Beauty by Design

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"We are swinging high...And when I look down I see all the ordinary stuff—our brick house, the porch, the tool shed, the back windows, the oil drum, barbecue pit, the clothesline, the chinaberry tree. But they are all lit up from inside so their everyday selves have holy sparks in them, and if people could only see those sparks, they'd go and kneel in front of them and pray and just feel good. Somehow the whole world looks like little altars everywhere."—Rebecca Wells¹

Have you entered the quiet of a cove deep in the forest, drunk in the lush vegetation, and experienced the rippling swirls of its creeks coursing through your spirit, only at some time to find time stand still? A deep presence opens up before you and you sense that you stand before and within something profound. Or have you come upon an alpine valley, sat to rest your feet, and without warning a vast space opened in your spirit? You feel part of something huge, beyond describing.

¹Rebecca Wells, Little Altars Everywhere (New York: Harper Perennial, 1996), 14.

And after a few moments, or minutes, you're back just sitting on a rock? Or perhaps have you entered an art gallery and gazed at a painting, only to find yourself beckoned into some conversation without words where something communicates with your deeper self?

Many of us have had spiritual experiences in nature or the arts. For some, it's our first, or perhaps only, church. What do we make of these glimpses, these intimations of some reality deeper than what we experience in our daily errands and interchanges? Do these experiences matter? Do these hints of a deep presence change us and do they have any implications for how we live our lives? What implications do these glimpses have for society? Might these hints offer some hope to an increasingly complex and challenged world?

This paper explores these issues and asserts that, because people easily encounter God in nature, and because people increasingly live in a built environment, it's critical to our spiritual health that we find ways to create living environments that bring nature and humans together in artful ways that reveal God's presence. We approach this topic by examining the theology of beauty and its relationship to social theory and to ecological design. While once of great importance to the western understanding of God, the concept of beauty fell into disuse until relatively recently, when it has experienced a resurgence of interest. In the Eastern Church, however, beauty has remained a subject of prime importance. So, as western Christians we will explore an old topic with new eyes, a topic that may illuminate central truths of our faith and help us to

interpret the signs of our time and respond to them in powerful ways.

Consequently, we will approach this topic first by exploring the phenomenon of beauty and how beauty relates to the Trinitarian nature of God. With these ideas we will be better able to understand what happens to us when a work of art or a mountain moves us deeply. Then we will explore the factors that influence whether or not we encounter beauty. We will see that this involves not just the individual but also the community within which he lives. From there we ask whether the way we change our world matters or not. It turns out that it matters greatly for both the individual and society. Finally, we will ask how we can affect our world in ways that make the world more beautiful. In other words, how can we alter, or design, our natural environment in ways that promote encounters with beauty? In this journey from encountering beauty to designing for beauty we will discover perhaps one of the most fundamental, and exciting, challenges facing Christianity, and all faithful people, today.

Beauty and a Loving God

I was walking down the street on my way to the University one day and passed a wooded corner lot. The day was nothing special. I passed this lot everyday on my walk to school. But this day as I noticed the trees I experienced a strong pull as if they were calling out to me, beckoning me to come into their midst. I just stood there, feeling them tug at me, but didn't move. Why, I don't know. It was a definite calling, one without

words. After awhile the sensation ceased and I went on my way, changed and moved.

What was this phenomenon? What happened? Was it important? The ancient Greeks call this phenomenon an experience of beauty. According to one etymology, the ancient Greek word for "the beautiful", to kalon, derives from the Greek word, to kaloun, "the called.²

For the Greeks the experience of beauty involves the experience of seeing something concrete or tangible while at the same time sensing a seductive otherness. It involves an invitation to the beholder and the beholder's response to it.³

Thus, beauty calls out to the beholder, as when Moses encountered the burning bush and an angel of the Lord called out to him from within it. As Christopher Bryan points out, the "Good Shepherd" easily could be translated as the "Beautiful Shepherd," a shepherd who calls his sheep and invites them to follow him. Similarly, in Romans 4:17 God calls into being things that do not yet exist. Again, God calls things into relationship with Godself and evokes a response.

² Plato, Cratylus 416C-D. Plato with an English Translation, Vol. 6. (H. N. Fowler. New York: G. P. Putnam's Sons, 1926), 110-13.

³ In the context of a particular sacred space Plato calls this sort of experience *chora*. He views place as "the wet-nurse, the suckler and feeder of all things...Place as *chora* carries its own energy and power, summoning its participants to a common dance, the 'choreography' most appropriate to their life together." Belden C. Lane, Landscapes of the Sacred: Geography and Narrative in American Spirituality, Expanded Edition (Baltimore: The Johns Hopkins University Press, 2002), 39.

⁴In a personal communication, May 14, 2014.

⁵I am grateful to my colleague Christopher McDonough for pointing this out.

The meaning of the word "beauty" also includes the sense of the orderly arrangement of all the parts of the cosmos. As Gatta points out, the ancient Greeks called the world (cosmos) $K\acute{o}\sigma\mu\sigma\varsigma$, or beauty. This word captures the sense of divine order, integrity, wholeness, and moral rectitude, as well as of human love of outward appearances.⁶

Thus, Jonathan Edwards says that "a thing appears beautiful when viewed most perfectly comprehensively and universally, with regards to all its tendencies, and its connections with everything it stands related to."

Thus, God "gave his only Son" because God loves the "world"; i.e., its order and beauty. When we appreciate the way things relate to one another, perceive the context of what we see, our appreciation for what we observe grows and our ability to perceive its beauty increases.⁸

Thus, inasmuch as God is a system or Trinity of relationships, as we come to see the interrelatedness of God's creation we more likely come to recognize the author of those interrelationships.

In recent times the great theologian Von Balthasar has rekindled an interest in the theology of beauty. In fact, his theology starts with beauty. Von Balthasar believes that we ignore the topic at our peril because most people first encounter God

⁶ John Gatta, Making Nature Sacred: Literature, Religion, and Environment in America from the Puritans to the Present (New York: Oxford University Press, 2004), 90.

⁷Gatta, Making Nature Sacred, 70.

⁸ For Simone Weil's perspective on beauty as orderly arrangement see Robert Davis Hughes III, Beloved Dust: Tides of the Spirit in Christian Life (New York: Continuum International, 2008).

through an experience of beauty, which he equates to the *kenosis*, God's total giving of self.⁹

Others equate beauty to the *shekinah*, or Glory, of God, or to the Holy Spirit. However understood, beauty is God's presence that exists within all of creation, human and nonhuman. It lies "under the surface" of the reality our senses give us. Both realities exist—the one of the senses and the one that undergirds, which permeates, the world of the senses. As Thomas Merton wrote:

O land alive with miracles!

O clad in stream

Lift your blue trees into the early sun! ...

O brilliant wood!

Yours is the voice of a new world;

And all the hills burn with such blinding art

That Christ and angels walk among us, everywhere.

These are their ways, their fiery footsteps,

That flash and vanish, smile and pass;

- By those bright passengers our groves are all inspired.

Lo, we have seen you, we have seized you, wonder,

Caught you, half held you in the larch and lighted birch:

But in that capture you have sailed us half-mile-high into the air $...^{10}$

⁹ Edward T. Oakes and David Moss, The Cambridge Companion to Hans Urs Von Balthasar (New York: Cambridge University Press, 2004) e.g. 283-86.

 $^{^{\}rm 10}$ Kathleen Deignan, ed., Thomas Merton: A Book of Hours (Notre Dame,

*Encountering the Mad Lover*¹¹

To understand this "calling out," the fleeting experience of some unexpected deep presence, we need to consider the trinitarian nature of God. According to Richard Rohr, Karl Rahner, the great 20th century Roman Catholic theologian, has said that most Christians today could drop the concept of the Trinity from their understanding of God and ninety-five percent of their Christian lives and thinking would be totally unaffected.¹²

Although we say that God is triune, in reality we talk and act as if God consists of at most two persons: the Father and Jesus. Very often we equate God with the Father, while we focus most of the time on Jesus. In other words, we talk as if God is either a duo or in reality a solo act with an occasional cameo appearance of a guest artist.

Is this truly a Christian view, however? Have we lost something of the richness of our faith by failing to internalize the significance of the triune nature of God? I think we have indeed and that we particularly need to incorporate the Trinity into our daily lives if we are to thrive in the 21st century.

IN: Sorin Books, 2007), 116-17, cited from Thomas Merton, The Collected Poems of Thomas Merton (New York: New Directions, 1977), 157-59.

¹¹ In this section I draw particularly on John Macquarrie, Principles of Christian Theology (New York: Charles Scribner's Sons, 1966), Robert W. Jenson, Systematic Theology, 2 vols. (New York: Oxford University Press, 1997); John J. O'Donnell, Hans Urs Von Balthasar (London: Geoffrey Chapman, 1992).

¹² Richard Rohr OFM, "The Divine Dance: Exploring the Mystery of Trinity," (Albuquerque, NM: Center for Action and Contemplation, nd), set of 4 audio cds, disk 1.

There once existed a land known for its music. In particular, wherever you went people talked about, and were moved by, a famous jazz trio. This trio affected people in surprising and new ways. Every time someone went to the club where they performed they left inspired, refreshed, and feeling amazingly whole.

Each member played a unique role. The bass player provided the creative heart of the combo. When asked, the bassist provided a seemingly unending stream of new musical ideas, while the older tunes remained as fresh as the day they first were played. The clarinetist had an amazing way of taking these ideas and galvanizing them into something so real that his listeners almost could see them. Finally, the drummer tied the trio together. Knowing the bassist so well, the drummer would encourage him to lay down a new idea and urge the clarinetist to bring it to fruition. With its imaginative rhythms that played off the strengths of the other two members of the combo, the drummer kept the trio tight, encouraging them to listen to one another, coaxing and encouraging them on.

The trio had been playing so long together and so tightly, that the members knew each others' hearts and minds perfectly. Just the slightest hint from one player brought a perfect response from the others. Everyone gave all that they had and never held back from one another. People would wonder, "Are they really three or just one? I see three folks up on stage but they act like they're just one. I've never heard anything like it!"

Nobody ever thought the trio needed augmenting—it was perfect as it was. However, the members of the group loved

to improvise. They couldn't resist exploring new ideas and sounds. So, periodically the drummer would suggest to the other two, "Let's try that new tune we've never played, and let's try it with a trumpet (or a tuba, or a washboard or a paper and comb or....)." So, the clarinetist would yell out, "Any trumpet player out there?" and a trumpet player would come in from off stage and join them. Inspired by the trio and brought in tight by the beat the trumpet player (or kazooist) quickly would become part of the jam. Night after night the trio played at the heart of a large grouping of musicians whose composition changed over time. But the perfection, depth, and joy of the music never changed even though the melodies might be all new or largely golden oldies.

This story of the jam is more than a fable. It describes a mad lover who in some ways is a community of three persons. The members of the trio give of themselves so thoroughly to one another that they interpenetrate one another and become one. They totally respect the ability of the other members of the trio and give them total freedom to play as they will. On top of that they love playing so much and love relating so much that they invite others to join them, regardless of their level of ability. They wildly love making music—and, as far as they are concerned, the more musicians the merrier. While their music is perfect as it is, they love having others involved. It's in the trio's nature to invite others to join in, even though the music is perfect.

Other metaphors offer the same insights on the Trinity from a different perspective. The early church Fathers describe it as three performers, or persons, who weave in and out of each other. Together they constitute "the Dance." The early church fathers call this circular, interweaving dance, their interpenetration, *perichoresis* (note that "choreography" comes from the same root, chōrēo, meaning "dance").¹³

Robert Jenson, the Lutheran theologian, thinks of the Trinity as a "fugued melody," a melody played in variations by three players who so skillfully intertwine their contributions that they sound like one.

Getting to Know You (and Me)

In reflecting upon the mystery of the Trinity, which ultimately we can only attempt to understand via metaphor and poetry, the church has come to equate the "Father," or bass player, with "primordial being" or the desire that things exist. The "Son," or clarinetist, takes the inexhaustible ideas from the Father and brings them into existence by speaking or calling (playing) them into being. When we see the Son, we know that the Father wants things to exist. The expression of that desire we call "The Son"; i.e., the Son gives voice to the Father. Both totally give themselves to the other to the degree that from our perspective it is hard to tell one from the other. Sharing the same nature and coequal in importance, these jamming or dancing persons have no beginning and no end.

This word "person" presents difficulties for the modern mind because it does not equate to "individual." According to Jenson, "a person is one with whom other persons—the circularity is constitutive—can converse, whom they can address."

¹³O'Donnell, Hans Urs Von Balthasar, 77.

For the Greeks a *persona* consists of the mask an actor wears in a drama. The mask determines the role s/he plays in the drama, or in the larger drama of life the role that the individual plays in society. Thus, a "person" is not an impenetrable private entity, but rather one whose social relationships determine who he is, giving him his identity.¹⁴

As O'Donnell points out, self-consciousness always involves an awareness of what is beyond oneself—it involves relating to something or someone else. We first become self-aware when our mother smiles at us. We are called into being by the love of another. In that sense our "self" includes the one who called us. Our encounters with the things around us similarly help us come to know who we are. These encounters make and mold us. So, St. Thomas said that in a certain sense the knower is all things because the human consciousness reaches out to everything that exists.¹⁵

This happens perfectly in the Trinity. Each person knows itself through the others. Each person is who they are to no small degree because of the others with whom they relate. Because each person loves the others, each gives them total freedom to be who they are, making room for them within themselves. They trust one another and rely on one another's always giving a loving response. They love perfectly. This total give-and-take creates the unity of the Trinity. Thus, "God is Love," a total pouring out of oneself (*kenosis*), and a total responding to, one another.¹⁶

¹⁴ Jenson, Systematic Theology, 177.

¹⁵O'Donnell, Hans Urs Von Balthasar, 67-68.

¹⁶O'Donnell, Hans Urs Von Balthasar, 67-68.

We may experience this unity in our everyday lives. A truly loving couple affects one another so much so that, although both partners maintain their uniqueness, each takes on many of the characteristics of the other. They interpenetrate—they become a unit unto itself called "the marriage." In many ways this reflects the relationship between the Father and the Son (and the Holy Spirit).

A third party helps us see one another more clearly by stretching and molding us. Without a third party challenging us and helping us to see ourselves and one another more clearly, we do not fully empty ourselves and truly give the other freedom. For example, after a few years of marriage my wife and I decided to have children. Neither of us felt a strong need to have children per se. We had a very happy and fulfilling relationship. Neither of us had a strong desire to hear the pitter patter of little feet. However, we came to realize that unless we had children, unless we opened ourselves to the intimate demands that children place on their parents, our love would remain closed and limited. To grow in our relationship we needed to look outward. Children help parents see who they are. Children call out of their parents aspects of their personalities the parents themselves didn't even know they had.

Similarly, within the Trinity the Holy Spirit helps the Father and Son see each other clearly and binds them together in a three-way, totally self-giving and responding community. The Spirit helps the Father see who the Son is, see that the Father is the Father of this particular Son. The Spirit likewise helps the

Son see that He is the expression of the Father. The Spirit provides perspective, calling the others to come together, to give to each other. In short, the Spirit brings unity and perfection into relationships. This is why it does not call attention to itself.

Shall We Dance?

We have seen that the nature of Love causes the Lover to reach out. So, although the Trinity loves perfectly and doesn't need more partners in its dance, its nature causes it to reach out for more. Accordingly, God makes creatures, whether rocks, streams, fish or people. The Spirit, who O'Donnell calls "the ecstasy of God," sees the infinite possibilities the Father offers and moves the Father and Son to bring into being a multitude of creatures from viruses to elephants and mountains. The Spirit calls out new life and draws the entire biophysical system into a functioning unity. The immense variety and novelty we see in creation reflects the wild joyfulness with which God makes things, as well as God's unpredictability. The moving, dancing Trinity moves throughout creation calling new things into being, cajoling, coaxing, rejoicing in all that is. Our God is a wild God, a God of serendipity, always new.

Thus, when we encounter beauty in a sunset or painting, we encounter a Mad Lover. Often we experience this Lover as joy, peace, profundity, deep silence, or a jarring wake-up call. These experiences of beauty are the Holy Spirit's calling us into the dance or jam, the Spirit's trying to get our attention.¹⁷ When something calls out to us from our particular burning

¹⁷ According to St. Augustine, because all three persons of the Trinity are so intertwined, they work together in their interactions with their cre-

bush, we encounter the Holy Spirit's inviting us to join the Father and Son in their music making. If we cooperate with this call, the Holy Spirit then helps incorporate us into the jam. Within our limitation as finite creatures we come to experience partially the intimate love of the Trinity, God's perfect giving of self and perfect response to others.

Encountering Beauty

Beauty peeks out at us through all creation. It breaks in on us when we least expect it. Moses certainly didn't expect to encounter God in a burning bush as he was herding his father-in-law's animals. Neither can we make beauty appear to us. But we *can* prepare ourselves to be more able to perceive it when it happens; i.e., to have "ears that hear and eyes that see." ¹⁸

What It Takes

Three things affect one's ability to encounter beauty: the transparency, or holiness, of the thing encountered, the transparency/holiness of the observer, and the degree to which the observer's understanding of the world corresponds to the truth,goodness, and beauty embodied in it.¹⁹

As to the holiness of what we observe, creation most clearly

ation, although we may perceive one person or another more clearly at any particular time: e.g. de trinitate 4:30.

¹⁸ This section draws on my own spiritual formation and my experience in outdoor contemplation. Lane's Landscapes of the Sacred, and Alejandro García-Rivera, The Community of the Beautiful: A Theological Aesthetics (Collegeville, MN: The Liturgical Press, 1999), have particularly influenced the way I approach this topic here.

¹⁹On truth, goodness and beauty, see the next section.

reflects the Creator. As the direct work of God, it reveals the values and intentions of its maker. The great saints for centuries have spoken of the Book of Nature that both directly gives us an experience of God and that yields spiritual lessons to those who read it. This understanding continues to this day. We might consider, then, creation (as God makes it) the most transparent of all things, the one thing most capable of revealing God's beauty to humans.²⁰ When we encounter wild nature, then, we have a great opportunity to encounter God. This would explain why many people say "I don't go to church on Sunday. I head for the woods— that's where I encounter God most easily." Paul, we remember, chastised the Athenians for not knowing God when God's handiwork was all about them.

As with any encounter, however, it "takes two to tango." Our own ability to perceive God at work in our lives affects our ability to perceive beauty. To the extent that God and we are on the same wavelength we most likely are going to be able to hear God when God calls out to us. When we spend our days interested in others and seeking the good for all, we allow God into our being. We give him a ready ear and eye. However, if we are distracted by greed, self-concern, or worry, for instance,

²⁰ Certainly creation includes human beings. So, people regularly encounter God in other humans. However, humans have also the capacity to turn away from God, to become less transparent—even to the point of turning others away from God. Other creatures, as far as we know, cannot choose to turn from God. So, within the created order humans can provide a great point of contact with God or not, depending upon the degree to which they allow God to shine forth in their lives. Because of this uncertainty, nonhuman, or wild, creation may provide a more reliable point of contact for many people.

we may not hear God at all. This does not mean God cannot reach us. It may imply, however, that God may have to take extraordinary measures, as God did with Paul on the road to Damascus. The more open we are, the more we give of ourselves to others, the more like God we are and the more we are able to carry on a meaningful conversation with our creator.²¹

Finally, our thoughts or worldview affect our ability to perceive beauty. To the extent we believe that such a phenomenon doesn't exist, we won't look for it and most likely will miss it when it happens. We all know that it may take a long time to grasp, if we do at all, something someone is trying to tell us that comes "out of left field." We tend to hear and see things that we expect to hear and see. Similarly, if the values implicit in the worldview our culture inculcates in us are ones that stress values opposed to God's, then we less likely will be able to perceive God's beauty shining from within creation. If society tells us that slavery and mistreatment of slaves is part of life, then a slave owner may find it challenging to see the Christ in his slave smiling out from within her. Or, if trees consist only of board feet of potential lumber, landowners may have difficulty experiencing an epiphany when God calls out to them within a cathedral of pines. Someone

²¹ For insightful examination into the reasons why present day western society has difficulty in perceiving God in the world see Ronald Rolheiser, The Shattered Lantern: Rediscovering a Felt Presence of God (New York: Crossroad, 2004). For historical analysis of the trends that have brought about this situation see Ronald Rolheiser, A Shrinking Horizon: The Deeper Reasons Underlying our Struggles to Believe in God in Western Culture available at http://www.ronrolheiser.com/common/pdf/shrinking_horizon.pdf.

who believes, however, that a certain place is sacred or that mountains bring one closer to God may have a mountaintop experience. Similarly, as beauty also includes appreciating the orderly arrangement of what we observe, to the extent our mindset leads us to look for interrelationships and order we more likely will encounter beauty.

Thus, the more our surroundings reflect God's glory, the more we learn to give of ourselves and to conform our thinking with a reality alive with God's presence, the greater the probability we will encounter beauty in the world around us.

The degree to which we can perceive something as beautiful also may vary according to the scale at which we view it. For instance, consider a particular parcel of land located between two larger parcels. Let's assume it is overgrown with a variety of weedy plant species that make it a tangle that assaults the eyes. The parcel itself, given our aesthetics, appears ugly. Yet, when we learn that the parcel serves as a crucial corridor for an endangered animal species, the parcel takes on a new significance. Without this corridor the animal's habitat would be too small. However, with this crucial link the animal can move between the two other parcels, gaining thereby enough habitat to survive. At a parcel (small) scale the piece of land appears ugly. At a regional scale, once we appreciate it for what it does, we may see beauty in the parcel. Thus, our ability to view beauty may depend, in part, on our ability to "see" at various scales. For this reason our search for beauty impels us to embrace all members of society, including the scientific community that enhances our understanding of the web of interrelationships and deepens our capacity to see the

hand of God at work. Without it we often may fail to grasp the truth and goodness before us.²²

The figure on the opposite page summarizes these ideas. The arrows represent an influence flowing from one thing to another. On the right we see the observer's ability to perceive beauty. As any of the three things on the left become more helpful to the observer's perception of beauty, then the probability of the observer having an experience of beauty from any encounter grows. For instance, the more a person comes to believe that encounters with beauty are possible, the more open they become and they become more likely to encounter beauty. Similarly, the more the thing we encounter mirrors God the more likely one will encounter beauty in it. The larger

²² This discussion also pertains to the problem of what some call "natural evil" —that is, the presence of suffering and violence in nonhuman creation. When we see an individual animal or person suffering a violent, painful death, we abhor it. We fail to perceive beauty there. However, when we consider this death at the ecosystem level and see that death is part of life, we may come to find death meaningful at that scale. Death makes way for new life. One's body gives itself so that the next life may have the nutrients with which to build a body. Death is a self-giving to others. When we look at death within an even larger scale, we see that death leads us into a reality far larger than we experienced previously. The pain and suffering we encountered in life may have prepared us for a deeper and richer life in the next. Jesus' death, while horrendous at the individual scale, led to amazing life for many when seen at a cosmic scale. Thus, our ability to view beauty depends, in part, on our ability to see at various scales. Otherwise, the symbol of the Cross loses its power. Notice, however, that this in no way diminishes the suffering of Jesus on the Cross nor of the individual facing cancer or crippling disease. For one discussion of the problem of natural evil see Christopher Southgate, The Groaning of Creation: God, Evolution, and the Problem of Evil (Louisville: Westminster John Knox Press, 2008).

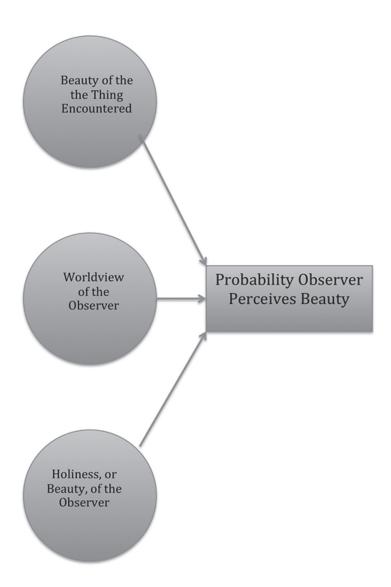


FIGURE 1

the size of the circles on the left the more positive influence they have on the observer's ability to perceive beauty.

The Effect of the Encounter

As people start experiencing beauty more, what impact does this have? Is the experience of beauty anything more than a warm, fuzzy feeling?

Beauty can transform us. In the 1999 film *American Beauty* a little boy sees a plastic bag floating in the air. The sight entrances him. His heart bursts from the beauty of the experience and he hears an incredibly benevolent force telling him not to be afraid. The experience jolts him into a new life and transforms his sadness and brokenness into "so much gratitude for every single day of my stupid little life."²³

When we encounter beauty, we may experience in some way the overwhelming sense of God's being "for us," of all being well. A most natural response to this experience is to praise and to give thanks. Beauty motivates us to seek God—to recognize the giver of the gift of this experience and to give thanks for it. Gratitude, in turn, can begin a whole process of spiritual growth in faith, hope and love. As Brother David Steindl-Rast says, gratitude is the heart of prayer.

Today it was wonderful. Clouds, sky overcast, but tall streamers of sunlight coming down in a fan over the bare hills. The pasture was full of birds—starlings.... Then, like lightning, it happened. I saw a scare go into the cloud of birds, and they opened their wings and

²³ Christine Chaney, "Beauty and Truth," The Cresset (2009), 19.

began to rise off the ground and, in that split second, from behind the house and from over my roof a hawk came down like a bullet, and shot straight into the middle of the starlings just as they were getting off the ground. They rose into the air and there was a slight scuffle on the ground as the hawk got his talons into the one bird he had nailed.

It was a terrible, and yet beautiful thing, that lightning flight, straight as an arrow, that killed the slowest starling. ... The hawk, all alone, in the pasture, possessed his prey. He did not fly away with it like a thief. He stayed in the field like a king with the killed bird...

I tried to pray, afterward. But the hawk was eating the bird. And I thought of that flight, coming down like a bullet from the sky behind me and over my roof, the sure aim with which he hit this one bird, as though he had picked it out a mile away in the end, I think that hawk is to be studied by saints and contemplatives; because he knows his business. I wish I knew my business as well as he does his.²⁴

So, beauty also can be stark and startling. It can turn one's world upside down, as happened to Moses and Merton. Whether comforting or discomfiting it always wakes one up,

²⁴ Thomas Merton, When the Trees Say Nothing: Writings on Nature, Kathleen Deignan, ed. (Notre Dame, Indianapolis: Sorin Books, 2003), 104-6.

leading one to reflect and to grow. Many agree with Rachel Carson, that "natural beauty has a necessary place in the spiritual development of any individual or any society."²⁵

As one grows in gratitude and awe of God, and in appreciation of the gifts of the Creator, one grows spiritually and becomes more like the Creator. In doing so we encounter beauty more easily, further motivating us to continue. Beauty has the potential for starting a virtuous cycle and for providing the fuel to keep it going. We can see this process in Figure 2 [opposite], which shows beauty increasing the holiness of the person who encountered it.

When a person becomes more and more transparent (holy), the beauty that resides within a person becomes more and more apparent to those around. When others encounter the beauty of a person, they, in turn, also may begin a journey of personal transformation. Thus, beauty can be contagious. It can start a virtuous beauty cycle by starting searches for truth and meaning. This has social implications.

The Social Dimensions of Beauty: The Beauty Cycle

We have seen that people's thoughts (worldviews) affect their ability to perceive beauty. Garcia-Rivera reminds us that this perception and response to beauty occurs in a social context.²⁶

He also points out that perceiving beauty requires discernment between good and evil and that this process of perceiving, discerning and responding appropriately leads to the

 $^{^{\}rm 25}$ Cited in Gatta, Making Nature Sacred, 166-67.

²⁶ García-Rivera, The Community of the Beautiful; also Lane, Landscapes of the Sacred: Geography and Narrative in American Spirituality.

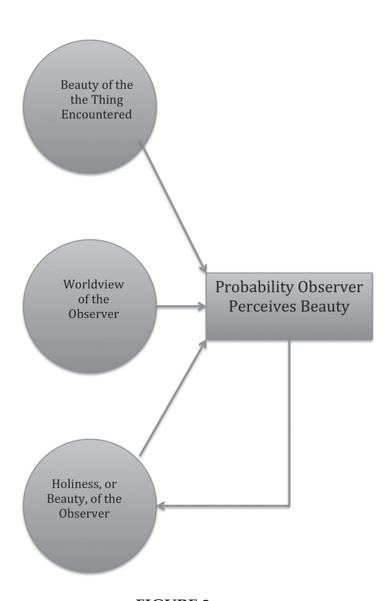


FIGURE 2

spiritual development of the community. Without entering into the depths of his sophisticated argument let's explore those aspects of his thought most useful to us here.

Garcia-Rivera develops his thought around the three classical transcendentals of being or unity (the One): truth, goodness and beauty. These are properties all beings have in common and are called transcendentals because they are coextensive with being and because they transcend any creature. As such they also may be considered aspects or faces of God.

The Communities of Truth and Good

As we've seen above, an encounter with beauty can be a powerful experience. It involves both the call and our response to it. For instance, when Moses heard the voice in the Burning Bush, he took off his shoes and entered into a dialogue with God. He could have walked off muttering that he must have eaten something that made him hear things, but he did not. He responded to the call. As a result, his life changed from that moment on.

When we have a religious experience akin to his, albeit usually much less dramatic, we inevitably try to make sense of it. We walk down the street and we experience trees beckoning to us from a wooded lot. Moved by the experience, we ask others whether they've ever had something similar happen to them. We confer with religious or other authorities in hopes of interpreting (understanding) what happened. These leaders (and our friends) use their experience and the accumulated wisdom of their traditions to help them and us interpret what happened. Accordingly, experiences of beauty stimulate

discussion in the community. If the community follows the subtle guidance of the Holy Spirit, over time the repeated encounters with beauty and the discussions they engender help the community more accurately interpret these events; i.e., its worldview grows closer and closer to the truth. As a result, the community grows into a community of the truth.

However, the process is trickier than it seems at first glance because falsehood and evil can masquerade as truth and beauty. Similarly, ugly things actually may be beautiful. As Garcia-Rivera puts it, the experience of beauty and our search to understand it occurs within the Garden of good and evil.

As Garcia-Rivera points out, Nazi pageants were beautifully choreographed. One who encountered such a pageant with no knowledge of what they were about might have found them aesthetically pleasing. They exhibited great order and harmony. But upon learning their intent, someone concerned with goodness would have been repulsed. The pageant, though aesthetic, revealed anti-beauty, or evil. People committed to truth develop the capacity to discern between truth and falsehood, and between beauty and anti-beauty, and then to choose good.

Aldo Leopold's land ethic offers us guidance on discernment by helping us understand the relationship between beauty, right action, and interrelatedness. For Leopold "a thing is right when it tends to preserve the integrity, stability, and *beauty* [italics mine] of the biotic community. It is wrong when it tends otherwise."²⁷ In a broader sense, all good occurs

²⁷ Gatta, Making Nature Sacred, 60.

within the context of a web of interrelationships. Goodness always leads to wholeness, to the vitality of the community. What truly is good for an individual must also imply good for all. Maintaining the beauty of all, the harmony and vibrant functioning of all, therefore, marks right action. Gatta points out that Jonathan Edwards would have agreed with Leopold. Edwards believed that the beauty of the world consists "wholy of sweet mutual consents, either within itself, or with the Supreme Being." Because of this, the world's beauty reflects the harmony of, and continuity with, the spirit world. Thus, right action, or goodness, requires working for the good of all, as God does. Nazi pageants fail to reveal beauty because they do not work for the good of all. While pleasing in their proportion, they fail to reveal the truth and goodness underlying reality because they are built on hate and lies.

On the other hand, dirt, which initially may seem ugly, can reveal beauty if we develop the eyes to see it. A community of fungi, bacteria, organic matter and minerals, dirt brings forth all manner of life. When one sees the order within it and its harmony, and realizes the good that comes out of it, one may experience an epiphany. Many a farmer and gardener attest to the transforming effect of encountering dirt. Dirt for them is beautiful.²⁹

It's not surprising that for centuries monastic communities have stressed the spiritual importance of farming and raising one's food.

²⁸ Gatta, Making Nature Sacred, 63.

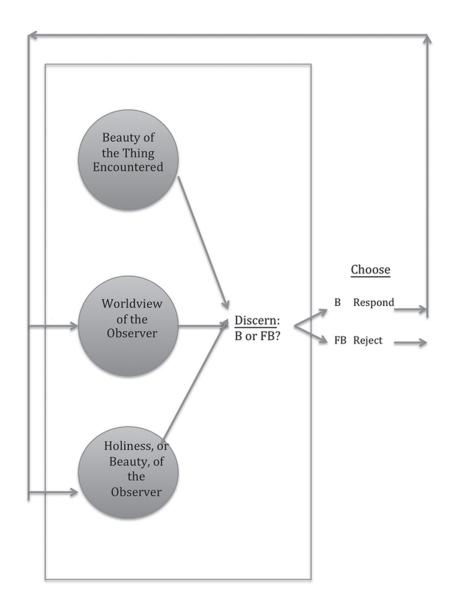
²⁹ See, for instance, the documentary film Dirt, narr. Jamie Lee Curtis, dir. Bill Benson and Gene Rosow (DVD 2010).

So, we cannot rely on our feelings or aesthetic sense alone to guide us. We need to exercise discernment. Guided by its worldview and experience the community helps its members discern whether we are encountering beauty (B) or false beauty (FB). Then the individual has to choose whether to respond positively to beauty's call or to reject it, whether to reject a call from false beauty or respond positively to it.

As a community's members correctly discern calls and choose beauty over false beauty, it grows in truth. And, it grows in goodness. The call of beauty leads the community to grow in understanding and to exercise a choice for good over evil. The community of truth develops into a community of good.

Figure 3 on the following page illustrates this process. Because individuals live in a community, we place the circles for the individual's Worldview and Holiness in a rectangle representing the community. We include the things we observe in that community because, in God's eyes, we are part of the community of creation; i.e., human and nonhuman creation relate to and affect one another.

When a person encounters a Call, she uses her understanding (worldview) and sensitivity to the Spirit (holiness) to discern whether beauty or false beauty is calling. This discernment occurs with the help of her community. The greater the community's wisdom and the individual's holiness the greater will be the *probability* that the individual will discern correctly. If she responds to beauty or rejects false beauty, she and the community grow in understanding and in goodness. The lines flowing back into the community and individual



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FIGURE 3

bear plus signs, showing that they lead to larger circles for Worldviews and holiness for the individual and for the community.

The Community of the Beautiful

Finally, as the community of truth and good matures, it develops the eyes and ears that enable it to perceive beauty more and more fully and deeply. As the community aligns more closely with Godliness both in thought and deed, it experiences beauty more often and more fully. Beauty, the Holy Spirit, transforms the community more and more, so that the community itself starts to reveal beauty within itself and within its individual members. Not only do individuals radiate a sense of wholeness and deep joy, but so does the whole community. The relationships between its members reveal something alive and dynamic, something life-giving and affirming. Thus, the community becomes a community of the beautiful. The vital community of people calls others to want to discern what they are experiencing. People see a praising, vibrant community that reveals something under the surface if one has the "daring imagination" to look for it. Thus beauty can transform society. Or, as Dostoevsky so famously said, "Beauty can save the world."

This community of the beautiful by its nature must encompass all of creation. Truly apprehending beauty and truly living righteously requires a loving, knowledgeable relationship with all things for we constitute a highly interdependent biophysical and spiritual system. This right living brings about *shalom*.

Its [shalom's] basic meaning is wholeness—a state of harmony among God, humanity and all creation.... All elements of creation are interrelated. Each element participates in the whole creation, and if any element is denied wholeness and well-being (shalom), all are thereby diminished. This relational character of creation is rooted in all creatures' common origin in a God who not only created all that is but who continues to be active in the world, seeking our shalom.³⁰

The Beauty Cycle

We have seen that Calls lead to a desire to understand them, the need to discern them, and the need to decide between good and evil. Also, encounters with beauty create a hunger for more. They motivate us to seek beauty. Thus, beauty motivates and sets in motion a positive process that leads to a community revealing God's truth, good, and beauty to the world. We can call this process the beauty cycle.

However, the beauty cycle, like many cycles, can run in two directions: positive and negative.³¹ Should people fail to discern that a call comes from false beauty and responds to it, they and their community may enter a situation where such encounters diminish personal and communal holiness and

³⁰ Bruce C. Birch, "Old Testament Foundations for Peacemaking in a Nuclear Age," The Christian Century102:38 (1985), 1115: cited in Douglas John Hall, Imaging God: Dominion as Stewardship (Grand Rapids: W. W. Eerdmans, 1986), 118.

³¹ Garcia-Rivera does not address much, if at all, how this process may work in a negative direction. Rather, he is concerned with the positive aspects of the process.

lead to worldviews antithetical to truth and good. Similarly, when people choose false beauty over beauty even when they know the difference, holiness and thought conducive to encountering beauty decline and the community embodies less and less good within it. This ultimately leads to a community of false beauty. Germany's decline into National Socialism and its accompanying Holocaust represents this sort of process.

The following diagram, Figure 4 [next page], shows the process working in a negative direction, where the negative signs indicate forces that decrease holiness and create a worldview that reflects falsehood and evil. As the two circles on the left become smaller and smaller, the probability that people perceive calls from beauty declines, their ability to discern between calls declines, and the likelihood that they will choose beauty over false beauty declines. This leads to even less holiness and a falser worldview, a negative feedback process that works to the detriment of society.

The Beauty Cycle and Co-creation

Now we come to the key point of this paper. Our individual and communal holiness and worldview don't only affect our discernment and ethical choices. They also influence how we choose to interact with the natural world God has placed us in. Because we are co-creators with God, every time we alter our environment, we affect the degree of beauty in the world around us. By doing so we affect the direction of the beauty cycle. As we will see below, the way we choose to interact with our natural environment requires both discernment and

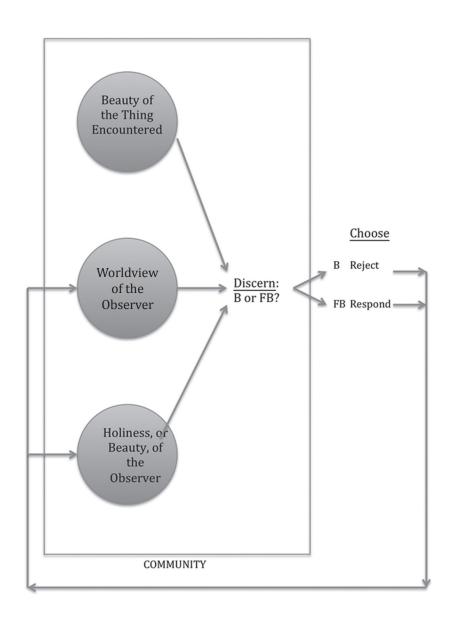


FIGURE 4

a choice for beauty over false beauty. Our cumulative choices greatly affect the probability that our society will encounter beauty and will grow in truth, goodness and beauty or otherwise; i.e., they affect our individual and corporate spiritual lives.³²

We can choose to create a world that makes it relatively easy to encounter beauty. This encounter with beauty can, in turn, promote a vibrant faith community that itself is a sacrament, or living sign, of God's presence on Earth. If Simone Weil is correct that "the soul's natural inclination to love beauty is the trap God most frequently uses in order to win it and open it to the breath from on high," we can cooperate with God in changing the world by setting that trap. By creating a living environment that shines forth with the beauty of God we increase the probability that people will encounter beauty and that society will change accordingly.

Incarnation

How do we create a beautiful environment? We will discuss the practical aspects of the "how to" soon. For now consider the matter of incarnation, the making of things that embody the character of the maker. If you listen to a composer's music or to a writer's poetry, you can infer a lot about the character of the artist himself. We might detect the artist's anxiety,

³² For an enlightening discussion of the role of work and beauty that complements the following parts of this paper see Hughes, Beloved Dust, 311-23.

³³ Simone Weil, Waiting for God (New York: Harper & Row, 1973), 163. Cited in Hughes III, Beloved Dust: Tides of the Spirit in Christian Life, 285.

anger, patience or understanding. This is why the saints say that the Book of Nature both reveals God to us and tells us a lot about God. For instance,

Throughout creation, the wisdom of God shines forth, as a mirror containing the beauty of all forms and lights and as a book in which all things are written according to the deep secrets of God.

St. Bonaventure

The whole earth is a living icon of the face of God

St. John of Damascus

When we offer few impediments to the work of the Spirit, God can work through us easily to create works that reflect his glory. This is the principle behind painting icons. The artist prepares himself by praying that he may be a conduit of God's action. This requires removing his ego from the process. One sign of this detachment consists of not signing the icon he paints. The artist further prepares himself by studying the rubrics, or principles, of painting icons that the tradition has found most easily lead the faithful to enter into the beauty of the Lord when gazing upon an icon. Thus, personal holiness and design principles (thought) work together to produce a transparent work of art. The community influences the worldview of the painter as well as the personal holiness of the painter, thereby increasing the likelihood of creating something that helps others to encounter beauty.

We incarnate our values in the work of our hands just as

God does. When we say that someone "puts a lot of herself into her work," we are saying that, not only does she put a lot of effort into it, but also that her work reflects a lot of her values, such as attention to quality, aesthetics, carefulness, and an unwillingness to cut corners, for example. Thus, when we co-create with God in our hearts and minds and alter God's creation, our changes reflect the values of God.

In nature that is least disrupted by the hand of humanity we most easily can discern God's presence. After all, they are the work of truth, good and beauty. The question is: will we maintain its transparency when we alter nature so that beauty continues to shine forth or will we embody values and attitudes that obscure the good deep within? After all, God created the writers of, and actors in, Nazi pageants. They, too, had beauty deep within. However, the values and attitudes they assumed made it more difficult to perceive God's presence in them. In fact, their embodied values led others to embrace falsehood and evil.

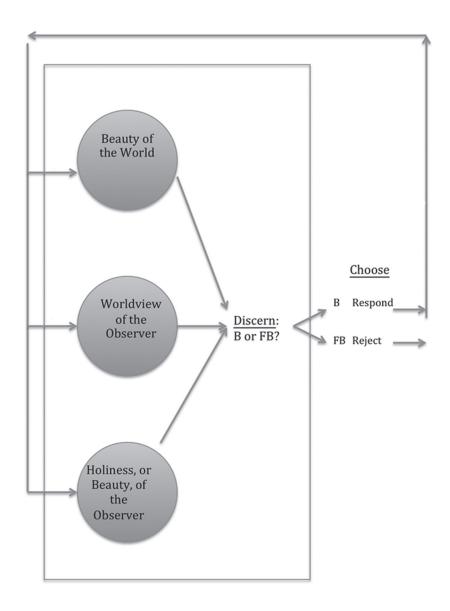
As humans we have the greatest ability to decide how we will change the environment we encounter. All life changes its environment. Beavers and bison have a huge impact on their world. However, they don't have much ability to decide how they want to affect it. Beavers only know how to make one sort of dam. They cannot choose to forgo dams of felled trees and to construct instead dams of concrete. Bison only know how to graze on prairie grasses. They cannot decide to sow corn instead. But humans can. Thus, we have the greatest ability to affect all the creatures around us and, therefore, face the greatest ethical dilemma of all living beings. We truly

live in a garden of good and evil. We can choose to change our world in ways that reflect God's glory or not. Only by understanding the potential ecological, social, and spiritual consequences of our actions can we design our world to reflect God's presence in it. By wholeheartedly seeking truth in all its forms we maintain an openness of spirit that allows us to be open to all people and things. This can lead us to interact lovingly and effectively with all we encounter. In this way we can create *shalom*, a community of truth, good, and beauty.

The Beauty Cycle Revisited

Consider the following, and final, version of the diagram of the beauty cycle we have been developing. As we'll see in the next section, when we decide, for example, how to manage a piece of land, that decision involves discernment as to whether or not what we are doing, and how we are doing it, is beautiful. We incarnate our values into the way we manage the land. To the extent we choose for beauty, we augment the beauty in the world (or, at least, keep it from decreasing). We see this in Figure 5 [opposite] by the line with the positive sign flowing from society's decision for beauty to the circle for the beauty of the world (what we before have labeled "Beauty of the Thing Encountered"). As a result of this choice, the probability that people will encounter beauty now rises as the beauty of the world increases. This stimulates the positive feedbacks of the beauty cycle and increases the likelihood that a community of the beautiful may unfold.

On the other hand, if society's thoughts toward creation



COMMUNITY

FIGURE 5

(whether human or nonhuman) change in a manner that are, e.g., more exploitive, then the community starts moving away from truth. This change in the worldview of its members impedes their ability to perceive creation's beauty. Society's works start reflecting an exploitive mentality and a move away from the good. We could show this by amending Figure 4 to show a negative influence running from the choice for false beauty to beauty of the World. As a result, people perceive beauty less often. As the community becomes less beautiful, its members grow less holy and less capable of perceiving beauty. As individuals have fewer experiences of beauty, the positive impact of beauty on society lessens, reinforcing the negative impact on society of the initial change in worldview. A vicious cycle emerges. The beauty cycle starts deflating beauty in the society. The world less and less proclaims the glory of God and people lose touch with the source of all life. It's evangelization in reverse. The scripture says that "the heavens proclaim the Glory of the Lord." But what does our Earth, the work of our hands, declare?

Of course, society usually produces a mixed bag of decisions, some good and some bad. Society may choose wisely and poorly, simultaneously increasing and decreasing the amount of beauty in the world. We truly live in a garden of both good and evil. The question is, which is winning?

The State of Affairs

So, where are we now? Do we experience the beauty cycle running positively or negatively? Is the beauty of the world and the beauty of our societies increasing or decreasing? Imagine that you are viewing a series of beautiful images or, even better, seeing the things themselves: mountain vistas, flowers, children playing, picturesque farmsteads, and so on. How might you feel upon seeing these things? If you were to do this in a retreat setting, you might find people saying they felt peaceful, loved, nurtured, forgiven, joyful, nourished, alive, hopeful, awed, filled with mystery.

These reactions clearly reflect the impacts of beauty. Beauty proclaims a creator who loves creation. Our experiences of beauty speak of God's mercy, forgiveness and healing, of delight in God's creation. We sense God's welcoming call to us. We also may experience God's immense power, a power always humble and intimate, or a stirring call to change. Beauty speaks to us of an immense Other that seeks our companionship and well being.

Our scriptures and theological understanding corroborate our experience. We understand that God so loves creation that God became part of it in the Incarnation. Jesus indeed is "God with us," Emmanuel. The doctrine of the Trinity tells us that God's nature is one of relating in a totally self-giving and perfectly responsive manner. God's nature leads God to permeate all things, to be totally and intimately involved with everything, while permitting creation total freedom to be what it is. God walks with us, not on us. God totally respects our otherness and delights in it. Because God values all, all things matter—they all have meaning. Nothing is wasted; all is loved.

Now imagine viewing scenes of badly denuded hillsides, water birds dripping with oil, polluted streams filled with trash, mountain tops blasted off for their coal, urban slums, strip malls, children with bloated bellies. How might you feel now? Perhaps you might mention, as others have, feeling defiled, dirty, ill, anxious, angry, sad, depressed, discouraged, grief-filled, or filled with despair.

These reactions to the work of our hands reveal anti-beauty: an acceptance of waste as a fact of life, whether of human life, energy, materials or other creatures;34 a willingness to degrade and foul other people or living systems as long as we ourselves benefit; an embrace of using things that are toxic to life, whether human or nonhuman; a love of superficial novelty. We experience a creator, humanity, who evidences little regard for life, human or nonhuman. This creator loves little and ignores the impacts of its actions. This creator does not respond selflessly to the world around it and holds back its very self from it. Objectifying creation, both human and nonhuman, humans manipulate the world to satisfy their desires. Rather than cooperate with the rest of creation humans (at least today) seek to dominate and tame it. Our experience in our human-influenced world all too often speaks of greed, desire for control, and pride.

Take a disposable ballpoint pen, for example. Made largely of petroleum-derived plastic, the pen declares that society believes that it is acceptable, and perhaps preferable, to use a

³⁴ Note that producing with no waste is not a pipe dream. The ideas of continuous quality improvement, avoiding "muda" (a term started by the founder of Toyota for any sort of purposeless use of resources), and industrial ecology all have to do with the elimination of waste. After all, why pay for an input only to throw it away? See Hunter Lovins, Amory Lovins, and Paul Hawken, *Natural Capitalism: Creating the Next Industrial Revolution* (New York: Little, Brown and Company, 1999) for an excellent primer.

nonrenewable resource once and then discard it. Convenience matters most. The pen declares as acceptable, or inevitable, the energy usage, carbon emission, and associated pollution from drilling, transporting, and refining oil, the manufacture of the plastic and then the pen, and finally the transportation of the pen into the retail establishment that required the use of resources to build (and continues to require resources to maintain). If workers toiling under inhumane labor conditions produced the pen, it also declares this practice as acceptable. Finally, we rate the convenience of the pen as worth the costs to people and the land of disposing of it. These attitudes tend to reveal disrespect for life in all its forms, love for power and control, greed, pride (at the human, social, and species levels), and alienation from the rest of creation and humans.

In an increasingly digital world we humans are becoming more and more alienated from creation. We walk with our eyes glued to screens and our ears filled with music we bring with us. However, as we walk we fail to hear the mockingbird sing or notice the cascade of red maple leaves in the Fall. We interact with others via text-bytes rather than through far richer face-to-face encounters. We trade sharing our deepest thoughts and feelings for knowing what our five hundred "friends" "like," where they work, and what they ate for dinner. We less and less know how to communicate complex thoughts and feelings. Nor do we notice the person walking by who would benefit from a simple "hello." As our communication with our physical and social environments becomes more and more arms-length, we lose the richness of interaction with a

varied and surprising world. We now control what stimuli we receive and limit the richness of our responses to them, while we tend to lose the capacity for relating deeply. We live in an increasingly alienated world and revel in it, thinking that we now are communicating more than before, while for us the world more and more loses meaning. We love novelty as long as it demands little of us. If there's a Burning Bush in our path, we don't notice it.

Of course, these products and technologies also proclaim the ingenuity of the human mind, and the efficiency of the market system and the firms that contribute to it. When we buy things such as a pen in the market, our willingness to pay more for certain goods than others motivates firms to produce more of the highly valued goods and less of the others. Adam Smith called this the Invisible Hand, saying that people in a competitive market will, by following their own self-interest, be guided as if by an invisible hand to do that which is the best for society. The market will produce those things people most want (given their ability to pay) and will do so at the least monetary cost to society. So, it's possible to argue that the above trends are good. After all, people are demanding these goods and receiving them.³⁵

³⁵ Economists point out that the market possesses inherent flaws that cause the Invisible Hand to go astray. One such flaw consists of the problem of externalities. If firms and consumers include in their decisions all the benefits and costs to society of their actions, then the market provides society the most benefits at the least cost. Many actions, however, impose costs (or benefits) on third parties who did not ask to receive them. For instance, someone who smokes in public contributes to others getting sick. Because the smoker does not have to pay their medical bills nor compensate the third parties for the anguish and pain they experience, the smoker

Smith implicitly recognized the problem of values being incarnated in goods. Prior to writing *The Wealth of Nations* Smith wrote *The Theory of Moral Sentiments*, his treatise on moral philosophy. His book on the market economy, *The Wealth of Nations*, built on his previous work, something we typically either forget, didn't know about, or choose to ignore. As a moral philosopher, Smith believed that, if people acted morally (as described in *The Theory of Moral Sentiments*), then the Invisible Hand of the market would lead individuals following their own self-interest to do that which is best for society. However, if they failed to act morally, then the Invisible Hand would fail to do its job.³⁶ So, Smith believed the Invisible Hand would fail if people failed to act on their own best beliefs. Consequently, he would agree that people's values guide the Invisible Hand for good or ill. Therefore,

ignores those costs. They are external to the smoker. So, the market's activities of buying and selling omit many important costs and benefits and, therefore, fail to utilize resources as wisely as possible. To the extent that society accepts this situation by not correcting this market failure (e.g., through taxes or subsidies) cigarettes and other goods with negative externalities embody the additional implicit value that the resulting illness and social injustice are acceptable.

Most forms of dealing with externalities, such as limiting the amount of material that can be dumped into streams via regulations, taxes, or permits that must be purchased, still assume that some degradation is unavoidable; i.e., that waste byproducts are inevitable. If people believed otherwise, however, and were willing to pay for products that were produced with no waste, then the market would move to produce more of those goods and less of the goods with external costs.

³⁶ Smith was actually rather pessimistic as to the likelihood that people, businesspeople included, would act morally. Thus he believed that businessmen would probably conspire to constrain trade rather than compete with one another, thereby thwarting the Invisible Hand.

we have the negative result of today's beauty cycle because people have accepted values that have become embodied in the goods they demand in the market. If we can change peoples' values and get them to get them to act accordingly, then the Invisible Hand of the market will start inflating beauty back into society.³⁷

Technology and Institutionalized Sin

As a part of society the church needs to be greatly concerned about the beauty cycle, even more so given its mission on

Clams on the beach or the radio spectrum provide examples of open access resources. Because no one can be prevented from taking them, unless society imposes some sort of effective regulation, soon no one will find any clams on the beach for their chowders and radio stations will interfere with each other's broadcasts. Thus, when the market produces efficiently (producing the most benefit with the least monetary cost), it does not necessarily produce at least *social* cost if the goods produced and consumed deteriorate the public goods and open access goods that the public takes for granted. These latter costs lie outside the scope of the market, which ignores them. Of course, if people demand goods that tend to promote the public good, then the market will produce them. Thus, the way we think drives the market and, ultimately, the beauty cycle.

³⁷ The market also fails to be efficient because of the existence of what economists call "public goods" and "open access resources." Adam Smith used national defense as his classic example. Everyone gets to consume the same amount of national defense. Once one person buys national defense he unwittingly provides it for everyone else because he cannot exclude anyone from receiving the benefits for which only he paid. Because everyone is aware of this conundrum, everyone chooses to let someone else pay for the national defense and thereby gets a "free ride." As a result, no one buys defense and the market undersupplies it to the nation. For this reason Smith argued that the government had to provide it. Public health, biodiversity, safety, and stable climate all are examples of public goods that the market, if left alone, will underprovide. So is the ability of society's members to interact effectively and richly with one another.

Earth. First, as the beauty cycle works in reverse making it harder and harder to discern God's presence in the world, people have an increasingly difficult time responding to the gospel. Without some experience of God, people find that the message of a loving God resonates very little with their reality. In a world where more and more young people know nature via Animal Planet and the internet, and where social interaction occurs via social media and text messages, how often will they encounter a sudden flash of God's presence in their lives? God, of course, exists in all things and circumstances. That said, we have seen that we experience God more easily in some things and some situations than others. We, as faithful people, willingly participate in a social system that is making it harder and harder for people to encounter God. The church, then, should be greatly concerned that it is participating, apparently willingly, in a situation that makes accepting the gospel, however well preached, more and more unlikely. Even if church members aren't concerned about their direct impacts on the rest of creation, which God madly loves and permeates (and, it can be argued, for which God went to the cross), the church should be concerned for this reason. If anything constitutes a call for repentance on a grand scale, this should be it.

We can understand the situation we are in from at least two perspectives: the theological and the technological. Many theologians and church leaders talk about institutionalized sin, or structures of sin. We live in a world where sinful behavior and attitudes have become institutionalized. Sweat shops, pollution from energy consumption, monopoly power, and corruption of the financial system all contribute to the problem. We cannot turn on our lights, buy food and clothing, or save for retirement without being part of institutions that too frequently cause harm to other people and the rest of creation. We cannot avoid sinning because we have no other options.

Economists describe a similar problem of "technological lock-in." Although we may not want to pollute coastal waters by extracting oil there, we all too often have no other alternative to driving our cars which depend on oil. Many of us have settled in the suburbs where we lack mass transit, which is difficult to provide in a suburban context. So, we have to drive to get to work, buy food, and worship. Although we may not like doing so, we have few feasible options because we are locked into a certain transportation technology. Similarly, we may not like to dump effluents from our factory into the air and water but may lack a cost effective means for dealing with the waste. Current technology may not provide us a treatment alternative that will permit us to stay in business. Once again, we are locked into a bad choice. Even if we believe that our impact on creation by and large is sinful, we don't know what else to do.

So, whether we see our situation as one of being locked into sinful ways of living or technologies we don't like, either way we find ourselves all too often with few ways out.

In addition to being concerned about society's growing inability to hear the gospel, the church also should be concerned about the social injustice that often results from the environmental degradation around us. Many toxic waste sites occur in the poorest parts of cities or the countryside. Oil

and mineral extraction often occur at the expense of the rural communities where it occurs, whether in Appalachia or the jungles of Ecuador. The poor have the least ability to adapt to adverse changes in their environment and, unfortunately, many of the worst problems seem to occur where the poor live.³⁸ So, the church ought to be greatly concerned about the increasing degradation of creation, if for no other reason, because of its concern for social justice.

So, out of concern for God's creation, evangelization, and social justice the church needs to exercise its prophetic voice. But what can it say? To what can it call society? If we are locked into structures of sin, what alternatives do we have? As Christians perhaps we should consider interacting with creation as God does; i.e., perhaps we should consider designing with beauty in mind. Any practical alternatives we explore should share the same vision and values as God.

Beauty by Design

Of all the creatures on Earth humans face a unique challenge—humans must choose how they wish to affect their environment. All life alters its environment. Beavers dam rivers. Lichens dissolve rock. Trees emit oxygen into the atmosphere. We might say "to live is to alter." However, of all the organisms on the planet humans appear to have the greatest capacity to change the world about them. And, they

³⁸ Whether this is a result of a lack of political power, market forces, or other factors, and whether or not these impacts occur where the poor live *because* the people are poor or because the poor happen to be located where the impacts occur is a matter of debate.

can choose *how* they do so. Beavers cannot decide that they no longer want to live in riparian zones, choosing instead to graze on prairie grasses. Bison similarly cannot decide to make dams on rivers. Humans, however, *can* decide what foods they want to eat, where they want to live, and how they want to change the terrain. Thus, alone among all God's creatures humans face the ethical dilemma of choosing how they wish to affect other living and nonliving creatures. Moreover, we make these choices in a garden of good and evil.

How we choose to interact with the rest of creation is a question of design. Van der Ryn and Cowan define *design* as "the intentional shaping of matter, energy, and process to meet a perceived need or desire."³⁹ As a species chosen to image God to the world, we bear a special responsibility to design appropriately. So, what might we use to guide us in this special task? How might we make beauty evident in the work of our hands? How can we design a human-intervened world that makes it as likely as possible that people will encounter God in it? We would do well to interact with the rest of creation as God does—to mirror the way God interacts with creation.

We saw above that God creates using a certain stance or approach. This approach involves total, intimate involvement with, and profound respect and love for, the community of life. As a result God works within its natural processes, according all of creation (whether one lion or an ecosystem) freedom to act according to its nature. God respects all things. God does not waste—all things have meaning and purpose whether or

³⁹ Sim Van der Ryn and Stuart Cowan, *Ecological Design* (Washington, DC: Island Press, 1996), 8.

not we can perceive it. God never takes without giving back many fold. Because of God's great love, God always creates with the good of creation in mind. God cooperates with it, knows it intimately, and works with it. God does not stand apart from it, creating at a distance. Rather, God constantly supports and interacts with it.⁴⁰

A Way to Proceed: Ecological Design

As we have said, when we create we would do well to use the same approach God uses. But what does this mean in practice? Fortunately for us there exists today a discipline that embodies many of these same principles: ecological design. Van der Ryn and Cowan define *ecological design* as "any form of design that minimizes environmentally destructive impacts by integrating itself with living processes"⁴¹ Proponents of ecological design share many of the same goals as we do, as evidenced by the following quotes from some of its foremost practitioners.

Ecological design is the art that reconnects us as sensuous creatures evolved over millions of years to a beautiful world. That world does not need to be remade but rather revealed. To do that, we do not need research as much as the rediscovery of old and forgotten things.

⁴⁰ See Larry L. Rasmussen, "Creation, Church, and Christian Responsbility," and Paolos Mar Gregorios, "New Testament Foundations for Understanding the Creation," in *Tending the Garden: Essays on the Gospel and the Earth*, ed. Wesley Granberg-Michaelson (Grand Rapids, Michigan: Eerdmans, 1987).

 $^{^{\}rm 41}$ Van der Ryn and Cowan, Ecological Design, 8 & 18.

We do not need more economic growth as much as we need to relearn the ancient lesson of generosity, as trustees for a moment between those who preceded us and those who will follow. Our greatest needs have nothing to do with the possession of things but rather with heart, wisdom, thankfulness, and generosity of spirit. And these virtues are part of larger ecologies that embrace spirit, body, and mind—the beginning of design.⁴²

...we hope to serve a rapidly growing network of people in the world who see the world as it can be, not merely as it is. Wendell Berry writes in his *Recollected Essays*:

We have lived by the assumption that what was good for us would be good for the world. We have been wrong. We must change our lives, so that it will be possible to live by the contrary assumption that what is good for the world will be good for us. And that requires that we make the effort to know the world and to learn what is good for it. We must learn to cooperate in its processes, and to yield to its limits. But even more important, we must learn to acknowledge that the creation is full of mystery; we will never clearly understand it. We must abandon arrogance and stand in awe. We must recover the

⁴² David W. Orr, *The Nature of Design: Ecology, Culture, and Human Intention* (New York: Oxford University Press, 2002), 32.

sense of the majesty of the creation, and the ability to be worshipful in its presence. For it is only on the condition of humility and reverence before the world that our species will be able to remain in it.⁴³

We see a world of abundance, not limits. In the midst of a great deal of talk about reducing the human ecological footprint, we offer a different vision. What if humans designed products and systems that celebrate an abundance of human creativity, culture, and productivity? That are so intelligent and safe, our species leaves an ecological footprint to delight in, not lament?.... Consider this: all the ants on the planet, taken together, have a biomass greater than that of humans. Ants have been incredibly industrious for millions of years. Yet their productiveness nourishes plants, animals, and soil Nature doesn't have a design problem. People do⁴⁴

A human being is part of the whole called by us the universe, a part limited in time and space. We experience ourselves, our thoughts and feelings, as something separate from the rest, a kind of optical illusion of consciousness.... Our task must be to free ourselves from the prison by widening our circle of compassion

⁴³ Hawken, Lovins and Lovins, Natural Capitalism, xiv.

⁴⁴ William McDonough and Michael Braungart, *Cradle to Cradle: Remaking the Way We Make Things* (New York: North Point Press, 2002), 16-17.

to embrace all living creatures and the whole of manner of thinking if humanity is to survive.⁴⁵

Ecological design exhibits concern for human and non-human creation now and into the future. Accordingly, it addresses issues of sustainability. Knowing that human and biophysical systems interact and affect each other over time, proponents of ecological design and of sustainability also address problems of social justice. They know that social injustice breeds unrest that threatens the stability of social systems and the viability of the natural systems that support them. Recognizing the intimate link between all members of the creation, whether human or nonhuman, proponents realize that justice towards humans requires similar justice towards nonhumans, and vice-versa.

The greatest impediment to an ecological design revolution is not, however, technological or scientific, but rather human. If intention is the first signal of design, as McDonough puts it, we must reckon with the fact that human intentions have been warped in recent history by violence and the systematic cultivation of greed, self-preoccupation, and mass consumerism. A real design revolution will have to transform human intentions and the larger political, economic, and institutional structure that permitted ecological degradation in the first place.... The larger design challenge is

⁴⁵Sim Van der Ryn uses this quotation from Einstein to describe his work and self-understanding; (http://www.vanderryn.com/About/index.html)

to transform a wasteful society into one that meets human needs with elegant simplicity⁴⁶

Ecological Design's Approach

Various designers have offered statements of ecological design principles. We might summarize them along the following lines:⁴⁷

- Design with nature—all creation should prosper; integrate living processes into the design
- Replenish, restore and nourish the rest of creation instead of merely minimizing environmental impact
- Recognize the interdependence of humans and nature
- Respect the spiritual aspect of the material world
- Design for and with the local area and region
- Mimic nature's processes
- Rely on natural energy flows
- Eliminate the concept of waste
- Allow the design to coevolve with the natural world
- Seek social and biological equity

 $^{^{\}rm 46}\,\rm Orr,$ The Nature of Design, 22-23, 27.

⁴⁷ See the variety of design statements summarized in Andres R. Edwards, *The Sustainability Revolution: Portrait of a Paradigm Shift* (Gabriola Island, British Columbia: New Society, 2005).

- Involve all the stakeholders in a participatory process
- Consider all the costs and benefits (economic, social, and ecological) of a design

The first four principles recognize the importance of making nonhuman creation an integral part of any design, a part that has intrinsic value as well as value to humans. Several authors reflect a sense, whether explicitly or implicitly, that nonhuman creation has a spiritual dimension worthy of our attention. The fifth principle recognizes that any design must be site specific, recognizing the unique characteristics of the place and its regional context. In other words, it honors place. The next three principles stress bio-mimicry, which uses nature's millions of years of "design expertise" as inspiration for human attempts at design. Such designs, e.g., rely on natural energy flows and natural processes to accomplish goals simply and elegantly. Because nonhuman creation wastes nothing, ecological design does the same thing by using materials that are continuously reused. The next principle recognizes that designs need to adapt over time as social and biophysical systems change. The following principle stresses the need for social and ecological justice. The principle that succeeds it attempts to accomplish this goal, as well as ensure a design's success, by including the knowledge, and by securing the "buy-in" of, all parties interested in a project or product. The last principle espouses "full-cost pricing," so that all prices in the marketplace reflect all the benefits and costs to society of a good or service.

The above suggests more than a utilitarian appreciation

of what nature can do for humans. Rather, it exhibits a love for nature itself and an appreciation of its numinous (spirit filled) character and beauty. Ecological design takes a systems approach that includes both human and nonhuman creation and that works to benefit all parts of the system. At the same time it recognizes the individuality of a particular place, both socially and ecologically. In recognizing the importance of individuals and of community, ecological design stresses the importance of equity for all, including future generations, and of including all parties at the table. Ecological design, thus, excludes no one. Accepting that change is part of life, it also designs for change.⁴⁸

These values that underlie ecological design remarkably resemble the principles derived from our understanding of the way that God interacts with and designs God's world. This is not surprising given that the espoused vision of an ecologically designed world sounds a lot like *shalom*, the state of harmony between all living beings, where all things prosper and contribute to the well-being of one another.⁴⁹ By choosing to cooperate with the way God's creation works and respecting the interrelationships in a creation that harbors a spiritual presence, ecological design appears to offer us an approach that might aid us in seeking truth, choosing good and manifesting beauty.

⁴⁸ For an excellent example of this type of thinking, explore William Mc-Donough's architectural firm's website: http://www.mcdonoughpartners.com/design_approach/philosophy

⁴⁹ For a discussion of *shalom* see Robert R. Gottfried, *Economics, Ecology,* and the Roots of Western Faith: Perspectives from the Garden (Lanham, Maryland: Rowman & Littlefield, 1995), 47-49.

And Now for the Real World

But do these principles work? They do on many levels, though their success, of course, depends upon the skill and knowledge we bring to their application. However, numerous examples attest to the power of this new approach to designing our world. ⁵⁰

One area where much practical experience has accumulated is green building. In the United States buildings use 13.6% of all potable water and 40% of all raw materials, while generating over a third of all waste.⁵¹ Efforts to change building practices, therefore, can have a huge environmental impact.

Hawken *et al.* describe a major bank building built in Amsterdam in 1987. The directors wanted all the building project's participants, including the employees, to understand all aspects of the building. This implied a participatory, systems approach to design that considered the interrelationships between all parts of the building from HVAC systems

⁵⁰ The field of green design is large. Two other examples in addition to those below provide some sense of its scope. Agro-ecology, the ecological approach to agriculture, offers another example of green design. For a quick introduction to this field see De Schutter and Vanloqueren, "The New Green Revolution: How Twenty-First-Century Science Can Feed the World." *Solutions* Vol. 2 (4), 33-44. Available online at http://www.thesolutionsjournal.com/node/971. Industrial ecology attempts to mimic ecosystems, which recycle and reuse nutrients by using the waste of one component to nourish the next component. For an introduction see T. E. H. Graedel and Braden R. Allenby, *Industrial Ecology and Sustainable Engineering* (Upper Saddle River, New Jersey: Prentice Hall, 2009).

⁵¹L. Hunter Lovins and Boyd Cohen, *Climate Capitalism: Capitalism in the Age of Climate Change* (New York: Hill and Wang, 2011), 329, footnote 4.

to plumbing to windows. The well being of the building's occupants was high on the list of goals of the building. The 538,000 square foot complex consists of ten towers linked by a winding internal street. A rainwater collection system provides water for the indoor and outdoor gardens. All offices are bathed in natural air and light. Due to the use of largely passive ventilation and heating, the building uses no conventional air conditioners. Flowing water and extensive artwork invite employees to linger and talk. As a result, absenteeism fell fifteen percent and productivity rose. The building cost no more than the average building, yet saved \$2.9 million per year in energy costs compared to a comparable conventional bank next door. The energy saving systems paid for themselves in the first three months of operation.⁵²

Similarly, in 2003 Toyota built a 724,000 foot² office in Torrance, California for 2,500 employees. By positioning the building to admit the most daylight and the least heat, and by using double glazed windows, extra insulation, and a highly reflective "cool roof" with photovoltaic cells mounted on it, the building used forty-two percent less energy than that allowed by California's very strict building code. Overall it saved sixty percent on energy costs over a comparable conventional building built to the same code.⁵³

Benefits go beyond energy savings. Studies on using day lighting instead of artificial light consistently demonstrate health benefits such as increased student learning rates and

⁵² Hawken, Lovins and Lovins, *Natural Capitalism: Creating the Next Industrial Revolution*, 82-83.

⁵³ Lovins and Cohen, Climate Capitalism, 89.

decreased worker sick days. Improvements in indoor air quality improve worker health and productivity.⁵⁴ As a result green buildings experience higher rents, greater occupancy rates, higher returns on investment, higher sales prices, and lower operating costs.⁵⁵

All this occurs "free of charge." Whereas a 2003 article found that green building tended to cost about two percent more than conventional homes, more recent studies find no empirical evidence for any cost premium. ⁵⁶ Considering that

⁵⁴ A study of a chain of West Coast franchise stores found that those stores that were well-daylit experienced 40% higher sales and that employees much preferred working there compared to conventional franchise stores (Heschong Mahone Group, *Windows and Offices: A Study of Office Worker Performance and the Indoor Environment*—Cec Pier, 2003). Available: http://www.h-m-g.com/projects/daylighting/summaries%20on%20daylighting. htm.). When energy-efficient lighting, efforts to increase indoor air quality, and strategies to address building acoustics and thermal qualities are combined, these can increase employee productivity 3-5%, dwarfing the money saved on energy savings. See Greg Kats, *Greening Our Built World: Costs, Benefits, and Strategies* (Washington, DC: Island Press, 2009). Cited in Amory Lovins and Rocky Mountain Institute, *Reinventing Fire: Bold Business Solutions for the New Energy Era* (Vermont: Chelsea Green, 2011), 102.

⁵⁵ An analysis of buildings built under the LEED or Energy Star programs found that these buildings received 3% higher rent, experienced greater occupancy rates, and sold for 13% more than comparable properties. See Nadav Malin, *Non-Green Office Buildings Sacrifice 8% in Rent Revenues*, 2010, Building Green.com, Available: ttp://www.buildinggreen.com/auth/article.cfm/2010/11/9/Non-Green-Office-Buildings-Sacrifice-8-in-Rent-Revenues/. Cited in Lovins and Institute, *Reinventing Fire: Bold Business Solutions for the New Energy Era*, 103. Another study of green buildings found similar results: operating costs decreased 8-9%, occupancy rates increased by more than 4%, rents increased 3%, and return on investment rose by more than 6 percent. See Lovins and Cohen, *Climate Capitalism: Capitalism in the Age of Climate Change*.footnote 7.

⁵⁶ James D. Qualk and Paul McCown, *The Cost-Effectiveness of Building Green*, 2009, HPAC Engineering, February 6 2013; Lovins and Cohen, *Cli*-

one can receive the above benefits at little or no increase in cost, green building makes economic sense. These benefits have caused such a huge demand for green buildings that the *Harvard Business Review* states that "Owners of standard building face massive obsolescence. They must act now to protect their investments." ⁵⁷

The implications for business go far beyond the construction industry. For example, Interface Carpet, the largest commercial carpet company in the world and, arguably, perhaps the greenest U. S. corporation, is on the road to achieving its goal of obtaining one hundred percent of its energy needs from renewable sources by 2020.⁵⁸ By changing its production, products, packaging and transportation methods Interface also has reduced its waste going to landfills by seventy-six percent. Its Mission Zero commitment states that it will eliminate any negative impact Interface has on the environment

mate Capitalism; Greg Kats, Leon Alevantis, Adam Berman, Evan Mills and Jeff Perlman, *The Costs and Financial Benefits of Green Buildings* (California: Sustainable Building Task Force, 2003).

⁵⁷ L. Hunter Lovins, *Entreprenouring the Solutions: Key to Competitiveness and Prosperity*, 2008, Available: http://media.sewanee.edu/htswl/in2050/Lovins/DriversOfChange.ppt.htm. The *Wall Street Journal* predicted in 2010 that half of all nonresidential buildings would be green by 2015. While only 2% of the nonresidential construction starts were green in 2005, McGraw-Hill Construction reported that they rose by 2008 to 10-12% and predicted that they would grow to 20-25% by 2013. See Lovins and Cohen, *Climate Capitalism*, 103, footnote 36.

⁵⁸This global company has reduced its energy use per unit of product by 43% since 1996. As of 2010 eight of its nine factories worldwide operated with 100% renewable electricity, with 30% of its total energy use coming from renewable sources. As a result it has reduced greenhouse gas emissions by 35% since 1996.

by 2020.⁵⁹ Because of its drive for sustainability, Interface has the least vulnerability to the volatility of the oil market of any carpet company. Interface's founder, the late Ray Anderson, believed that this strategy not only has saved the company millions of dollars, but also has enabled it to gain and hold market share.⁶⁰

These results are not surprising. A report from Goldman Sachs found that stocks of companies considered leaders in environmental, social, and governance policies outperformed other firms by an average of twenty-five percent. Compared to their industry peers, seventy-two percent of these companies performed better. A 2009 *Harvard Business Review* article states,

Sustainability isn't the burden on bottom lines that many executives believe it to be. In fact, becoming environment-friendly can lower your costs and increase your revenues. That's why sustainability should be a touchstone for all innovation. In the future, only companies that make sustainability a goal will achieve competitive advantage. That means rethinking business models as well as products, technologies and processes.⁶¹

⁵⁹ Interface, Available: http://www.interfaceglobal.com/Company/Speakers-Bureau/Topics/Journey-to-Mission-Zero.aspx, February 6 2013.

⁶⁰ Amory Lovins, *Reinventing Fire: Bold Business Solutions for the New Energy Era* (Vermont: Chelsea Green), 162.

⁶¹Lovins and Cohen, *Climate Capitalism*, 27, footnote 94. Similarly, Hunter Lovins states that a 2005 Price Waterhouse Cooper survey of CEO's from 43 countries found that 83% believed that environmental sustainability was an important factor in determining their profits, up from 79% in 2004

Conclusion

We started this journey talking about a Mad Lover and ended it by discussing the need to rethink business models. On the surface this resembles a theological "odd couple." However, if we love madly like God does, then no parts of our lives can remain unaffected by our passion for God and the things God loves. Love knows no bounds and transforms all it touches. Thus, business, design and love ultimately go together.

We have seen that it's in the trinitarian nature of God to reach out beyond itself to invite us to join in its music, or its dance. Beauty moves us, as it did Moses, to respond to this call and to wrestle with the experience. This wrestling leads to a formation of a community committed to understanding these encounters with the caller and to making difficult life decisions based upon this understanding. Ultimately this community becomes the community of the beautiful, a community that radiates the life of God. This community itself beckons others, both human and nonhuman, to join in the jam.

In our discussion of beauty we also came to realize that the experience of beauty depends not only on our own receptiveness to it but also upon the degree to which our surroundings transmit God's presence. To the degree that we act as a community of the beautiful when we change God's creation, to that degree human-influenced creation enables the Spirit to

and 69% in 2003. She also cites a Davos CEO survey's findings that 90% believed that going beyond merely obeying environmental laws enhanced their reputation, 75% believed it provided competitive advantages, and 73% believed it led to cost savings. See Lovins, *Entreprenouring the Solutions: Key to Competitiveness and Prosperity*.

call out to others through it. However, to the degree that, in our alterations of the world, we incarnate greed and a desire to control people and nature, to that extent people will find it increasingly difficult to encounter a God of love and joy. For this reason people of faith have an obligation to create a world that reflects a Mad Lover. Green design offers an approach to working with God's creation that not only reflects such an approach but that also passes the test of practicality. We have the means at our disposal to create a world of beauty if we have the will.

Beauty can transform society and lead it towards *shalom*, a state reflecting truth, good and beauty. Out of a concern for helping people encounter God, hear the gospel, and receive justice, we need to be transformed by "the renewal of our minds" so that the works of our hands reflect God's beauty. Because most people can encounter God easily in nature, and because people increasingly live in a built environment, it's critical that we find ways to create living environments that bring nature and humans together in ways that reveal God's presence. We now have the practical means to incarnate these values in new ways of interacting with our world. And, we will get better at it as we do so more and more.

We have the opportunity to speak prophetically to a world increasingly bombarded by a sensory anti-gospel. We can do this by our words and thoughts, but more importantly through the ways we live—through the ways we go to work, grow our food, and make things. This presents us with a daunting challenge: the radical transformation of our everyday lives, a true conversion or *metanoia*. So, how do we respond? Will we

proclaim a God desiring wholeness and health for all creation by the way we build, eat, and work, or will we continue to acquiesce to a world of institutionalized sin? It is up to us to decide.