 Jun. 2012.

Antonova, Clemena. *Space, Time, and Presence in the Icon: Seeing the World with the Eyes of God*. Farnham: Ashgate, 2010. Print.

Bacon, Edmund N.. *Design of Cities*. New York: Viking Press, 1967. Print.

Bainbridge, David A. "Sustainable Community - Village Homes, Davis, California." *Ecocomposite*. n.p. 21 Mar. 2004. Web. 12 Mar. 2010

Berry, Thomas. "The Viable Human." Sessions 8-18.

Bodain, Stephan. "Simple in Means, Rich in Ends: An interview with Arne Naess." Sessions 26-36.

Bouraway, Micheal. "The Extended Case Method." *Sociological Theory* 16.1 (March 2008): 4-33.

Callenbach, Ernest. *Ecotopia: The Notebooks and Reports of William Weston*. Berkeley Cali.: Banyan Tree Books, 1977. Print.

Campbell, Joseph, Bill D. Moyers, and Catherine Tatge. *Joseph Campbell and the Power of Myth*. New York: WinStar Home Video, 2001. Film.

Capra, Fritjof. "Deep Ecology: A New Paradigm." Sessions 19-25.

"City of Davis Profile." *City of Davis California Official Website.* City of Davis, California, n.d. Web. 1 Jun. 2012.

Crowe, Norman. *Nature and the Idea of a Man-Made world: An Investigation into the Evolutionary Roots of Form and Order in the Built Environment*. Cambridge, Mass.: MIT Press, 1995. Print.

Devall, Bill, and George Sessions. *Deep Ecology*. Salt Lake City, Utah: G.M. Smith, 1985. Print.

Drengson, Alan R., and Yuichi Inoue, eds. *The Deep Ecology Movement: An Introductory Anthology*. Berkeley, Calif.: North Atlantic Books, 1995. Print.

Dunn, Kevin. "A Great City is a Great Solitude: Descartes Urban Pastoral." *Yale French Studies* 80 (1991): 93-107. ///Publisher/// JSTOR. Web. 5 May 2012.

"Eco Homes: Green Community Does Not Have Developers Seeing Green." *ACF Newsource.* n.p. 31 Dec. 2006. Web. 12 Mar. 2010.

"Ecological Covenants." *Dancing Rabbit Ecovillage.* n.p. n.d. Web. 1 Jun. 2012.

Eliade, Mircea, and Willard R. Trask. *The Sacred and the Profane: The Nature of Religion*. San Diego: Harcourt, 1987. Print.

Glendinning, Chellis. "Recovery from Western Civilization." Sessions 37-40.

Gottlieb, Rodger S. "Spiritual Deep Ecology and World Religions: A Shared Fate, a Shared Task." *Deep ecology and world religions: new essays on sacred grounds*. Eds. David Landis Barnhill and Roger S. Gottlieb. Albany: State University of New York Press, 2001. 14-34 Print.

Kaufman, Gordon D.. *In the Beginning…Creativity*. Minneapolis, MN: Fortress Press, 2004. Print.

Korten, David C.. *The Post-corporate World: Life After Capitalism*. San Francisco, Calif.: Berrett-Koehler, 1999. Print.

LaChapell, Delores. "Ritual—The Pattern that Connects." Sessions 57-63.

Le Corbusier. *Towards a New Architecture*. Mineola, NY: Dover, 2009. Print.

Leinberger, Christopher B.. *The Option of Urbanism: Investing in a New American Dream*. Washington, DC: Island Press, 2008. Print.

Lynch, Kevin. *A Theory of Good City Form*. Cambridge, MA: MIT Press, 1981. Print.

Mann, Charles C.. "Birth of Religion." *National Geographic*. June 2011. Print.

Matthews, Freya. "Conservation and Self-Realization: A Deep Ecology Perspective." Drengson and Inoue 124-135.

McLaughlin, Andrew. *Regarding Nature: Industrialism and Deep Ecology*. Albany: State University of New York Press, 1993. Print.

Mumford, Lewis. *The City in History: Its Origins, its Transformations, and its Prospects*. New York: Harcourt, Brace & World, 1961. Print.

Newman, Peter. "Theology and the City: Babylon and Zion." *Case Studies.* Murdoch University Institute for Sustainability and Technology Policy, 16 Jan. 2008. Web. 22 Nov. 2011.

Naess, Arne. "The Deep Ecology Movement." Sessions 64-84.

"Nature." *Dictionary.com Unabridged*. Random House, Inc. n.d. Web. 14 Nov. 2011.

Orr, David. "The Designer's Challenge." *Encyclopedia of Earth*. Ed. Cutler J. Cleveland. 16 Apr. 2008. Web. 4 Mar. 2012.

Panofsky, Erwin. *Perspective as Symbolic Form*. New York: Zone Books, 1991. Print.

Patton, Michael Quinn. *Qualitative evaluation and research methods*. 2nd ed. Newbury Park, Cali.: Sage Publications, 1990. Print.

Register, Richard. *Ecocities: Rebuilding Cities in Balance with Nature*. Rev. ed. Gabriola, BC: New Society Publishers, 2006. Print.

Rossi, Aldo, and Peter Eisenman. *The Architecture of the City*. Cambridge, Mass.: MIT Press, 1982. Print.

Rykwert, Joseph. *The Idea of a Town: The Anthropology of Urban Form in Rome, Italy and the ancient world*. Princeton, N.J.: Princeton University Press, 1976. Print.

Sessions, George. "Deep Ecology and the Anthropocentric Detour." Sessions 156-183.

Sessions, George. "Preface." Sessions ix-xxviii.

Sessions, George, ed. *Deep Ecology for the Twenty-First Century: Readings on the Philosophy and Practice of the New Environmentalism*. Boston: Shambhala, 1995. Print.

Snyder, Gary. "Ecology, Place, and the Awakening of Compassion." Drengson and Inoue 237-241.

Stoll, Steven. *The Great Delusion: A Mad Inventor, Death in the Tropics, and the Utopian Origins of Economic Growth*. New York: Hill and Wang, 2008. Print.

Stump, Roger W.. *The Geography of Religion: Faith, Place, and Space*. Lanham, Md.: Rowman & Littlefield Publishers, 2008. Print.

Thayer, Robert L.. *LifePlace Bioregional Thought and Practice*. Berkeley: University of California Press, 2003. Print.

Tuan, Yi. *Space and Place: The Perspective of Experience*. Minneapolis: University of Minnesota Press, 1977. Print.

"Weltanschauung." *Collins English Dictionary - Complete & Unabridged 10th Edition*. HarperCollins Publishers, n.d. Web. 14 Nov. 2011.

Wilson, Edward O.. *Consilience: The Unity of Knowledge*. New York: Knopf, 1998. Print.

Woodruff, Paul. *Reverence: Renewing a Forgotten Virtue*. Oxford: Oxford University Press, 2001. Print.

Zurick, David. Rev. of *Deep Ecology for the Twenty-First Century: Readings on the Philosophy and Practice of the New Environmentalism*, ed. George Sessions. *Annals of the Association of American Geographers* 86.2 (1996): 352-354. *JSTOR*. Web. 29 Jul. 2011.

APPENDIX A—SELECTED EXTENDED QUOTES

The following are some additional or extended quotes selected from the qualitative analysis.

Village Homes

Worldview: How did you come to live at Village Homes?

VH #9: "[The first time I lived here] I knew the place was special even though my contact with the community wasn't all that great…I just had this positive impression...even though I was only here for one semester during law school…when I moved back [to Davis for a job] I was looking around for something to buy and Village Homes just felt right…the project is set up to encourage neighbor interaction, waiving at everyone in the morning and knowing their names. A lot of us say that when you take off a day from work you don't even have to go on vacation, you have to leave the joint, you can just stay home and it feels like vacation. When you walk the place you will see all the colors and smells and say hello to everyone in the whole world, and it just feels like a very comfortable environment."

VH #3: "[the people we bought the house from] had a very active 10-year-old boy who was climbing all these trees around here when we were looking at it. I guess they wanted a bigger place, but I tell ya, it sure worked for us. Our daughter was one when we moved in, and our son was born a couple years later, when we were here, and they have totally enjoyed living in Village Homes, which is high praise from your kids…This just had a lot more trees and natural habitat like right there in your back yard. [we] knew about the community…and we liked the house, so we decided to buy it…In terms of space it works extremely well for families and kids, kids have a lot of freedom to just move around between the yards and the common areas."

VH #8: "It had the values and it was intended to be an energy conserving community and I was teaching energy conservation and was interested in the notion of community so it was a very nice fit when I moved in. You'll probably understand this, there's nothing like this place and I never intend to leave. It's truly a very very wonderful community."

VH #7: "I was raised to feel that anywhere you live, whether you owned it or rented it, you had charge over it, and in your free will you could let it go crazy and not care, or you really own it, and by owning it you are made more and it's made more. That was my catholic upbringing, and I'm affiliated with the Quakers now and that's even more so with them, and for the whole green political movement is much more about that and this really seems right for people here in Davis, people really are much more interested in what happens to 'my stuff after it leaves me,' and I haven't found that very many other places."

AG: "So people care beyond themselves, and you find that here more than other places?"

VH #7: "Totally, oh yeah that's true the city in general but here [at Village Homes] specifically"

VH #6: "I think this facilitates people who have always had the dream of having a farm to live the dream even thought they might not have the financial wherewithal to get there, or might not have the skills to actually carry it out. Resources are strange that way, if you are a farmer you have a whole of lot of one thing and you have to go bartering or selling to get what you need for the whole year. This is so much more logical because you get a little bit of everything and you live right next to the people that you're sharing it with and you

live right next to the few trees of each kind and so you can go sampling and you can go sharing them. It seems like people ought to, it feels more natural."

Worldview: How is Village Homes significant?

VH #2: "It signifies nationally and internationally that you can actually have differently designed built landscapes, that you can have a place that's not all compartmentalized or privatized, there's so much public space here or semi-public space, that you can also have a place that's ecological, that at least intends to be as sustainable as it can be, though that term wasn't used when they were building it. It's a very powerful alternative model or example, and we need more of those."

VH #10: "When I was a kid I just thought this is how places are, I didn't realize I was in a unique place…Everyone knows each other, much more so, I realized, than other places where you might know a few kids around you on your block or something but I knew people five streets over, and they knew my family. It was just much more of a community."

VH #2: "No other developer would give this much common space, you'd just build wall to wall houses. It was basically built by people, particularly Mike and Judy Corbett, who weren't in it for the money, which is radically different."

VH #7: "I think 1/3 of the 72 acres is open green space, and needless to say, in a regular subdivision, that would all be houses. There are probably 100 fewer houses here than could in a regular subdivision, and that was the plan. The shared green space is more important to the quality of life than just having more public buildings or more houses with bigger lots, the lots here are much smaller than they would be ordinarily."

VH #4: "Almost every time I've mentioned [that I live in Village Homes] people say 'you sure are lucky.' People in Davis are familiar with it, they walk through it because it's a nice place to walk through, and they know it's a nice place to live, so people are usually envious of the attractions of the place you've mentioned and that I've confirmed (Common space, sustainability, values they want to live out) And it's all in comparison to other places, it's all relative, and Village Homes just has more of those positive attributes."

VH #6: "[people think] it's the coolest place to live, if you are into sustainability"

VH #2: "It's generally admired in a lot of corners in town."

VH #1: "There is a feeling among some people that this is kind of an exclusive area, and indeed the housing values are higher than in other parts of town…the reputation of Village Homes as being a place where people pay a special attention to the environment becomes, as you move away from it, a place that becomes precious."

VH #10: "There's definitely a connotation that goes with it. We jokingly referred to ourselves as like the 'Village homes posse' and we were just a close-knit group of friends all from there who have stayed friends…In the community people know about Village Homes.

AG: "Was it a cool thing to be from Village Homes?"

VH #10: "Yeah. No one ever made fun of you for being from Village Homes. They might say, 'oh that's that hippy place,' but there was never any negative connotation with it. People were definitely interested."

Worldview: What are the shared values among Village Homes residents?

VH #8: "Most people in Village Homes would consider themselves environmentalists, most people in Village Homes would consider themselves progressive liberals, most people in Village Homes tend to not be that enthusiastic about war and violence, most people in Village Homes value education, most people in Village Homes value senses of community. I guess I'm delighted to live in village homes because what I think what happens is that it has influenced my values and we have influenced its values. So there's a transaction between what we believe and what we practice and where we are. So I think the more you hang out with people in this community the more you are persuaded [by it]."

VH #3: "I would say probably it's a pretty liberal place, but other than that. Not everyone is open, I have immediate neighbors that are actually quite private, but they still choose to live here"

AG: "So there's a variety of people that live here?"

VH #3: "Most definitely…but the ecological principles are shared, so even my private neighbors is really big into ecological stuff. I would say that's definitely common."

VH #1: "Almost all of us are politically liberal, I don't know anyone who is conservative. There might be some, but we do often advertise for causes…even if there are conservatives, and I don't personally know any here, they would be of that ilk. So that's one core value that we all care about the environment. I think there are a number of people who are interested in exploring a slightly more broad lifestyle, just the way they raise their kids and that kind of thing, they are more open in many ways."

VH #2: "Some people are really coming from a deep ecology point of view, really not as much into private property and that sort of thing, much more into collective living, definitely much more into green living. But there is a range as I said, and you don't have to subscribe to that to move in here."

Built Environment: How does the built environment of Village Homes reflect the worldview of its residents? How does it facilitate living out of shared values?

VH #3: "Because the walkways are so close to the yard I see many more people, and talk with them. I see people getting fruit off the trees and you go and talk with them...you'll just naturally run into your neighbors in a way that might not happen in a more rectangular kind of a neighborhood."

VH #8: "One dimension that Village Homes just beats the hell out of any other community is what it's like for children. We felt when we were raising our kids that as long our children were careful crossing streets, and did not leave Village Homes, then we could let them roam within the community safely."

VH #10: "The amount of freedom that I had as a kid was lot more than most, My parents could basically expect me to just run off with my friends in the morning and be off somewhere in the community and they would not have to worry about me at all… My parents, this was way before cell phones, they might not know where I was but I could call and check in from anyone's house, you could just play and be a kid as long as you stayed within Village Homes…[we were at] the pool all summer long, at the parks we would always get together to play games…the benches where the sidewalk ends, cool little places like

that, which to a kid are like totally magical…all the little sidewalks, we could get from one end of village homes to the other without ever walking down a street."

VH #7: "It was designed to emphasize day to day society, its designed so you kind of have to run into your neighbors, you don't hide behind your fence because there aren't any allowed. Your yard melds into the yard next door, and all that common area is the responsibility of the shared houses. If you can see it you are partially responsible for it. Anybody who has walked through Village Homes, whether from Davis or from somewhere else, knows immediately that this is different. You don't have to have anything told to you, you just walk through. As soon as you come into the area you have the feeling of a gated community but there's no gate, this is pass through area for people who live on all sides."

VH #2: "When we were looking at the house we got told three different things about where the property line is, I don't know where it is [laughing], but we are also supposed to take care of our part of the greenway."

VH #1: "each one of these [houses], even though they are similar, are quite different, they all seems to be kind of experiments…that's important…there seems to be a lot of intentionality"

VH #2: "village homes is not manicured, the open spaces is not manicured the way that city parks and greenways are, and it's not under surveillance in the same ways…its threatening to mainstream views of control and behavior."

VH #7: "Village Homes as it exists now, I'm just stunned every time I ride my bike through it, that it just is so itself. To use a Buddhist term 'the suchness of it' it just is really what it is, and that's okay, and that informs me and allows me to be exactly who I am...that's really what I get here, that everybody is really able to be themselves to a really great degree."

VH #8: "I'm a landscape architect, and you can look at something as mundane as people's front yard or side yards and you can tell that people [at Village Homes] feel that [they can be themselves] because there are more weeds and more tuftiness, people just don't care about manicuring their landscape, they are not behaving for others...we don't do a lot of things to show off to our neighbors because our neighbors know who we really are."

VH #7: You are given a real easy way to walk, run, or bike anywhere in the village and I do. I use my bicycle way more here than I would in a regular suburb because there is nothing but concrete cars to watch out for. Here there is just not that, you don't every feel like you are competing.

VH #9: The place was built to care about the environment. It just makes sense. The narrow streets so you don't have heat gain from the asphalt, the trees on the streets to reduce heat gain during the summers, the grape arbors on the south-side to cut the summer heat and shed in the winter, the north south configuration to get the delta breeze, the mostly stucco tile [roof] structure.

VH #1: "But I guess I need to emphasize that it's a feeling about it to which all these things contribute. I mean the open space, If it were just open space, there are parks all around Davis; If it were just big trees well there are older neighborhoods downtown that have big trees. So it is this notion that everything that was done was done with some sort of rational plan in mind, that it wasn't just slapping a grid of subdivision out there with identical houses…."

VH #5: "This place is special because it's intentional. Somebody made it special on purpose and it's otherwise just a regular old place."

VH #3: "You cross the street and you enter Village Homes and the temperature drops noticeably, just coming in...I'm sure that's because of the green. Immediately the temperature drops, like the same difference if you went beside a swimming pool and it's cooler from the evaporation, you get that effect just coming into Village Homes. I've heard many people remark on this. It just is a total de-stressing...it's something I experience all the time. Just the fullness and the richness of the natural habitat here, and the life of it and the vibrancy of it, you just fell in when you come in."

VH #5: It's like my mental health, this garden. I think I would shrivel up and die if I didn't have a garden. It grounds you so much. If I'm angry I need to go out and weed and I need to get it out of my system. Or I just go there in the middle of a crazy day and I pick some tomatoes and it gets me back down to that place that I need to be able to find. It's necessary for me because I tend to be quick-paced frantic in my job...going out and, this sounds sort of loony, but talking to the chickens, checking out my little plants, putting in some flowers. I need that.

VH #10: "[Nature] is just very important, and every kid that I know that was raised there is very environmentally minded. [Nature] is its own reward. It's not connected to any economic theory, that these trees are worth 'x' or that this open space is worth 'x' per square foot. I don't think it can be quantified…I certainly feel like I was more connected [to nature at Village Homes], and more in tune with the seasons and that things are growing…knowing where stuff comes from."

Sacredness: How do Village Homes residents understand and experience sacredness?

How does Village Homes specifically relate to sacredness?

VH #6: "sacred is some place that transcends yourself, you are there and you are like 'whoa' and this is a place that has significance and it's beyond me and I feel small and this place is amazing compared to every other place."

VH #7: "It will humble you, if you ever been in any kind of natural situation, among trees, at the ocean, in a wind storm. There's no doubt about who is going to win this fight. Man is nothing and nature is way bigger, and unconcerned, it's just doing what it does and if you get in the way, oh well…I feel that nature is my God…it's all there, and if you go you will be in the cathedral of your dreams."

VH #10: "Basically I always feel best when I'm outside, deep in nature…in places like Yosemite or the in the Redwoods…when I get can to a place that's as natural as can be is when I feel most…at home, or a very strong emotional connection, or wellbeing...peace…in the right place."

AG: "Does Village Homes evoke any of those feelings for you?

VH #10: "Certainly"

VH #2: "[I feel] solace, groundedness, calm, being outside the crazy social world that we have. I personally have a really big range for sacred it's a very relevant term for me, and I think about it a lot and it's very important. I have places in the house, any house I live in I have places I will meditate, usually those are not places I do things in the rest of the time. Nature in general, nature is of a huge continuum, lots of places are sacred in different ways at different times. Sometimes you want to be out on a mountain top, sometimes you want to be in a very sheltered secluded place…I look at it a whole lot of different ways depending on the context. This whole development is a sacred place in one respect just because such a different statement and a different feeling to me than any place else."

AG: "Do you feel a sense of belonging here that you might not in other places?"

VH #2: "Yeah. I'm really happy being here, I just feel really lucky almost every day."

VH #3: "Here in Village Homes we have had bonfires at the Winter solstice… and those have been wonderful gatherings…the musicians would come out, and we would even get the teenagers…that gathering of people and music has been extremely special… I would say it celebrates community, and I've also experienced this in smaller potluck settings, a real acceptance of everybody regardless of what job they have, regardless of what money they have, so it would cut across any class lines. Its actually a breath of fresh air for me compared with the economics department sometimes where there's a certain way of thinking...and this is much more of a just caring for each other...also just a celebration of being alive, being here, being in good health, being able to listen to this music."

VH #1: "For me part of sacredness is friends."

VH #8: "For me, a sacred place is a place where you have decided that it would be okay to die. A factoid which I tell people in relationship to this…is that more people have their ashes shipped out California for burial somewhere else than any other state, as if California didn't matter, as if the places in California were only temporary, as if they came here to make a living like migrant workers and they are going to go back to the homestead and be buried in the family cemetery. I'm here. I'm here for the duration."

AG: "Does Village Homes play a part in that feeling rooted?

VH #8: "Absolutely"

Sacredness: How is Village Homes a transformative place?

VH #9: "This environment fosters communication between neighbors, I tell people I have 250 neighbors...we all consider ourselves neighbors even if we're 4 blocks or 5 blocks away…the sense of neighborhood is just naturally big…somehow there's this mentality that changes when you're here."

VH #7: "When I first moved here I had all of those negative traits of suburbanites, 'I don't want anybody to know me, I don't want to be accosted on my way to the mailbox, I just want to come and go.' So I've changed a lot. I'm much more of a meeter and greeter now that at any point in my life."

VH #10: "It does feel pretty good to just take my dog for a walk around Village Homes and say hi to anyone on the sidewalk. Whether I know them or not, when you are in Village Homes you say hi to the people you pass by, but that doesn't happen outside of Village Homes. It's one of those things where, you don't know why, but it just feels right to acknowledge the person walking by you or something. They could not even be from Village Homes."

VH #7: "Its indoctrinating you into the flow of nature, now after five years of being here I know the fruit seasons, I know when things are going to begin to happen."

VH #5: "I think that if you are intentional about things [in Village Homes] then you notice the passing of time and the miracle that is things that grow here, the neat things about this community."

VH #6: "It's like they planted slow acting firecrackers all over the place"

VH #4: "we are very into the food value at village homes, we probably harvest more than anyone else…all year we pretty much just follow the cycle."

VH #8: The specific thing about this place in terms of it's meaning for me, is the way it integrates several levels of meaning...it actually does do good things for the environment, we

consumes less energy, we use less water here, we grow more food here, we have more friends here...quantifiable things...That is combined with a heightened sense of community and a heightened sense of place…The other thing I can say about my affection, it's kind of nested. I love this house, I love our immediate neighborhood, I love the greater Village Homes neighborhood, and I really love Davis I think it's a wonderful town with tremendous values. I have developed an affection for this bioregion...the area roughly between the foothills and the delta and Mt. Shasta and the Sacramento River. So I feel like I have a nested sense of place at many scales"

AG: "And this is kind of the epicenter of it?"

VH #8: "Right here in this living room [it goes out] like a series of concentric donuts, and all of those things move in and out."

VH #10:"Davis is an extension of Village Homes for me."

Dancing Rabbit

Worldview: How did you come to live at Dancing Rabbit?

DR #1: "I was in graduate school prior to coming here…and had the great pleasure of being a part of a housing cooperative, and really found it incredibly rewarding and far more interesting than graduate school…so I dropped out of graduate school and decided I wanted to do the community thing full time…I wanted something a little more stable…but prior even to going to grad school I lived in San Diego and really got disenchanted with the culture out there…I don't know if I've always been an ecological person…but I've always had an abhorrence of waste which was something that attracted me to Dancing Rabbit…I have always been a bit of a luddite and I had hand written my letters of interest. [Dancing Rabbit wrote back quickly] and it was mailed in this homemade envelope using part of magazine. The note was on the back of a used piece of paper. I remember seeing that and I was like 'my God, these are my people'…Dancing Rabbit] is really trying to put an end to wastefulness as much as possible…[conventional culture] is very material oriented, consumption all the time…This is a place where I didn't have to have a job, and I didn't have to drive everyday, and I didn't have to go shopping. Instead of trying to be responsible within the system it felt better for me to be away from the system as much as possible. Dancing Rabbit allows for the opportunity to do something along those lines."

DR #5: "I finally got to experience the 'American Dream.' We had the house the cars the nice American life, the two kids, and I started to really sense that it was disconnected…I thought 'really, this is it? This is what people work 30 years of their lives to get? This is what I have to look forward to? This is ridiculous.' I started to bridge aspects of holism, I planted a garden…and doing things just within the site, however it was pretty obvious that the typical American neighborhood [wasn't really going to work] it isn't oriented toward south, you can't put up solar panels on any building it not like you are actually gaining heat from south facing windows. So I had reached as far as I could possibly reach and started looking into intentional communities"

DR #7: "The city really depressed me and I really wanted to get out…my original idea was to go away and be as far from humans as possible…then I was in a group based on the works of Daniel Quinn. Something about what Quinn said spoke to me…'oh yeah, humans, you've got to work with them,' and if we're going to save this planet you've got to change this culture, and culture is about humans. While I feel so much more at peace [in] the so called 'pure natural world' I just embrace that humans are part of that, and humans need some radical change in order to be a part of the community of life…. before, [the

natural world] was all that I wanted, I didn't want anything to do with humans, but now I'm merging the two."

AG: "Is that what Dancing Rabbit is to you, your quest to connect to humans and to ecology at the same time?"

DR #7: "That's a really big part of it for me."

DR #3: "I liked that it wasn't a survivalist kind of thing, it wasn't based out of fear. The intention was to really see if there was a different way of living that could be sustainable and could give hope. I think I was coming from a real place of hopelessness with everything that I was reading. It just felt like 'we are so screwed up, we are so lost, as humanity we have thrown ourselves of a cliff and now we are just falling. It really felt desperate for me and I was going into a lot of depression. For me to come here and see that people were really banded together to do something...it gave me real hope…the idea of living with other people who had the same values, the same ideas, that were really counter cultural in many ways, felt extremely positive, like I could live. I could live and not feel despairing."

DR #2: "I was looking for that union of cooperative living, farming was really great I was really into it, but it was a very lonely existence. There's not that many people on a farm. You might have apprentices, but it's pretty quiet. I wanted more community… I really wanted to live with close cooperation between people and also on the land, so this seemed like it fit that pretty well...it has continued to feel like the right choice for me."

Worldview: How is Dancing Rabbit significant?

DR #6: I think the most significant thing for me might be that we are trying, that we have that intention to take good care of this place and be an example about how others can try to do that too…I try not to be too self-congratulating about what we are doing here because I like to be critical and not complacent…but we are a good example of a lot of alternatives, we are a good repository for a lot of skills and information … and we provide a good experience for hundreds of people who come through every year, so I think that real important…You spoke of the ecological crisis, to the hugeness of it, and there's some immediacy to it too. By working together and creating projects like this, to share information with people around the world, I think we put the focus on the scale of what's going on."

DR #2: "Maybe the most obvious thing is the way people respond to it when you tell them about it. I've had the experience since moving here, when I mention where I live to someone they are like 'oh wow really?'…it grasps the mind, I feel like there is clearly, in some sector of the population, a desire for other opportunities, for other things that are like this, that are different than what is 'normal'…It's been a part of two documentaries, and I feel like it's gotten enough currency to grasp more and more, the web traffic is going up all the time that I've lived here…it has a pretty decent following given that we live in the middle of nowhere in Missouri. I think the way it grasps people's imagination is what suggests to me that [it's significant].

DR #1: "I think that Dancing Rabbit is significant and I think it's going to prove more and more significant as the world uses up more and more of our resources. I'm a pretty firm believer in peak oil, peak everything really, and we are going to face really difficult transitions if we are not working on it now, if we wait any longer it might be too late. Dancing Rabbit is an experimental pocket of how we can get by in a post petroleum world."

DR #4: "As a model [it's] a very significant community. We have a lot of traffic on our website, a lot of people get exposed to what we are doing, we are very pro-media, pro-interviews,

a lot of researchers have come through. So we are willing to not only be the experiment about how to be sustainable but to actually show up and share what we are learning with other people…The data that we have seems to indicate that we are running at about 1/10th of the resource use of your average American. I think that's a very significant number at a time when we need more models for that."

DR #6: "I can also say that as much as we are obviously social creatures, I still have a sense that I like working alone, like a monk or a hermit or something. Sometimes I'm like 'you other people, I'll leave you alone you leave me alone,' but when it's all said and done I think I enjoy living with other people. I think by living with other people in pursuit of our ecological values, we are doing something really important and necessary in that humans need to be communicating these things to one another and working on them together to solve common problems."

DR #4: "We are able to [live] in a way that isn't ugly or deprivation oriented or whatever, I mean we live a really high quality of life here, and we are doing something really significant ecologically."

DR #3: "In addition to being captivated by the beauty of the space looking up and actually seeing the stars, the milky way, the coyotes and the owls…when I came here there was this slowness to the pace where people actually had the time because they weren't commuting to work, because they weren't putting all of their energy in to making a lot of money so they could afford a lot of things. People worked together on projects, and so there was this lovely sense of shared lives, shared thoughts, shared respect, this basic human comfort of being with others of your species that didn't feel commercial…people get together and do work parties because they want to help people out…not to get stuff back…There is also encouragement to take care of yourself if you are really overextended, to take care of boundaries too. It just felt so human and sane."

DR #3: "It's not isolationist…what I really appreciate is that really anybody can come here and live in a tent and build something...not anybody, I mean you have to come up with some resources and some knowledge and social skills. It's not for everybody. But there's that opportunity for some."

DR #7: "The financial piece of it is important, here they charge you for your warren a penny per square foot per month. You don't have to put money down when you come here. At [the other eco-village I was a part of] there was a joining fee, which was $4,000 and then when you become a member you have to lease your site for $20,000 for a 99-year lease…If you live 99 years, this is not a better deal than that, but without that money to put up it becomes a barrier. And if you do somehow pull that money together…you are invested there, and you can't get out...and [some people there] are angry and bitter and trapped…Here, although transience has its impact on the ability of having this core group of people that keeps it going, somehow it allows for people to not feel trapped. This is a place where they can come and try it out and experiment and if it's not right for them they haven't lost their whole life savings or made this huge commitment…I think that's huge in community planning.

DR #5: "One of the things that really excited me about dancing rabbit is that it's, not amateur but it has that grass roots feeling. You want to make something happen at Dancing Rabbit? Just put your sweat and toil into it, and your love and your time, and you can make anything happen here."

Worldview: What are the shared values among Dancing Rabbit residents?

DR #1: "I think that there's a tremendous amount of respect for individuality…you see a lot of things here that you wouldn't see many other places. Part of that you can attribute to the comfort that people feel in being here."

DR #2: "You can think of it like a body, things coming and going and moving between—interconnection, ecological principles, permaculture and what not. Everything is connected. The more points of connection you have the more complex and rich your system is. The whole is greater than the sum of its parts...The farther we grow, the more people we have here, the more energy of different sorts and different skill-sets interact, and people work for each other and are friends with each other and party together. It's all sort of this social continuum that takes place in a tapestry that is very physical.

DR #1: The Venn-diagram of our lives would have a lot more overlap than traditional society …a lot of what we are able to accomplish we would not be able to accomplish without being able to have a large group of people helping."

DR #3: "Our shared values are to have a small footprint on the planet, not being primitive but using technology [appropriately]. They are based on a knowledge that this planet is our home, it's finite, and the balance is being tipped by human activity, I think most people here would believe that. The desire to keep up things, to see the value in individual choice, that we can make a difference not just in our own actions but also by example so that others might be inspired to makes changes in their own lives, however small."

DR #4: "Nature is valuable for nature's sake and it's not all about us. I definitely think that's held here…if not held universally I think it's pretty darn close."

DR #5: "I don't like the human centered way of thinking about things, I don't want to live that way. Yet that's the way that I've been raised that's the way that we've all been raised. We've been raised to think that we are the best and not only are we the best WE are the best, that even those other humans they are inferior to us. And so there is always a hierarchy, and the breaking down of the hierarchy is a continual process...it is a complete re-evaluation of your life and the way you relate to yourself, to others, to the planet."

Built Environment: How does the built environment of Dancing Rabbit reflect the worldview of its residents? How does it facilitate living out of shared values?

DR #1: "The kinds of rules that we set for ourselves are pretty extreme…being off the grid sets us apart from other places, and not owning a personal vehicle…we also have covenants that say we only use reclaimed wood in our buildings, so that kind of limits what we are able to do…we use probably 1/10 of the electricity of modern consumers…probably the biggest thing would be the humanure system, we're not hooked up to the sewer, we don't pump our waste in fresh water to have it get treated somewhere and then have it pump back to us with different chemicals in it."

DR #4: "Dancing Rabbit has a batch of what we call the 'ecological covenants' which spell out what the basic, lowest bar of ecological responsibility that you can have in order to live here…the include things like all lumber has to be reclaimed or locally sustainably harvested, and then we have one's about our power usage, we recycle materials including human waste so there are not flush toilets allowed, we primarily collect water off of our roofs…any agriculture here has to be done in an organic fashion."

DR #5: "We've chosen at Dancing Rabbit to try to minimize duplication, for the longest time we had one washing machine on the farm because it was ridiculous to have more than one, we didn't get a second until we reached 35. Systems like that, whether it's washing

machines or showers or kitchens or social spaces…Dancing Rabbit is striving to be pedestrian so you won't be in car once you set foot onto the property, you walk everywhere. Because we are doing that we want things to be as close together as possible, we don't want it to feel like you can't walk from one side of the village to the other, so suddenly we are dealing with density…and what ever spaces there are between buildings are encouraged to be utilized for social spaces or for growing food."

DR #4: "All of the houses are different, there is no cookie cutter, there are no architectural guidelines that we make people dance to, so we have everything from the shack which is a metal structure which is really hard to heat in the winter and is total bare bones and you can see it third world countries…and he is totally fine with it, to this [house] which is like a full home where it's really comfortable in the winter. I don't feel like anyone gets flack for making the decisions that are right for them as long as they stay within the ecological guidelines and as long as their neighbors are okay with it."

DR #1: "A few [houses] have all the things a person would need, a place to eat, a place to get clean, a place to go to the bathroom, a place to do your other things. Many more [houses] are places where you sleep and places where you hang out maybe, an then those places where you eat, and place where you clean yourself, and places where you go to the bathroom are in different areas, like the common house and other eating coops."

DR #3: "When we first drove in I thought it was a mess. I mean I was from suburbia where everything is very manicured, and I saw these piles of wood and big barrels of rain water. I wanted to turn around and go back, but after three days of being here I just fell in love."

DR #7: "It feels very fluid, that was hard at first, but have gotten used to it, "people are very different here and so everyone has their own level of comfort and need for space and that's what I really like about dancing Rabbit is that is does seem like there's a spirit of accommodation for all those different gradients"

DR #2: "Every year the paths that are established...you could just see all of the pathways. You could see from how worn they were, which paths were used, how often, how many people were traveling on them. It was like this physical representation of these bonds that we are weaving actively, day after day."

DR #4: "We are starting to pay a lot more attention to how we orient buildings so that they face each other…having kitchens located on the same courtyard because kitchen are a space that people hang out…some people share kitchens…sitting homes so that they face the walking paths [which] get used a ton. We want public walking paths to go through what would be the equivalent of personal property, so that we are passing through each other's spaces with some regularity…Everybody shares the common house, so that creates a node of functions that would normally be considered private, people's work space, the library, kitchen space, a kid's play space, so that is all shared. Our land is collectively owned so nobody owns the property individually, so all of the recreation areas are shared. People do have private spaces and private homes, so it's not like you can just walk into anybody's private space whenever you want to, but we don't put up fences between the homes so that makes a really big difference."

DR #3: "I like how densely things are built… fences would not feel nice at all to me, there are no bounds. The road is right there, lots of times I'll be outside processing food or hanging laundry, and it's really rich to me that I can be doing something like that, whereas before I'd being doing that alone. Lot's of times people pass by and they say 'how are you doing' or 'I have to check in with you about something' or 'have you been able to do this' or 'hey you look sad, what's going on' or 'would you hug me.' There are a lot of hugs and a lot of support and a lot of human have fences if you have your own space."

DR #1: "we are a creating, rewarding, and nurturing society. We know everybody and the well being of the people is important just because of the proximity we share…If we were set up in a style that had our buildings hundreds of yards apart then we probably wouldn't be out and about as much as we are, and so we wouldn't be seeing as much of each other, and having those opportunities to share a conversation or ask a question or borrow this thing or whatever, and I think it would be more isolating."

DR #2: "Pedestrians are the norm and not the exception, vehicles are not typical in the village. We don't have streetlights. We are settled very close to each other. You can hear somebody having sex in the next house sometimes, or down in a tent, down in the holler or whatever. Or having an argument. You interact with each other on so many more planes of existence by virtue of the scale and how close you are to the other people around you. That's part of the deepening social connections with people, and having that many more interactions with the people that you don't particularly get along with. There can be somebody that you work with that you don't interact with and you'll never know anything about them. But even if you never speak to somebody that lives in the community you know a fair amount about them just by virtue of seeing them again and again and again doing whatever it is they do, and whatever extent you notice. It feels like such a complex web of interactions between people...

DR #2: "A lot of the buildings [feel right] in their settings, the [cob house], especially this year, he established all of these gardens around it, that setting and that natural looking of a house and the living roof and all that, it feels like it fits in."

DR #5: "We go [pretty far] towards the idea that we should preserve nature, often times we will make land-use decisions based on favorite trees. We have this landscape that was pretty barren, [there were some trees around the ponds and the creek] but we have actually planted thousands of trees to try to extend that belt of trees and create woods. So we've worked really hard to create green spaces close to our village and out on the land. We've even done some prairie restoration to try to get it back to what it was before farming came in…we pull invasive species and we do prairie burns…we do a pretty good job of understanding the value of wild lands, in fact we are trying to minimize our overall human impact to the village and keep as much of our land wild as possible, that's another reason for our density."

DR #6: "There are some nice spots walking around on the land, some nice hollers to hang out in, walking through a tall grass prairie feels really good, there's a nice little creek that runs through, out looking for mushrooms, there's a lot of peace and connection to be found…I like peoples houses, I really like porches, you get a lot of good interaction, you get to watch the scenery, to get to feel the breeze and the sun."

Sacredness: How do Dancing Rabbit residents understand and experience sacredness?

How does Dancing Rabbit specifically relate to sacredness?

DR #2: "What it all sort of boils down to is 'how do I feel in my landscape, what the things that are important to me, what are the things that represent the unknown the more powerful the larger longer-lived than I?' It's a diffuse kind of belief for me… The sense of the cyclical nature of things and how important it is to help, or not to hinder those cycles in our daily lives. To try to fit in a little more closely to the way nature works…recognizing that I'm not the most important thing here, that I need to been looking consistently for the ways the land wants to be different or could be improved through my influence or my neglect...trying to keep an eye open for the idea that something else my be more important than what I want … I definitely feel more capacity for the sacred in my life being here… The sweep of the land, the shape of it, The longer you live on it the more it feels like a body, like a thing or a person that you interact with, and that is so much

bigger than you are. And that feels like a sacred connection between people and place. Which is definitely keeping with what I want my life here to be like."

DR #4: "For me nature is where I feel grounded and where I feel like my thinking clears and where my heart rate slows down. I think there are physiological things that are really good for me about it. If there's any pure expression of anything in the spiritual world it's definitely in the natural world for me. I think it's beautiful and amazing that people try to imitate that and capture that in what we do, but I think we almost always fall short of what the natural world does effortlessly and I think that's really amazing."

DR #5: "So many times I feel like the built environment fails to create sacred spaces… For me most sacred spaces are spaces that have been affected by human impact...yet there is something [else] there. It's interesting you talk about sacred. I find some place becomes more sacred if I have a relationship to it. If I am physically relating to it in some way…there is a sense that there is something larger than yourself, and I don't believe in God so it's not like its a God thing, it's more like, this is not something that we could make, we can't manifest this. It is special in this moment without being meticulously created or crafted."

DR #7: "I'll walk across the prairie and see the carpet changing colors all spring and summer long, and that is sacred to me…connection is the biggest word, seeing those invisible spider web lines of lines of the ecosystems, it becomes really vibrant for me, and then sometimes it's a feeling of 'I can't take it in it's just so awesome'…it's more than I can appreciate."

DR #7: "[Sacredness] is also sometimes when we are in a circle, we are circling and we are singing, sometimes when we sing certain songs it gives me goose bumps because I feel that connection like 'wow we really are standing on this earth, and we are trying really hard, and we are doing what we can to make the change that we think we need to make, and we are all here doing it' it feels pretty awesome."

DR #3: "I think places become sacred with intent, so I don't think there are any spaces that feel intrinsically sacred. There are some spaces that lend themselves more to that than others…[Dancing Rabbit can be sacred] at times, I wouldn't say all the time. It has the greatest hope for me of the sacred or the spiritual emerging right now in my life, it allows for that [more than other places]…because the richness and variedness of human connection [here] is great."

DR #4: "I think for me, what Dancing Rabbit is, is my best attempt as a human with all of our imperfections, at holding space for people sacred stuff and the natural sacred stuff to get along. Whether they are completely in harmony or not, I don't think we are at total harmony here with the natural world. But for me that is sacred work, getting the people stuff and the sacred stuff integrated. I think that that's the best we can do, and that's a really high expression for me of whether you want to call it God or spirit or the sacred or however you want to call it...it's like right relationship, which is sort of a Buddhist way of talking about things...That's what I hope for here."

Sacredness: How is Dancing Rabbit a transformative place?

DR #5: "Anyone who comes here for any amount of time is transformed…there is often a strong reaction to coming here…it is like going to a different country…we put out there, without any holds bars, our reality. We talk about humanure, we encourage people to lick their plates to save water. We can be overwhelming. Usually people need three days to adjust, and if they make it past the third day not matter how long they stay…they will say 'this place has changed my life.' I could be little things…that start the wheels turning, sometimes…it's entering the sphere of alternative livelihood."

DR #4: "There is something about when you build your own home, which has been true for almost everybody here ... you are much more in touch with the elements. You have to think about how the building relates to water flows and the wind and the temperature changes, and you just have to get more in touch with what is happening in nature, I think that natural building and owner building has made a real big difference for a lot of us in our consciousness about the environment. I think you also get more real about nature. Part of my roof blew off this spring in this really intense storm…the natural world is not all nice and not all friendly…I think you get more in touch with what nature really is instead of what you fantasize about it being, and I think that's really good for us…I [mainstream culture] our housing is built for us and we don't ever think about what goes into shelter…you just turn the air-conditioning up a little when it gets really hot. We don't have that here, it's a less protected life than most people have."

DR #5: "As we know more about the land we are able to tweak our understanding of planning. It feels like its a process that's still not perfect…but every single time that you physically put something on the land it has a strong impact for everything around it, it influences everything, even you say 'oh this is temporary,' it has an impact."

DR #6: "Certainly we've had a transformative affect on the land. This was all cattle and beans and cattle and hogs for the last hundred years, and before that prairie and woods, so were are kind of taking all that and throwing all of our ramshackle development on it and you get a pretty funky place."

DR #2: "The sweep of the land, the shape of it. The longer you live on it the more it feels like a body like a thing or a person that you interact with, and that is so much bigger than you are. And that feels like a sacred connection between people and place. Which is definitely keeping with what I want my life here to be like."

DR #2: "Most of [the transformation for me] has been in the interpersonal realm. I think I would have done some shade of what I'm doing regardless of where I lived and how I lived but living is such close concert with so many other people, many of whom end up being not a perfect fit for you socially or otherwise, and having to learn to stretch and grow, and working with consensus. Whether or not you get along with somebody you still have to live with them and make decisions together, and that's a pretty key thing. So I think interpersonal communication and emotional intelligence are the two things that I've learned more than anything living here. But, certainly I've gained lots and lots of experience in natural building and in gardening and food, things like that."

DR #3: "[When I first came here] I witnessed a conversation [about a conflict in the community] and it was one the most beautiful, open communications I had ever seen up until that point in my life. They held each other with deep respect, caring, but with a real difference of opinion. I was like 'I have to learn that.' It was a huge draw for me. I think in my former life, before here, the model was if there is conflict then you avoid that person or you cut them out of your life, or you talk about them with other people and that gains closeness with other people while you shred this other person, and that always felt like crap to me. That was my family, my culture, that was how you did things, and it just felt ugly to me. When I saw this [conversation] I just really desired to know more about that."

DR #5: "Interestingly enough the way that I have been transformed the most is that I had to deal with personal growth in a huge way. I thought I was coming to community so that I could become more sustainable, and sure I did that, but it's not hard to work towards sustainability here…yet what I really had to do here is learn to live with other people…Dancing Rabbit has been constant personal growth since moving here."

DR #6: "Yeah, I think [it has been transformative]. Certainly you learn a lot by virtue of living with other people, having to make decisions together, and being considerate towards one another in really deep ways. So we go through a lot together. So even if you an intern or something, or coming as a visitor, I think a lot of people realize a lot about how life has gone, and what opportunities there are, and that can challenging, but that's a growth opportunity too."

Arcosanti

Worldview: How did you come to live at Arcosanti?

AS #2: "I came to Arcosanti with three big ideas, one of them was to work on my portfolio and use the resources of this college campus-like environment, I wanted to work with Paolo Soleri,…and I wanted to work in construction to get hands on experience…Arcology was definitely a big interest [of mine]."

AS #6: "I studied architecture…I took a trip with some friends and we went to Arcosanti and I just fell in love with the place right away, just like 'this is where I want to be. I love the architecture, I love the landscape, the weather, I love the idea…later I came back for a workshop, and that got the whole thing started…I was also concerned with the environment, it was always something I took seriously and felt likes, as an architect, I should make effort to think these problems through and see what I could do as a professional."

AS #4: "I was studying architecture…I was doing an independent study…my professors and a guest critic mentioned that I should consider Arcosanti and the concepts of Arcology because my project was very much in tune with Paolo Soleri's newest project 'Lean Linear City' which happened to be just emerging when I was graduating, so that was really what triggered [moving here]."

AS #5: "My original interest, interestingly enough, there's a component to the theory which has to do with this rather dense urban environment, and then another component which has to do with the fact that this dense urban environment leaves the rest of nature to be nature or farming. Growing up in Phoenix I had seen suburban sprawl just take up the countryside. So my interest in Arcology was not so much from an urban perspective, promoting the urban effect, people coming together. It actually had more to do with limiting the impact of the human species from being the absolute dominate species on earth. Later on I got intrigued with cities.

AS #3: "I don't think I was too sophisticated in understanding what Paolo was doing, other than that he want to create this alternative urban environment, based on his ideas of the evolution of humanity in terms of were we needed to go and where we are coming from. Just thinking about the place in terms of, maybe it would be a good place to go for a little while, to get away. I didn't feel like going the conventional career route."

AS #1: "The community-life aspect really attracted me to Arco...any one that has something they can offer can just make a time to teach it and announce it, and have an impromptu yoga class or whatever, an event or a teaching or something. And you can do that anywhere but somehow it's more normal here. Also if something's broken and you see it and you fix it, within an hour someone will notice and be benefitted by it. So the return on your effort is really direct...whereas if you live in a city and take it upon yourself to fix a pothole in the road no one cares."

AS #4: "I spent six years of my life learning about myself, trying to adapt to systems of life…that I thought I had to achieve…I had to own my own business, my own house, my

own car. I really went very far to try to experience and urban environment that was not comfortable to me…I was thinking about Arcosanti all the time."

AS #2: "Probably the most honest answer [to why I have stayed] would be that I just didn't have anything else to leave for. I didn't have the motivation. [I came in] my early 20's, and I guess at the time I really needed this isolation in order to see some things about myself, about my life that is much easier seen from a distance…a little escape from the expected path in life in order to have this perspective."

Worldview: How is Arcosanti significant?

AS #2: "The people who are residents here have a very worldly view, they are not stuck in onto 'we believe in this, we believe in composting, etc.' Paolo Soleri said it's very global, it's for the whole world, its not about isolating yourself. He's giving a solution to the problem of over population, which is a very serious problem...so he's given a very neat answer to that problem. It's not an idea like these days you can see, let's live off the land independently, off 5 acres, let's grow our own food, take care of our own animals, which is the style of agricultural society...of course we will always have the urban problem, overpopulation, and health improvements, now we live longer...So there is this problem. Some people are like 'we are going back to the land.' It's like saying no to the sin of modern life. But Paolo Soleri gives another idea."

AS #3: "Arcosanti is holding the space for that unique idea that could be relevant or could have some ramifications for the future of urban development."

AS #1: "It's a landmark in prototyping a different way for community life. And the Arcology concept, although there is plenty to criticize, I still think it's a very significant experiment."

AS #6: "Arcosanti is an experiment, like we experiment with planes or cars or whatever I think we should be experimenting with our habitat, how we should develop our cities…that's what we are doing here. But it's also more than that, it's becoming a lifestyle, it's becoming a way of doing things, a way of thinking about things. It's becoming more than just an experiment that you do and then you finish, it definitely more than that, it's a life experiment. The architecture is enhancing the way we live."

AS #4: This is carried by the force of humans working together collectively toward establishing something, similar to what cathedrals were centered on. Cathedrals established communities around them. Many of the major cities in Europe were established around cathedrals. This is not a brand new feature of human urbanism...we are taking it a step further, we are introducing it at a time when we need to reconsider or reformulate society all together. To go back to those core values that we all share, and that's basic needs being met for all."

AS #2: "I think Paolo's solution is more appropriate to modern day, to the reality of today, compared to the solutions of 'lets go back to the land.' There have been times in history when cities have come apart and then there is the Dark Ages again, and culture is lost…I kind of like Soleri's solution better because it preserves culture more."

AS #5: "The thing with Arcosanti is that is was really an artisan, artist, architect, that being Paolo Soleri, who very much, going back to Cosanti, in a very sculptural way, wanted to experiment…Coming up to Arcosanti was to extend that to a larger concept."

Worldview: What are the shared values among Arcosanti residents?

AS #5: "On a good day the place is pretty much believes 'to each his own'...generally the idea is to not constrain people…Generally speaking, in this place there's a healthy skepticism about any kind of overt mandate, any kind of party line of belief. So I would say in some ways what's agreed upon here is that people don't have to agree all the time.

AS #2: "Freedom is one [shared value], that would be the one that unifies people. I think that everyone who comes here has come because they want to not be put in a constrictive environment, and they find a very 'open to everything' environment. Not like open to violence or anything."
AG: "So there's an ethic of respecting everyone's independence here?"
AS #2: "Yes."

AS #1: "Sadly, there aren't really [shared values] other than just a small community…trying to respect one another and keep things comfortable for one another. Other than that I don't think so. Even being supportive of one another, I think [here] it's more about personal relationships.
AG: "So there's not really a community system [for support]?"
AS #1: "No, 'Morning Meeting' [is mostly about business], it's not like the community at large has a support group, and I think that's a problem because I think that would benefit a lot of people here. A lot of people keep to themselves, and they've got their friends, but there isn't this blossoming social scene here. [The young people especially] are just here on vacation, they have somewhere else to go to afterwards…I don't feel a sense of cohesion or sense of unity that I kind of expected. Part of it could be the transitory nature of this place."

AS #2: "The place had an appeal to it that was similar to a college campus but a little bit more like a summer camp too. Like more free. Like you don't have homework for example to do after you are done with work."

AS #6: "I don't know what people think in general, I think we should use nature as much as we can, as much as we should as long as we are thinking about the future…the idea of densifying here makes it a moot point almost, by using less land you are protecting the land so you don't need to use it. You have a smaller footprint and the rest is nature. I enjoy being able to go into nature how it is. Here you just walk a few minutes and you are in nature.
AG: "Is that and important thing for people to experience?"
AS #6: "Oh yeah, I think so."

AS #1: "Everyone has their own opinion, I would guess there is a variety of opinions. There is environmentalism for our own survival, like we are shooting ourselves in the foot and we aren't going to make ipods and cell phones and stuff if we ruin it, so we need to be conservative so that we can continue to [have them]. And then there are the people who are at a whole other level who are, where nature itself is something to learn from and be a part of and that our artificially sort of arbitrary environment that we are creating around ourselves is sort of without any anchor. [Technology] does kind of have a life of its own, it's complex enough that is replicates patterns you find in nature and so there is a nature that you find within our technological world.

Built Environment: How does the built environment of Arcosanti reflect the worldview of its residents? How does it facilitate living out of shared values?

AS #2: "The very important aspect is the freedom of people are given here, that freedom to speak your mind or say whatever you feel like. At 'Morning Meeting you can say whatever is on your mind together with a very important business meeting…So a lot of people who are a part of American society or any other society, they live in an expected environment they already have the steps written for them…It's very cosmopolitan and so there are no expectations about behavior, no openly stated expectations about living here…so it is a very free environment here, and that can give you a fresh start...there is a social collective decision [about what is built] and then there is the veto power [of the foundation]. But the community council is pretty respected, the construction managers [also have influence]."

AS #6: "I think the idea and the project wants that to happen, just by what we are trying to do; the idea of densifying, and having smaller spaces and living together, more in a spirit of sharing things, and living more in a community where we don't each have our own house, our own kitchen, our own backyard, our own car. So there is that sharing…but it's not a religion, there is not a set of things that people have to follow, it's really influenced by the discussions that we have, by the people that come through, by the architecture and the way we design things…but everybody is at different stages, different levels, some people think that they need the air conditioning, so shared values, its sort of difficult to say we all have the same goals or the same reason for being here, it's a big challenge for us, because we don't have that religion or doctrine that says 'you have to do it this way and that's how it has to be done.' I would be much easier if we could control everybody...but its not that way"

AS #4: "I think isolation is where we risk loosing the consciousness of other people. So I'm interested in understanding how we can work with the rest of the world to achieve comfortable environments for people to thrive and be themselves and love and be at peace with one another."

AS #2: "There's a sense of neighborhood here, you can walk outside your door and find someone to chat with."

AS #6: "The advantage of the way that this is, its so close together, it's still so small too, if it was bigger it may be a different story, but at this scale as it is, every knows each other, a lot of people eat together most of the time. There is time and places where people can mingle and learn from each other, and hopefully influence each other. There is some of that. I can think of many people that have influenced me since I've been here, and have played a big role in making me who I am."

AS #1: "People live a lot more close together, so we do see each other all the time. I think the time that I would rally a bunch of people together would be at lunch time or at dinner time…there's a lot of people that I've never really had a deep conversation with, even though we are really steeped in each other and even though it is such a small community, at the moment there are less than fifty people here. It's surprising to me that there are some people I wouldn't feel comfortable just knocking on their door, although I bet if I did it wouldn't be a big deal…People set it up as they want, some people's porch for example you just go and it's understood that it's a place that is social and people hang there, and other people just disappear into their room and you never see them and it's sort of known that they can't be bothered."

AS #5: "A lot of people that watch the sunset, that watch stars. Here you really notice the difference between a full moon and a new moon. The birds. One of the interesting things about these buildings and the mesa is that even though you are inside, you are in and out of buildings all the time. In a city a lot of times you'll disappear into a building and be there for the day. Here you go from building to building to building. You are always in and out. There is always the breeze, some line of sight. You always know what the weather is like. The air is good up here, there is that feeling of a natural state. Where

we are sitting right now we can look across and see the mesa and the trees and rocks and basalt. I personally find that to be terrifically rewarding."

AS 4: "It gives us the opportunity to see how beautifully architecture and the environment can be brought together; technology, the environment and people."

AS #3: "It really has been an urban laboratory because it has enabled people to consider these things and do it for themselves. Find that space, go to sky theater watch the sky, be able to appreciate the built environment and the sky seamlessly coming together."
AG: "So this place is still about harmonizing man with the cosmos?"
AS #3: "Yeah, but more so at Cosanti."

AS #2: "I like the idea of the modern life and how connected we are because of technology today. Having that knowledge of the other side of the world. How are you going to get that if we all go back to the land?
AG: "So instead of a radical move backwards, or cutting off the 'sinful part' as you said it, it's more that we should work with what we have. So in a sense is that the human taking the role of nature in a way? I mean you are taking these huge megastructures and making a place for people instead of nature creating the space for people.
AS#2: "Yeah I think so, but the structures are built with respect for nature, the solar orientation, the wind turbines, the greenhouses, so they are built with respect for nature…wild animals make shelters, but yeah these structures, they are difficult because they are made with concrete and steel and those are materials that we have to hurt the land in order to build…it is a good question about the resources, but the resources are already being put in suburban sprawl.
AG: "Yeah, I read that this whole place could be built for the cost of an aircraft carrier."
AS #2 "so these resources are already there, being used for war, or space exploration…I guess we aren't to that point of thinking of all human beings together."

Sacredness: How do Arcosanti residents understand and experience sacredness? How does Arcosanti specifically relate to sacredness?

AS #2: "Times of the day are sacred, definitely the morning is sacred to me, and sometimes the first human interaction I have kind of stops that sacredness…the morning in the desert, and I guess everywhere, but here in particular seeing this vast nature around you is really sacred…the 'Minds Garden' is sacred, I like to go there and…it really help me to reach a state of calmness in my head…that's the place for me to go and let go of the physical, the material and kind of find a peace inside. The roofs of the buildings are sacred, the river bed…I really enjoy this walk here that makes a full circle around the mesa and it really gives a progression of the elevation and the site, from the flat desert up, going through beautiful views, going along the river, so that's really a great experience for me, it connects me back to something primal or calmer nature of mine…feelings of peace, calmness, knowing that you can do what you need to do to get where you want to get…acceptance of the past…It depends, sometimes sacred means reverence and a little fear, awe understanding of how a little pebble you are, and understanding how life can be."

AS #6: "I don't use that word very much, I'm not a religious person. I'm for no religion or all religion. I think sacred and connect that word to religion. But for me nature is sacred, my body is sacred, my kids are sacred. I Don't have a special place I go to meditate or anything although sometimes I would like that, but I will go to nature, that would be my place where I would meditate, so nature is sacred to me and that's where I go."

AG: "Is there anything about the way this place is laid out or the architecture or the essence of the place that gives you more or less reverence than other places?

AS #2: "In a way. The vaults are amazing, during the day, at night especially during morning time. They are such exadurated structures that the scale, similar to the way the cathedral is built. The scale, seeing the human into that gives you sense of reverence or a sense of awe."

AS #5: "Arcosanti generally avoids the concept of sacred space being a created thing, something that we make. Like we don't have a meditation room, we don't have an ashram. We have a classroom with nice carpet to do yoga…now mind you, in the early design of Arcosanti there was a monastic part of it. Paolo Soleri has this idea that you want to have a monastic side, or a very very very lean aesthetic. One of the other things that I think is generally commonly held here is the idea that leanness is a solution. People equate leanness with being impoverished or something, but you can be very proactively intelligently lean. That's not necessarily leading to a sacred space, but it get back more of that attention to nature and that position within nature. We will have mediation groups that will come stay here on a workshop. We've had yoga groups come here and stay, we've had writing workshops where people come and do writing. It's generally a very quiet place at night, there's not a lot of lighting. Though there is a lot of things going on it doesn't have that perpetual buzz that you would have in a Manhattan where it never unplugs. This place, people tend to value a certain amount of leanness. So one could argue that the whole site reflects a certain amount of that. That's on a good day. Halloween is tomorrow night, that's going to be a little more robust."

AS #3: "So I think that what we are trying to look at now in terms of sacred space is that there is something that we lost in terms of how we create our spaces as we became sophisticated civilizations"

AG: "Is sacredness recovering something that's lost?"

AS #3: "Yes, it's a rediscovery process…I don't want to say that's all it is, but yes, from my personal experience. Rediscovering these ideas…there was this middle ground of civilization, when the Celts were around, the Minoan civilization…maybe they had some level of development and they didn't have the same repressive tendencies that we associate with civilizations now, the contradictions that we associate with civilizations now. That might have been where sacred space thrived… now what we have is a desire to rethink modern experiences and realities and create a sacred space that's helping facilitate that process…to create an urban space that's very well integrated with nature and is very comfortable for human beings… How do you create a space so feel can feel union, that idea of helping people to create that union with each other and nature? That's the idea of organic architecture—reconnection…Its more than just 'oh I want to create this unique space using organic architecture'…existing [conventional] architecture is not working because it's based on this model that is looking at the world that does not appreciate nature for it's intrinsic value."

AS #4: A sacred place for me is when family and friends are present, it's not a place or a structure that represents anything other than people, and I feel that people are sacred, when we join together in union, its about us, about people, about humankind. It's about all people coming together for an experience, those are the sacred moments. If I were to call my city the most sacred city in the world I would be offering someone else a challenge…lets us work together to understand what really is sacred is each other… structures can't do it justice."

AS #1: "The sacredness in other places, for myself personally, need to be cultivated. I work in the foundry and I think that's a sacred place, I think ceramics is sacred, I think the café is sacred. But maybe to a lesser degree intrinsically, and maybe because its so meaningful to so many people. It's a sacredness that exists because of peoples belief in it and the people that are around it."

Sacredness: How is Arcosanti a transformative place?

AS #3: "The only way I can really see that is metaphysically. Somehow, you are always projecting onto things. The seven thousand people that have done workshops here, they've projected their dreams onto this place."

AS #1: "The intention of people coming here, the types of people that come here, there are so many heads that are into environmentalism."

AG: "So this attracts a certain kind of person, so there is a lot of knowledge here and a lot of access to different ideas"

AS #1: "For me it's pretty easy to have an isolated experience, but if I come out of my shell…I am immediately exposed to this really good cross section of people that are conscious and concerned."

AS #6: "yes I would say [it's transformative], first I have been transformed by the idea of frugality. Living simply with less, being happy with what I have, and valuing my lifestyle as opposed to what I own or what I have, that's the biggest thing that this place has taught me. It also allows me time to work on my self, spiritually, that could be where the sacred comes in. Because I'm not caught up in this craziness of making money and spending money and being in that whole consumerism deal, where you become totally in it. You don't have any time for yourself to think about other things. If you look at a spiritual people, they say 'get rid of material things to live spiritually.' Well I think there is something to that, and this place allows you a little bit more of the possibility to do these kind of this because you have a lot less to deal with, you are living close to each other, you don't have to drive to work, you don't think about buying things all the time because you aren't making a huge amount of money, but you have what you need to live. In that way it's transformative, to me.

AS #2: "I think [it is transformative], it also depends on how much you want it to transform you. You have the subject and you have the grounds for change. It is a transformative place. I think a very important aspect is the freedom that people are given here, the freedom to speak your mind or to say what ever you feel…so it is a very free environment and people do loosen up a bit here which can give you a fresh start, to think about your life, what you want to do…finding confidence about doing what you really want to do…I think it is transformative because it is a 'tabula rasa' in a way, on the human scale. We put some concrete buildings here so it's not a desert 'tabula rasa,' it's a social one.

AS #5: "Yeah it is [transformative], mind you I was in my 20's in the 70's which were hugely culturally transformative…it's hard for me to know what it's like for someone who is 20 that is coming here [today] and what that impact it has. Some of the people coming here, come here having visited 10 or 15 or 20 different nations and have a lot of global experience, so it might no be as transformative as you might think, [to them] it's instructive more than transformative. For me, that's a really interesting question, it certainly had effects, but I myself would not claim any greater effect than going to the university, or traveling to Mexico, or going to India. In the sense that everything is transformative, sure it's transformative, in the sense that this is a wildly different place that you can't experience anywhere else, I don't think so…there was a young woman who was living here from New York City…who had been in all kinds of interesting situations and she said that Arcosanti was the most regular place she had lived in [laughing]…some of the antics that go one here remind me of a freshman dormitory more than this ultra transformative place."

AS #4: "Reformulation is a big factor here, but you can live here and not be reformulated. You can exist in an overindulgent, self-indulgent consumption level and still be present here. You can be lazy and not work and mediocre. You can also be very high intensity conscious and spiritual. It's a place of diversity, you cannot tell anyone what to do here. It challenges people."

AS #1: "I've given this a lot of thought, and the more I've thought about it the more I realize how little I understand it. I see a lot of talent come in here and I see a lot of talent leave before it really

applies itself very much. I also see a lot talent immediately get to work and good things happen, but it seems like Arco is constantly waiting for its ship to come in…Informally people have taught everything from how to paint, how to sketch, to electrical theory, to circus arts workshops. Maybe if there were something a little more formal…Arco is such a ripe place for experimentation and yet a lot of residents here just want to go watch movies after work, or do what people want to do anywhere else, they want to watch some TV show and have a beer and go to bed. And there's nothing wrong with that. But on the other hand...

AG: "Is there an alternative culture here? You said that people don't have too may shared values, but do people have an alternative set of values than conventional value set?"

AS #1: "well inevitably yeah, but it's not as different as I would have thought when I first got here. Like there are people who don't recycle and don't want to, they through stuff a way because it's easier, people who don't walk the hill, they drive…It's not a big deal but it counteracts value systems in an obvious way to visitors and everyone, and that isn't frowned upon or even talk about because there isn't a collective communication system."

AS #3: "The majority agree that there is something about this vision that's interesting and they'd like to make it happen, see it develop. But in terms of actualization there's a difference between your theories of core values and your practice of core values, I think that's where the real problem comes into play...So I'd say [Arcosanti residents have shared] theoretical core values, yes, but practical core values? big no…Not that I'm perfect either, but I think it's that ability to inventory yourself and realistically look and say 'this is where I'm at,' and that's tough. We don't have that real alternative sense of core values. I've got to be honest about where I'm at in relationship to my core values and how I can get to the point where my core values are more integrated with my livelihood or my practice."

The Theme of Death discussed in 'Extrapolations from Generalized Findings'

Death was another theme that emerged in interesting ways throughout the study, but was not explored to the extent to which it could be. But given that the theme of death is a central theme of sacredness, and a major theme in myth and religious ritual, it is important that I share a few significant extended quotes having to do with this topic.

Throughout his interview, one Village Homes resident repeated over and over again, proudly, that he was content to stay living in Village Homes until he died. The following are some excerpts:

AG: "Is Village Homes a significant place?"

VH #8: "Absolutely. It's changed for me over the years. It started off being a place for me to reconcile what I was teaching and what I was living. The second stage that I passed through or that Village Homes may have passed through in my view was that it became sort of a beacon or icon [in the early 80's], and people came from all over the world. The French president, and Roselyn Carter as firstly lady came in…People came from all over the world, from Europe and Japan and Russia…and that I would say was kind of the second stage for the village. I would say that I have kind of a third stage because I'm retired and I've kind of been there and done that with all of the environmental things, and now what I appreciate most are the people and the relationships I have

with people and the fact that I can go out on the green belt and talk to people I really like. You know, my neighbor just came over to my yard and dropped off some peaches or some damn thing. We can take care of each others dogs, we have a potluck every Sunday…A group of us who are retired have started to meet together to start sharing dinners in anticipation that some day instead of moving to a retirement community we might coordinate our elderly care, whether it's with common nursing or having someone cook a meal. We are anticipating the next, perhaps final phase of our lives in some communal fashion that would probably be here at Village Homes. My wife and I have bought long term care insurance and that allows us to stay in this house until we kick the bucket…what it says is that we are planning not to move and that we are going to stay here until the end. It's a wonderful feeling to realize that you've been in a house 30 years and you might be in it another 30 years, you have no desire to move."

AG: "So this is a place, if I can say, that you would like to die in?"

VH #8: "Very good. You know I never really quite thought about it, but yes. Let's put it this way, I'm content to spend the rest of my life here. I have no dreams or anticipations of leaving. I mean the only thing that might get us out of here is if all three of our children moved away and we got so sick that we decided to move closer to them so that they could take care of us…We've seen that happen to a number of people in Village Homes. But until that happens, we are content to live here, indefinitely."

AG: "Can you say more about its significance?"

VH #8: "Well, the original reasons why I moved in here are still very valid. I don't mean to dismiss them. I feel good about living in a solar house, I feel good about living in a place where people grow vegetables in their front yard, where people have community events, where people think about what they are doing, how they are getting around and who they are interacting with…but I guess the specific thing about this place in terms of its meaning for me is the way it integrates several levels of meaning...we consumes less energy, we use less water here, we grow more food here, we have more friends here...quantifiable things...that is combined with a heightened sense of community and a heightened sense of place. The other thing I can say about my affection, is that it's kind of nested. I love this house, I love our immediate neighborhood, I love the greater Village Homes neighborhood, and I really love Davis I think it's a wonderful town with tremendous values. I have developed an affection for this bioregion...the area roughly between the foothills and the delta and Mt. Shasta and the Sacramento River. So I feel like I have a nested sense of place at many scales" "

AG: "And this is kind of the epicenter of it?"

VH #8: "Right here in this living room [it goes out] like a series of concentric donuts, and all of those things move in and out…This and that and this house and this community this region I am very very deeply attached to, and if I were to kick the bucket tomorrow, burn me up and throw my ashes in the common area or dump them into Putah Creek or something like that. I'm into that, and I feel totally comfortable with it. That concept, though it might sound weird to some people, is very reassuring to me, it feels right, it feels like I'm home and I want to stay there."

AG: "Could you say it feels like you've found your appropriate place among creation?"

VH #8: "Yeah. Absolutely"

AG: "Can you tell me about sacred places?"

VH #8: " I would consider myself, if anything, a Buddhist Atheist. I don't believe that there is a God that has any control over anything, and if there is a God is consists primarily of that which is within people to treat each other well, and that's about it. So when I think about sacred places I think about it in the Randy Hester lower case 's' sacred, that are intensely meaningful and seem to have a power… For me, a sacred place is a place where you have decided that it would be okay to die. A factiod which I tell people in relationship to this if I'm doing a lecture or something like that is that more people have their ashes shipped out California for burial somewhere else than any other state, as if California didn't matter, as if the places in California were only temporary, as if they came here to make a living like migrant workers and they are going to go back to the homestead and be buried in the family cemetery. I'm here. I'm here for the duration."

AG: "Does Village Homes play a part in that feeling rooted?"

VH #8: "Absolutely…You can look at a community in its nested bioregional niches as soil where roots can go down and grab. So emotionally this is nice loamy soil, you live in this place and boy your roots can go down pretty easily. I think without this place, without this specific place I wouldn't feel rooted to this bigger ecosystem. I don't think I've ever articulated that explanation to anybody before this. I think it's been prompted by your interview, I would have to say that without the centroid, without the taproot, there wouldn't be the other root."

Several Interviewees at Dancing Rabbit discussed the recent death of one of their members. The following are selected excerpts on this topic:

DR #2: "We had a burial last month for a woman who had lived here, most of ten years…a year or so ago she found out she [was ill] and left to seek treatment out east near her family, and died in September."
AG: "She's buried here?"
DR #2: "She's buried under an oak tree just across from the kids play set up there by the playing field. She was very specific about wanting to be in a fairly central place that would be visited and tended."
AG: "But she wanted to be buried here?"
DR #2: "Yeah, I mean she lived here for ten years, longer than anywhere in here life, and, yeah, she wanted to be here."
AG: "Was there a ceremony here?"
DR #2: "Yeah, the whole thing was amazing…she was frozen by the local coroner, and they drove her body out here in less that 24 hours. She was prepared for burial here by all of us, by her friends. Her family didn't want to do it. So all of us did it. [A community member] who works with wood and does everything with hand tools made this incredible litter out of osage orange like hand carved and woven, and grasses from the prairie lining it. She was wrapped in a shroud made by [another community member], and there were all these flowers. Everything about it represented the sum total of the social, like 'yes we do live this close with each other, we can do something sacred like that, that doesn't have to be done by a funeral home, in this particular way that doesn't cost hundreds or thousands of dollars.'...Going through that process, I felt strongly that the community had the capacity for that kind of thing but until you experienced it, when it happened it was like 'of course, this is how we would do this, but having never seen any example of it before I didn't know for sure. That was definitely a sort of sacred moment for the culture here, to recognize that we have the capacity to care for our dead and every stage of life in that way…the kids participated in digging the grave, and we all dug that grave. The whole thing was just overwhelmingly positive, the best possible manifestation of loosing somebody that I could imagine."

DR #3: "Another time that felt really connecting to me, we recently had the loss of a friend a few weeks back. We had healing circles for her before she left where a lot of the community came and just laid hands on her, and listened, and sent her healing energy. I just felt, looking around the room at a bunch of women at one time, and I was like "I know there are difference between these people, that there are conflicts that flare up, and how beautiful it is that we can all come together and be here for this person, and simply be together. It felt really holy, really transcending of the crap that happens in everyday life. Her burial, that whole day as we dug her grave together, this was a good friend of mine, a very dear friend, one of the closest friends of mine that died. Her dad brought back this box with her frozen, and there were six of us that moved her body from the box onto this beautiful litter that [a community member] had made, it was created out of all wood and joined together and put tall grasses on. It was lovely and we took the sheet off of our friend and just thanked her for her life. We tied her in the shroud, I was a pall bearer, and during the ceremony we carried her up. She was Jewish so we stopped the seven times before we lowered her. Just the

ritual, it was the first time that I had ever been part of a death or burial that was so real or so unremoved for me. I actually touched her frozen body and kissed her head saw her swollenness from her suffering and actually lowered her into the ground and covered her with dirt and read something and cried, and that felt amazingly connective, and I don't think I'll ever be the same after that."

DR #7: "[The monarch migration] is connected with her death…I was the one that actually initiated the walk that we took, did anyone tell you about the walk?... During that monarch migration, it was a Sunday morning, and I stepped out of here and there were thousands of monarchs. It was a gorgeous day like this, and I just needed to be out on the prairie and honoring what was going on. News had just come in two days before that things were not looking good for T. It has just, the day before, really hit me that this really is the end. I hadn't really processed it yet. So I just announced at our community meeting that I had been really inspired by the prairie and after the meeting wanted to take a walk and just celebrate T's life, and invited anyone to join me. It was very spur of the moment, and I didn't think many people would, and there was a crowd. We walked, I had no plan, it was just something I needed to do. So we walked out quite a ways on the property and amongst all the butterfly's and identifying plants and just talking among ourselves. Then we got to a place where some of us needed to turn back. So I asked everyone to circle, and we did a little, our own little personal thoughts, because there's not a lot of group meditation here."

AG: "And there's probably not a shared language here, for prayers, I mean how do you pray? Because it's not like there's a shared religion."

DR #7: "Right, so we just had a moment of silence to contemplate whatever. Then [a close friend of the woman that died] she just said, 'lets just send our love to her. ' So we turned to the East because she was in Massachusetts, and we just turned to the east and shouted 'we love you.' Then we circled, and then we all went on our way. Someone took a picture of us at that time, and so we have the time, and it was just maybe four minutes before she actually passed. So that was pretty important"

AG: "And she wanted to be buried here."

DR #7: "Right. She was a really extraordinary person, so I don't know if necessarily everyone here feels that [connection to the place]. There are a lot of transients here, and so some people are here just hanging out and they'll find another place that they will find being more connected to, to the point of wanting to be buried there. But I think there is enough people here now that the burial conversation is very meaningful, and it's real for some of us. It real for [my husband and I] because we are older and we are building a house here by hand, and we aren't moving anytime too soon. I never would have thought that I might be buried on the prairie of Missouri, but, we are starting to have those conversations.

APPENDIX B—DANCING RABBIT ECOLOGICAL COVENANTS

These following are the ecological covenants that Dancing Rabbit residents agree to live by. More about these covenants can be found at dancingrabbit.org.

1. Dancing Rabbit members will not use personal motorized vehicles, or store them on Dancing Rabbit property.

2. At Dancing Rabbit, fossil fuels will not be applied to the following uses: powering vehicles, space-heating and -cooling, refrigeration, and heating domestic water.

3. All gardening, landscaping, horticulture, silviculture and agriculture conducted on Dancing Rabbit property must conform to the standards as set by OCIA for organic procedures and processing. In addition, no petrochemical biocides may be used or stored on DR property for household or other purposes.

4. All electricity produced at Dancing Rabbit shall be from sustainable sources. Any electricity imported from off-site shall be balanced by Dancing Rabbit exporting enough on site, sustainably generated electricity, to offset the imported electricity.

5. No lumber harvested outside of the bioregion, excepting reused and reclaimed lumber, shall be used for construction at Dancing Rabbit.

6. Waste disposal systems at Dancing Rabbit shall reclaim organic and recyclable materials.