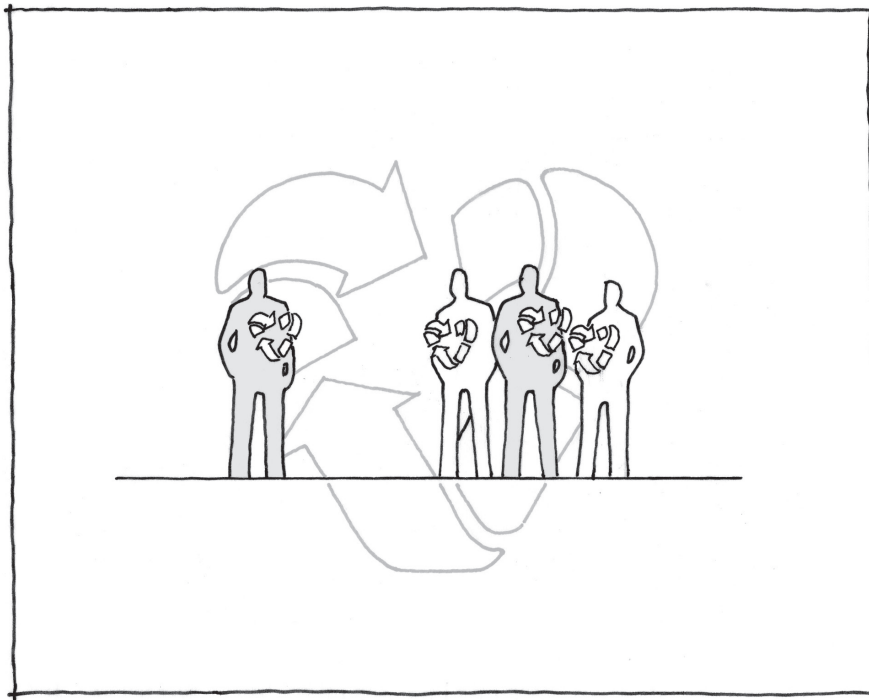


Celebrating the Individual and the Common Good



Symbiosis balances the individual and the common good.

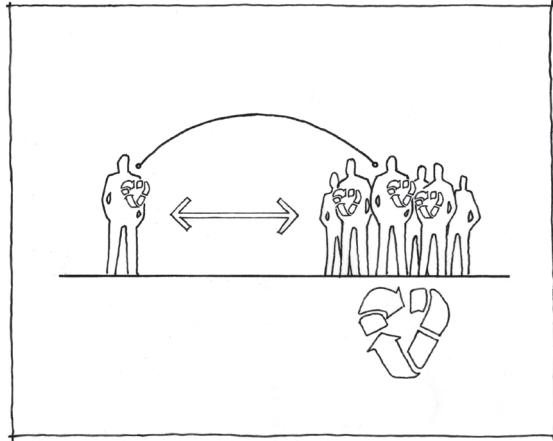
Individuals Benefit from the Common Good

Sometimes the answers to life's questions start small. Sometimes wisdom for the future must be reclaimed from the past. Sometimes a new way of living gets underway when people finally see that the current system is broken and it's time to generate solutions themselves.

“Many are finding the need to re-weave the web of their interconnection with others . . . the safety net of caring that we extend to one another when life is hard.”

—MARGARET WHEATLEY, ED.D.¹

That's how this whole project in an old school called Ivywild began. We are now building Ivywild and learning how to achieve a wise and different way of living called *symbiosis*—which we believe is a way of living with the power to help many Americans reach their dreams.



Symbiosis helps us to be part of something bigger than ourselves.

The Ivywild School Symbiosis District is a reality, but it is based on a dream we share with our nation's founders. This dream is woven into the fiber of our national character and heritage. We've heard it all our lives; we've heard it so many times it is embedded deep in our minds. It is inherent in the words "life, liberty, and the pursuit of happiness."

These words—written in our nation's original Declaration of Independence—stand as a monument for any group of people wanting to establish a new way of life. Americans grow up from childhood with a strong sense of our inalienable rights. But, increasingly, many of us feel we have lost our way and sense that access to our funda-

mental rights is disappearing. More and more of us are asking: Is it time to declare a new way of life in America?

This book is based on a real-life project that is happening because three individual entrepreneurs recognized the benefits of combining their businesses into a single connected district. These individuals, each with unique businesses, maintain their autonomy as individuals, yet by considering the "common good," each individual receives greater benefits (higher profits, less waste, and happier dispositions) by having an association with others in their district. Most importantly, the district was planned, designed, and built for this purpose.

With our children and our neighbors, we believe that we can find life, liberty, and happiness through a lifestyle of symbiosis. We believe that most of those reading this book are like ourselves: small business owners and entrepreneurs who need better ways of doing business; skilled workers who need a place where their skills are valued; design professionals who'd like to use their training to serve their neighbors; families concerned about how their children will grow up; retirees looking for a better option for their future; young people who believe things can be done much better.

We can create better places to live and raise our families. Rather than subscribing to the systems in our culture that leave us feeling empty, we can experience what it really means to live life, to be truly free and to be genuinely happy.

What Is Symbiosis?

This book represents a beginning for symbiosis through building Ivywild. The old Ivywild School in Colorado Springs, Colorado, which is being reclaimed and repur-

posed into a working symbiosis district, is the hub of an established neighborhood. It is being carefully designed and constructed to achieve the three aspects of symbiosis: environmental, functional, and cultural. The Ivywild project explores how to create better working and living environments that respect and encourage individuality while receiving the benefits of working cooperatively. It models mutually beneficial action by bringing three small-business owners and their families together to create something radically new. As partners, Mike Bristol, Joe Coleman, and I (Jim) form the core team for this project committed to creating symbiosis. The principles of symbiosis, which we will be explaining in this chapter and throughout this book, are the guiding principles for creating buildings, spaces, and neighborhoods that grow organically. Embracing the wisdom of Earth and its systems, symbiosis is destined to evolve. As Mike explained to a local government official during the planning and design process, “symbiosis is a journey.”

The journey to symbiosis will take us to a new place built in a new way. A symbiosis district promotes a way of living based on right relationships. We become rightly related to our locale in a continuous loop of environmental, economic, and cultural benefits. Each benefit builds on the others and continually interacts with the others to create a neighborhood system greater than the sum of its parts. It’s a place where people can live vibrantly—happy and free. It means living the American dream.

But we know that to be successful, we must actively address the extreme crises our world is facing: the disruption of Earth’s natural systems, the depletion of resources, the expanding economic inequities in our society, the disconnection between citizens and government, the loss of

genuine and authentic character and place, and our apparent indifference about all of these declining trends.

If we were to write a manifesto, these would be our “demands”:

- We want to ensure that the earth and its resources will be there for our children.
- We want a human-scaled life where we have a significant voice in how things are run and through which we have significant control over our present and future.
- We want new ways of doing business that reward the people who are the true producers of our nation and the backbone of America’s economic greatness.
- We want to be part of a thriving genuine community that makes each of us feel connected, valued, heard, and recognized as important.

We could title this “The Manifesto for Symbiosis.” Then we could sit down at our kitchen tables and talk about it, share ideas, and imagine new ways to achieve it. It would become our evolving manifesto for a new way of living.

So, what does symbiosis look like? We have the official textbook definition, of organisms living in mutually beneficial associations, but how does symbiosis really apply to the way we build things, the way we run our businesses, and the way we relate to our neighbors?

Advocating symbiosis begins by acknowledging that everything we build—everything in our “built environment” of cities, neighborhoods, and individual buildings—has an impact on the natural environment. Rather than harming Earth’s natural systems by the way we build,

we can use symbiosis to put our built environment into a positive mutually beneficial relationship with the earth. Our buildings and our environment can support each other. We are calling this first aspect *environmental symbiosis*.

From the very beginning of any plans for a symbiosis district, environmental symbiosis is designed into all the district's buildings and infrastructure. This starts by understanding a neighborhood's unique natural environment and natural resources and by assessing the appropriateness of designs. The fundamental question is: Are these compatible with the unique climate of the earth at this specific location?

The second aspect of symbiosis—and the one that is all too rare—creates economic prosperity by using the by-products of human activities more efficiently. This means repurposing and recycling byproducts from business and other activities so that nothing is wasted, and buildings are planned from the outset to promote this type of exchange. Imagine office buildings, retail stores, and homes where there is no waste! All the problems, costs, and ugliness associated with waste disappear. Also, if nothing is wasted, businesses operate more efficiently, thereby increasing profits. We refer to this as *functional symbiosis*.

The third aspect is about people—specifically “community.” How do we find the understanding and participation in community that makes our lives feel connected, whole, and secure? Equally important, how can we find a connectedness with others that respects each person's uniqueness and worth as an individual? Can relationships help us realize our full potential as individuals? It is important for humans to have their sense of personal value validated by others. At the same time, we only thrive when we are free to be who we are. This requires a delicate balance in hu-

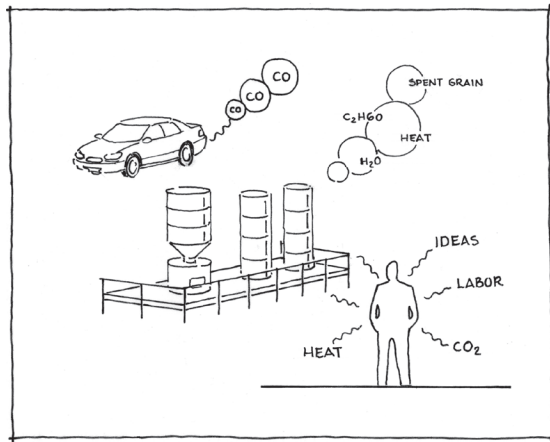
man relationships—one that, historically, has been difficult to actualize. But we believe it is attainable. It begins with mutually beneficial interaction that acknowledges the worth of people of different ages, skills, and experience. When as individuals we plan, design, and build alliances to benefit ourselves and the group—because of our associations and contributions—this is called *cultural symbiosis*.

Let us focus initially on what symbiosis means to our built environment. In terms of its physical structure, Ivywild is a *multi-use district* set apart by its practice of functional symbiosis. A multi-use district is an area that may include businesses, retail stores, restaurants, residences (like apartments and condos), child care centers, and other services like drugstores and hair salons. In other words, many kinds of activities are in a neighboring area; the activities are “mixed” rather than of a single type. Usually, because the activities are close together, residents can walk to everything. A common description for this level of walkability is a “pedestrian-oriented” district.

The term *district* is used in various ways by different designers and city planners, and these are explored in Chapter 3. Generally, though, a *symbiosis district* is a physical place that is located inside a neighborhood and functions as its hub. A district has a distinctive appearance that creates visual unity. For example, a Greek fishing village may consistently have white plastered buildings with blue roofs. A small town trying to revitalize its downtown puts up new, attractive light posts and mounts a colorful banner on each one. A cohesive visual quality or “look” defines a district.

Although in this book we focus on neighborhood infill districts, a large city will include other districts with specialized functions such as university campuses, hospital campuses, and others that typically provide service beyond

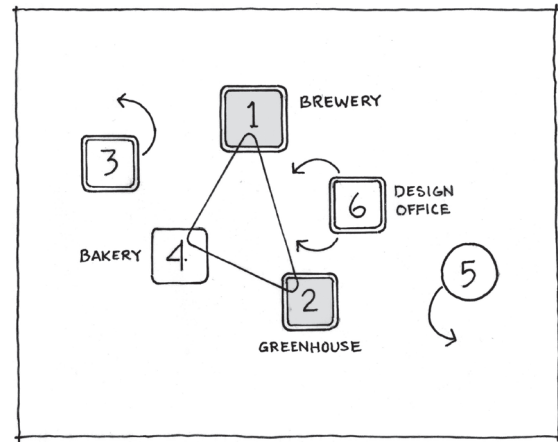
a neighborhood scale. These have unique design requirements and are outside the subject of our study. (However, it is increasingly being realized that principles of symbiosis are assets to specialized districts, as seen in the Collaborative Research Center at Rockefeller University and the new center for stem cell research at the University of California, San Francisco.) But in the symbiosis model, smaller operations match the neighborhood scale: for example, a doctor's office, a virtual classroom, or a city library module. These could easily be accommodated in a neighborhood infill district and add variety to neighborhood services. They provide benefits such as walkability, more time near home, and an increasingly self-reliant neighborhood.



Functional symbiosis is the exchange of byproducts within a system.

A major design distinctive of Ivywild is the addition of functional symbiosis to the concept of a multi-use district. To ensure functional symbiosis, businesses in the district are selected, programmed, and operated to promote the exchange of byproducts from their opera-

tions. This type of functional exchange is uncommon. In the few places it exists worldwide, it is used primarily for heavy industrial and large-scale agricultural applications. In the United States, it is unprecedented to bring byproduct exchange to the neighborhood level and apply it to daily living in such a systematic way. In addition to the connections between businesses, a central district within a neighborhood may have its own district-based infrastructure. This is a very resourceful approach that yields higher operating efficiencies and lower costs for everything operating in the district. Businesses can become more profitable. Functional symbiosis has clear and quantifiable economic benefits.



Businesses and activities are grouped to promote exchanges.

Estimating the economic benefits of symbiosis gives us a good transition to the environmental and cultural gains from symbiosis. When we say a symbiosis district is "profitable," we mean there is a financial gain for the businesses operating there. But there are other forms of profit. Saving the

earth's natural resources is clearly “profitable” for all of us. The less-tangible benefits associated with positive human relationships are a form of profit as well. When people of all ages, skills, and interests are working in a system that promotes balance, efficiency, and sharing, we see a community experiencing the profit that comes from cultural symbiosis.

Symbiosis is something we can literally see, and its style of design is based on a straightforward visual philosophy. A symbiosis district, positioned as the hub of its neighborhood, is based on a theory that the built environment influences human behavior. We design the structures of symbiosis to encourage behavior conducive to symbiosis. We believe that, on a daily basis, living in facilities intentionally designed to be in balance with natural systems, and working in businesses that exhibit the physical exchange of by-products, promote self-reliance and a spirit of the common good in a neighborhood's culture. The built environment can actively shape the human relationships within it.

So, what does it mean to practice symbiosis in our daily lives? The Ivywild model offers three key realities:

- (1) living, working, and relaxing in facilities and systems that respond to Earth's natural systems (*environmental symbiosis*),
- (2) working in multi-use symbiosis districts that promote the exchange of material byproducts among businesses and other enterprises located there (*functional symbiosis*), and
- (3) inspiring community-building cooperative human relationships among a diverse group of neighbors (*cultural symbiosis*).

Ivywild is designed to serve by spreading the positive energy of symbiosis from its hub to its entire neighbor-

hood, and beyond that to its entire city. As Americans become more concerned about the environmental, economic, and cultural crises affecting our nation, a movement of symbiosis could spread across our country. A successful symbiosis district could be the hub of every single neighborhood in every city in the United States.

When our architectural firm, Fennell Group, participated in a local “Dream City” master planning process for Colorado Springs and the Pikes Peak region, we identified 30 to 40 unique neighborhoods in our hometown alone. So, if there could be 30 to 40 symbiosis districts in our city (of approximately 420,000 people), there could be thousands across America. Every neighborhood could “build Ivywild”—and for the sake of our future, should.

The Journey to Symbiosis

We pointed out earlier that symbiosis is a “journey.” It is not something we can create and then leave to fend for itself. Symbiosis is both an initial condition and a process that evolves and requires continuing refinement.

Ongoing improvement is partially due to changes in technology. Building materials, products, and construction techniques change rapidly. This is especially true with the “green” building industry, where new systems and products seem to arrive daily.

Responding to the availability and cost of energy is another reason symbiosis must evolve over time—necessitating the continual adjustments characteristic of a journey. It's possible to build a “net-zero energy” building, for example (one that produces its own energy from renewable sources and does not require outside energy sources to operate), but this is extremely expensive and necessitates creative funding and long-term operations to amortize

the costs. Building owners such as fire departments and military bases make good candidates for net-zero energy facilities because they use facilities for many years and they have established budgets to pay for utilities. The rest of us, even though we may be committed to our symbiosis district for the long term, would likely install energy-producing equipment incrementally. Net-zero or positive energy production status could take many years to achieve.

Symbiosis will evolve because of cultural changes as well. A local Colorado Springs contractor told me (Jim) that the “pendulum always has a way of swinging in the opposite direction.” So it is with American culture. We recognize that there is a relation between being a free society and having a need for newness and change. We realize that symbiosis must constantly be rethought to feel contemporary to its practitioners and to stay open and responsive to new developments.

In whatever manner symbiosis evolves, however, it has a beginning—and this is the beginning. As we leave an old way of life behind to pursue another, as many of our ancestors did when they left an old world to come to the new, we experience the exuberance and drive that accompanies freedom. Americans are a people who constantly seek what newness and freedom bring. As the inscription on the Statue of Liberty says, we are forever “yearning to breathe free.” So, the journey to symbiosis is open-ended and resilient in response to change. One of our tremendous gifts as American citizens is the liberty to take this exciting process where we need and want it to go.

This is what we’re doing. We’re building a living and ever-evolving version of our “manifesto”: a symbiosis district called Ivywild. We feel strongly about empowering Americans to once again control their way of life. We want

to recapture the notion of the neighborhood as a component of a larger coherent community that can be the locus of control and decision making. So, in this book we’re trying to convey what we’ve learned to others who also desire greater local control over their lives and futures.

This book is the story of three small businesses that have set out to design, organize, and conduct their business activities differently (with a case study that includes the actual nuts and bolts of how we went about it). There’s no single or exact formula, because every symbiosis district will be unique. But we’ve found things proving essential to creating a symbiosis district at Ivywild that are worth sharing:

- Thoughtful inquiries about life, happiness, and prosperity
- A beloved historic school building with great potential for renovation
- Deep wisdom from native peoples about the earth
- Unavoidable facts from scientists about the earth
- A system of creative, sensible ideas about how to design and build responsibly
- A team of design professionals who care about serving the common good
- An ownership team of small businesses willing to try something new
- City leaders with a vision for their city’s future
- The cooperation and support of our neighbors

As we get clearer about what’s important in this project, we’re developing a model or template with regular updates, so that others can have some tested guidelines. That’s this book, available in printed form and in an electronic form linked to a construction-phase blog and website. We’ll try to encourage readers by emphasizing all

the good things and also by warning about pitfalls and discouraging events. All of us need the help of others to fulfill our dreams. We hope to build a sense of community around Ivywild that carries, respects, and actualizes everyone's dreams for a new and better way of living.

We see Ivywild as a model for taking action at the local level—through a sustainable way to design and build—that allows us to address global crises and simultaneously achieve a genuinely happy and free life. The Ivywild symbiosis district can inspire a new way of living, because, with this guide, others can build symbiosis districts like it in their neighborhoods. We can all be part of a growing movement that will help all Americans reclaim the present and reach our highest dreams.

Placing “The Common Good” First

The realization that we exist both for our own individual good and for the good of others is the essence of the concept of “the common good.” Life is not “either-or” (either others or me), it is “both-and” (both others and me). In American society, most of us agree it is good to develop one's personal self and to allocate resources to oneself so we each can achieve our highest personal potential. But, clearly, if this is the principal value of every person in our society, then our society is in peril.

Today's crises in the environment, the economy, and the culture are calling us to find balance between the individual and the public. We need both in a strong, healthy condition if we are to rise above our problems and find solutions. Both matter. We need the creativity and drive of individuals and we need all those individuals joined together and enhanced in teams that are more than the sum of their parts.

Ivywild helps us find balance between individual and society by expressing balance in the built environment, by showing us physical relationships of positive symbiosis on a daily basis. In fact, one way to think about symbiosis is as the art of making balanced connections.

As we've described, through functional symbiosis businesses in the district are exchanging material byproducts: what's left over from the operating or manufacturing process of one business (its “waste”) is repurposed and reused by another business. This is balance in action, but accomplished in a way most people haven't seen or even considered. Seeing things operate affects how we think and can gradually shape what we consider to be a “right” way of acting and relating to one another. “Building Ivywild” as a working model of balanced connections is our way of illustrating how the design of the built environment can actually help propel cultural change.

We need only look around to see that unchecked individualism and focus on the self has failed to serve us well. The image of what it means to be a successful individual—with an emphasis on material possessions, newness, wealth, and the drive for personal recognition—can culminate in an overemphasis on “me” on “my own personal here and now,” and on “my personal future,” with only a limited concern for our community's or nation's long-term future.

As opposed to the fierce drive to win what we individually “deserve” (as many ads today put it), ethicist John Rawls defined the *common good* as “certain general conditions . . . equally to everyone's advantage.”² More and more we understand the interconnectedness of all things, realizing that humans, culture, and nature are all intricately interwoven and dependent on one another. We are starting

to see that a society of “every man for himself” or “to each his own” or “as I see fit” is going to end up being a society in name only, unable to sustain itself.

For good or ill, community builds character. In a symbiosis community, a strong sense of the common good is balanced with the strong value Americans place on individuality. We believe that a concern for the common good puts individuality in a healthy context. It makes our individuality productive, and lets both the individual and the group find fulfillment.

Placing individuality within a context of society troubles some Americans. They fear getting suppressed, oppressed, confined, or limited in some way. Individual freedom is part of our cultural legacy. We have bravely fought tragic wars to oppose political systems that suppress the individual. But wisdom tells us that life is about balance and that extreme positions are inherently unstable and easily toppled.

Today we see individuals, who have invested their lives in small businesses, gradually losing the resources they need to be successful. We see wealth concentrated in small elite groups rather than being earned by the middle class. Two key groups that have historically been the backbone of our society—small businesses and the middle class—are increasingly stranded in an economic and cultural wasteland.

It’s extremely difficult to operate a small business under today’s conditions, and it is growing harder to make a profit. Long-time mom-and-pop stores have closed in droves after being in business for decades. Traditional middle-class jobs in construction, manufacturing, administrative support, office work, data entry, and utilities are vanishing, being downsized out of existence or shipped

overseas. As a profoundly insightful article, titled “Can the Middle Class Be Saved?,” described, we are seeing “the ever more distinct sorting of Americans into winners and losers.”³

Under growing economic pressure, our “backbone” families are fragmenting. Children are more influenced by media than by parents. Many parents feel themselves losing the ability to instill their own values in their children. They are in constant competition with cultural forces. Our defining classes find it harder and harder to replicate themselves and what they value.

We need help, and we need it near home. We need to turn things around with the support of our neighbors. Immediately—today—we are called to embrace a vision that firmly connects us to Earth, to our local economic systems, and to each other. The place to find and cultivate these relationships is in our immediate locales, in our neighborhoods and with the people who live there. Each of us has deep longings for connectivity, belonging, meaning, purpose, and love, but we can’t gain these alone. Our problems, both individual and societal, are calling us to reactivate our innate sense about the common good.

During a renovation project, I (Jim) recall hauling a pickup truck load of moulding from the lumberyard. The back of the truck was fully loaded. “I was going up a hill, hit a bump, and the entire load poured into the street. When I saw it I immediately wondered, ‘How will I ever get this back into the truck without causing accidents or stopping traffic?’ Within 30 seconds there were about eight people on hand helping me get the material back into my vehicle. They came out of nowhere. At that moment we all joined together to accomplish this task and I was moved by that. I

thanked them, but never knew who they were. These folks bonded together to accomplish this task, and it happened by accident.”

People racing to the aid of a neighbor used to be typical in our society. People helped young couples build barns when they were starting a family, and helped neighboring families work the fields when the dad was sick. Today, though, technology and lifestyles can remove the need for people to band together to accomplish things. There are far fewer opportunities in urban society for people to work together on concrete tasks essential to their mutual well-being, as they did in a rural society—pressing grapes, shucking corn, shelling peas, or whatever had to be done. People gathered to build a church or repair a roof, because those things kept the whole neighborhood strong.

Increasingly, we are losing a mature sense of what it means to be a self-giving human being. As noted theologian Walter Bruggemann wrote,

The great crisis among us is the crisis of “the common good,” the sense of community solidarity that binds all into a common destiny Mature people, at their best, are people who are committed to the common good that reaches beyond private interests, transcends sectarian commitments, and offers human solidarity.”⁴

Why has a culture based on the common good deteriorated in America? We can begin to answer by examining technology’s impact. When we consider human effort—

literal human toil, with people turning cranks, sweating and laboring—we see that connectivity often comes from the common bonds of physical labor. When machines and automated control systems displace humans in the workplace, we go through our days with the feeling that we are disconnected from one another, remote from actual people—and that we don’t really need each other.

In the 1950s, we took significant steps away from a shared commitment to community. We literally moved away from interaction. After work, we drove away from urban areas and retreated to our private homes in the suburbs to watch television. The primacy of the public realm vaporized in the homebound isolation fostered by this spread-out, disconnected way of life.

Now we are faced with the need to intentionally recreate places and activities that bring us back into interaction with the people around us. This book explains how: how we can design and build our worlds of work and daily living to support the kind of human connections we urgently need.

So, exactly how does symbiosis help us do this? The very meaning of the word *symbiosis* speaks to relationships of common good. Our English word *symbiosis* derives from two Greek words that mean “companionship” and “to live together.” Symbiosis, according to its positive definition, occurs when two dissimilar organisms live in association for their mutual benefit. In this book, *symbiosis* is used in a similar way: here it means choosing to associate with others in a symbiosis district that is designed to promote mutually beneficial relationships.

The aspect of mutual benefit is indispensable to positive associations. In today’s society, we not only need to create new positive relationships, but we also need to erase

old harmful relationships. Thoughtless ways of doing have spread throughout our cultural system, and are draining our vitality and prosperity.

To give an example, we have developed a national lifestyle that requires us to have cars. We have built a physical environment that can be reached only by car. On the surface, economically, this may look like a good thing. But, in many ways our dependency on our vehicles, coupled with how our cars are built and the kind of fuel they are manufactured to use, is depleting our natural and built environments and giving a stressful texture to daily life.

Likewise, some land developers' relationship to the land is not positive. They are "living off the land," certainly, by drawing substantial profits from their use of the land, but without giving much back. What they do give back—suburban sprawl, rural land denuded, wetlands and habitat for animals lost, trees removed—is gradually draining the life from the land and killing the natural forms of life within it.

Left unaddressed, negative relationships of this type accumulate. Multiple negative relationships with the natural environment mean that humans (one of the natural forms of life that depend on the land) are heading into a future worse than the present.

Nevertheless, change is always possible, and there are many reasons for hope. We are beginning to comprehend the connectedness of all things and the role that right relationships play in our survival as a species. Sustainability is being explored in many schools. More big businesses are becoming environmentally aware. Each day, as our eyes open to certain realities, it becomes easier for us to see that the mutually beneficial relationships of environmental symbiosis, functional symbiosis, and cultural symbiosis are essential to everyone's well-being. These practices are for the

good of all; in other words, they are for the "common good."

Realizing that symbiosis as a journey is helpful, because our concept of the common good will always evolve. Our ideas of what is good for us constitute what sociologists call a "process structure." We can rebalance and renegotiate these relationships over time to be sure that everyone continues to benefit. First, though, we have to get on that positive track.

Ivywild is grounded in positive symbiosis where all parties benefit. We will live and work as a network of strong individuals who seek associations that are fair and rewarding to everyone involved. Ivywild will count on every member to contribute, but without any one person or business carrying an unfair burden. Each will contribute something and each will receive something in return. This is the ongoing balance of symbiosis.

In a large city, region, or nation, many entities are linked in complex, multiple ways. By creating symbiosis in one neighborhood—and then in another—it is possible to promote the common good throughout a system, such as a big urban city. Ivywild School, the project on which this book is based, begins change at the neighborhood level and, through replication, offers an organic method of large-system change.

Balancing the Public and Private Realms

A city's public realm—its streets, parks and open space—is the defining characteristic signifying the extent to which a city values all its residents.

—KEVIN LYNCH, CITY PLANNER⁵

Physically, in the built environment, the distinction between an individual person and that person's community is represented by the *private* realm as contrasted to the public realm. As we've noted, the built environment, in contrast to the natural environment, refers to buildings, parking lots, shopping malls, airports, plazas, and so on; that is, anything that humans have built.

One of the strongest ways an individual connects physically to the commons is by accessing the public realm of the built environment. Everyone has a right to use a community's public realm, and all users are entitled to claim social ownership of it. The public realm is where it is legitimate (indeed, encouraged) to express our common interests for our common good. But we have lost many social aspects of the public realm and our sense of how vitally necessary this realm is for a community's life to flourish and grow.

The public realm is physical space, but it is not merely sheer space. It is space intentionally designed to be public. As the *New York Times* noted, "The best public spaces encourage diverse experiences, from people watching to protesting, daydreaming to handball, eating, reading and sunbathing to strolling and snoozing."⁶ As vibrant points of public connection, Rockefeller Plaza, Times Square, and the Luxembourg Gardens in Paris are among the world's great public spaces.

Insightful design of the public realm is an irreplaceable requirement for any built environment that seeks to support the well-bonded community lifestyle of symbiosis. Public space speaks to a community's aspirations. Therefore, common space in a symbiosis district must physically express support for the individual and for the group. Architecturally, care in defining both the private and pub-

lic realms is the primary symbolic expression of a symbiosis district's healthy balance between the rights of the individual and the needs of the whole.

Public space can be achieved through both land planning and architecture, as both are intentionally applied to the overall design of a symbiosis district. The public realm also includes privately owned businesses that are "open to the public." A restaurant, which is technically a private development, becomes an extension of the public realm because the public is welcome there. Many businesses even open their doors along the street to strengthen their connection to the public sidewalk. Take any street on which cars are traveling which is also lined with sidewalks where the public can walk. All of these are examples of the public realm.

At Ivywild, we are finding that an important intellectual or psychological realm has to be acknowledged. This "psychological public space" comes into being when a person enters the physical public realm. Openness is often reinforced with a smile or by making eye contact. If a person is standing or seated in public space, but unwilling or too internally focused to engage in interaction, then he or she is psychologically in the private realm. These subtle recognitions help us design spaces to accommodate everyone, but the goal of public space is typically to encourage and enhance interaction. When public space is successfully designed, often the primary attraction is simply the place itself.

With the advent of separated-use zoning and the cultural move to suburbia, developers built housing developments without understanding the crucial significance of public space and its cultural role as the public realm. This is discussed more fully in Chapter 5. The results of un-

aware suburban development included so-called “public” street corridors and parks that were really nothing but left-over open space with no power to truly build connections between neighbors. These pseudo-public spaces were design afterthoughts and did not provide the type of public realm that citizens needed (and desired) to evolve into a successful neighborhood.

When developers lead a project, the public realm is often compromised. Intentionally creating public space is considered too expensive—not leasable space. For many developers, open space in the development plan just looks like worthless empty space rather than a true asset. There is no vision for it other than as functional space for parking cars and accessing homes, shops, or offices. Buildings are important to a developer because they generate income. Unfortunately, it’s difficult to quantify how open public spaces—amenities like plazas, for example—affect overall development income. These spaces increase a developer’s cost to design, build, and maintain, so they are often excluded entirely from the development plan. When they are included, it is often as a bargaining chip for zoning concessions or tax breaks. Such grudgingly dedicated public space is often grossly underdesigned or too underfunded to be successful.

Two prime ways the public realm has been compromised in the suburbs are by putting in sidewalks that are too small and by eliminating alleys. Developers viewed these features as too costly. When they moved sidewalks to the curb, used narrow paving, and took tree belts away—or worse, removed sidewalks completely—people became less comfortable walking and tended to drive to places instead. With less pedestrian traffic, there were fewer opportunities for people to interact at the front of their lots along

the street. Overall, people were unable to get to know each other through the casual daily conversation that happens when the front yard of a home connects to a viable public space. Gradually, people became isolated in their homes. When they got in their cars, they drove away and left their street and their neighbors behind. But who noticed this was happening?

Another example has been the degradation of planning for neighborhood parks, leading to desolate and unused park spaces. Successful parks are traditionally built along a viable public space. In many early American small towns, parks were public greens bounded by streets. Across the streets were houses with front porches or buildings with storefronts, both making a strong connection to the public space. This way of organizing a neighborhood around an important public space is a physical representation of the traditional wisdom that “it takes a village to raise a child.”

My (Jim’s) wife lived in Las Animas, Colorado, as a little girl, and her home was adjacent to the town’s baseball field. Yes, the town had a baseball field. The field occupied an entire block and was bordered by housing across the street on three sides and an elementary school on the other. People could sit on their front porches or in their front yards and watch the games. Friends would visit homes around the field to watch the games. There were cookouts and parties. It was an amazing experience of community!

When the aging Las Animas field began to need expensive repairs on its dugouts and bleachers, a local developer offered land to build a field in a new housing development. The new field was situated without any significant relationship or connection to housing or merchants. It was

just a field off by itself. The wonderful web of community experience was lost.

In contemporary suburbia, parks are often placed in isolated leftover spaces without any connection to public space. Some parks are accessible only through a narrow passage between lots and are created in combination with drainage basins or other utilitarian areas. It is illogical to put a park just anywhere and expect it to be able to serve as vibrant public space. People simply don't go to inaccessible spaces on a regular basis. They're not on anyone's normal "route" around the neighborhood. This shows how the design of the built environment can encourage or discourage certain behavior.

One last point about land development: In early American small towns, alleys were valuable design elements, a key part of the web connecting the public and private realms. People used alleys to get in and out of their homes, office buildings, or downtown shops. In this pre-suburban world, alleys had a clear purpose, offering highly useful access to detached garages and providing rear service entrances. This dictated the arrangement of interior spaces in houses and buildings. With entrances off alleys, private spaces were in the back. Public space was planned for the front. Front porches and front yards as well as business entrances were meant to interface physically with the public realm of the street. Again, the nature of the design built a stronger neighborhood, because people naturally migrated to the front spaces that were designed for interaction and where interaction was expected.

The symbiosis style proposes designs intentionally crafted to provide the framework of public spaces around which a community's life grows. At the Ivywild School, we

created a dynamic public space in front of the core buildings. Rather than pour a flat, empty parking lot in front of the major buildings, we created a real streetscape for walking that encourages the encounters that lead to interaction and conversation.

People intuitively recognize when they are on a public street or in public space. It prompts social behavior. It is the psychological public realm. We see people smile, nod, and speak. When they see someone they know, they feel free to stop and talk. There may be street musicians or public art or the chance to rest under a shade tree for a few minutes. Many activities that occur in a public space simply never happen in private space or in mere leftover open space.

The public and private realms must be defined and separated by some degree of transition or enclosure. The importance of transition area is acknowledged by Portland's forward-thinking development company, Gerding Edlen, which stated,

One of the most interesting things we do is engineering the transition between public and private spaces. So often these realms are viewed as separate from one another, or black and white. Instead, we celebrate the gray. We think of these spaces between public and private as front porches or thresholds, and we've created a rich toolbox to help make great gray spaces.⁷

We need both public and private realms. Careful creation and design of the public realm is a physical assur-

ance that we all have ownership and a stake in our common life. Thoughtful design of the private realm assures us that our individual value is not lost in the collective aims or uses of the group. Both thrive at Ivywild due to their mutually beneficial relationship encouraged and facilitated by cultural symbiosis.

Individual Fulfillment through Community

Americans believe in individual dreams. We admire lone heroes who take a personal stand and make their dreams come true. But sometimes we forget the other side of the equation. Although maturing as an individual is vitally important, few humans can survive alone, and no one comes into this world without help. We also crave and need others to develop successfully. We clearly thrive in communities that recognize our uniqueness and where we have found the right role to bring our special uniqueness to bear for the good of all.

As Pegge Erkeneff wrote in the *Listen* newsletter, “We discover fundamental parts of ourselves in and through interacting with one another in community. When we rub up against other personalities and individuals, we learn where we are fearful, gifted, cruel, expansive, dismissive, and delightful. . . . We discover humility in community—and radical transformation.”⁸ Further, as Dr. Martin Luther King, Jr., said, “Whatever affects one directly affects all indirectly. I can never be what I ought to be until you are what you ought to be, and you can never be what you ought to be until I am what I ought to be. This is the inter-related structure of reality.”⁹

The foundation for maintaining cultural symbiosis in a symbiosis district is the ongoing process of discerning each person’s talents and strengths and passions. When

identified, that talent or enthusiasm or strength can be given a vital role in the community’s life. Every group member has the freedom to choose a fulfilling individual purpose that benefits the community. There are professional assessment tools that communities can use to identify and understand their members’ gifts, but often this can be simply observed. It’s also important to ask people what they want to do and feel gifted to do, rather than simply assigning tasks.

This respectful type of interaction and team building creates trust. It generates a personal faith in our community. Our individuality feels protected. We are safe to be who we are and where we are. When we know that our community sees who we really are and cares about our development, then we are able to let go of more superficial ego concerns and do what needs to be done for the sake of the common good.

One of the great gifts of a symbiosis district is the fact that we’re building a physical environment that expresses a vision for how people can be connected. In a symbiosis district, each person or enterprise has its mutually beneficial role. After each one has what it needs to perform its role, then any byproduct—whatever is left over—is distributed to someone else who needs it. This healthy give-and-take is the essence of mutually beneficial association.

The rewards of symbiosis are very concrete. They include the great task of stewardship for our planet, the strong economic benefits from sharing byproducts and other synergies, and the warm emotional bonds of human connectivity. This level of realization—of individual purpose coupled with belonging—is one of the deepest desires of the human heart.

So, at Ivywild, which is a voluntary association for mutual benefit, we celebrate American freedom and the individual purpose each person can choose in a free society. These are hard-won societal assets, admired the world over. In fact, it is only this free individual who is capable of freely choosing for the common good. Our goal is to position individuals in a community where it is rewarding to be a unique, creative person.

Okay, we could all imagine this: Stephen Colbert on the *Colbert Report* saying after reading *Build Ivywild*, “So, Jim and Lola, you want to build these hippie communes across our nation?” The audience laughs and envisions Volkswagen vans. Seriously, though, symbiosis simply reinforces long-held traditional American ideals about our potential as individuals and our excellence at volunteer cooperation. It is entirely congruent with our traditional beliefs in the ability of Americans to be self-reliant and to exercise the wisdom to manage our lives. Symbiosis is not some subtly reinvented version of socialist or Marxist ideology. It is fundamentally American. So really, Stephen, it’s just being hip.

Always, our questions are about optimal ways to align the individual and the neighborhood, city, and nation. On our journey to symbiosis, we continually ask: What are the best conditions for enhancing individual potential and development? How can an individual maintain autonomy yet join with others so we can all enhance our lives? This is ultimately each individual’s decision. We hope this book provides the opportunity to assess how the environmental, functional, and cultural benefits found in symbiosis can help bring forward our full, unique identity and potential, while advancing these qualities in a way that promotes the common good.

Why Build Ivywild?

Neighborhoods, town and cities that make the heart sing: how do we create them?

—JOSEPH P. RILEY, JR., MAYOR OF CHARLESTON, SOUTH CAROLINA¹⁰

Because of the remarkable kinds of people it attracts, every symbiosis district will naturally become a think tank and creative incubator for new ideas, innovations, even inventions. Anchored by its core ownership team of small-business entrepreneurs, architects, and designers, partnering with skilled workers good at organization, technical problem solving, and discovery, each “Ivywild” will give rise to its own neighborhood’s creative class. A high percentage of resourceful people will be highly concentrated in a relatively small local district. With an Ivywild flourishing in every neighborhood, the entire United States map will be dotted with hotbeds of ingenuity and growth.

Envisioning a symbiosis district as a breeding ground for inspiration and innovation demands a spark in the design—an immediately apparent “vibe.” We have all walked into a place—maybe on a Friday afternoon in early spring that promises cycling, swimming, golfing—and immediately keyed into the excitement of the crowd after just catching a word here and there. Ivywild was designed to have a persona like that; it was designed to be dynamic. When people go to Ivywild, they will sense excitement about the symbiosis already functioning and the symbiosis being envisioned. Everyone will know about the active synergies between enterprises and the active exchange of byproducts, because they can see it happening. Likewise, ideas will flow back and forth in the public spaces. This

propels people to imagine the future and stretch toward being innovators. In a synergistic environment, there is a collective spirit of innovation.

The symbiosis style comes from the conviction that buildings can be both functional and poetic. They can be inspiring while expressing what it takes to live with good common sense. Symbiosis is grounded in the physical, but also gives rise to the cultural and social. It is an intelligent physical platform for a creative way of living.

Each district is designed to be the hub of a neighborhood's social life. "Hub" is a strong metaphor for symbiosis districts like Ivywild, because they function best in central locations within well-established neighborhoods. In the diagram we developed for the Colorado Springs Dream City master plan, the multi-use infill districts were always at or near the geographic center of a neighborhood.

Comfortable distances for walking help define the spacing of districts. In the Dream City model, we created districts near the center of neighborhoods. Arterial streets, which are high-capacity roads with limited access, were generally found to be spaced about a half-mile apart. These arterials gave neighborhoods an innate boundary about a half-mile in diameter. So, if symbiosis districts are near the center of neighborhoods, they are about a half-mile apart. Thus, the distance from the center of the neighborhood (and its central district) to the outside edge is about a quarter of a mile—1,200 feet—a distance people are willing to walk. If we were designing brand new neighborhoods, we could use this spacing and scale as a template.

This example shows how Ivywild is intended to serve as a replicable model. Many details are set out in the case

study that accompanies this book. These details will make clear the essentials for a development to be an "Ivywild"; that is, one capable of achieving symbiosis.

How do we build Ivywild? Consider the notion of a "framework," which is essential to putting a project like Ivywild together. This framework—what design professionals call an architectural program—is really just a listing of all of the spaces in a facility or development. We relate our list of the physical spaces to an understanding of how people, goods, and services use or access a facility or district.

Any group setting out to build an Ivywild can use a framework or architectural program to identify potential mutually beneficial relationships. They will first seek businesses that best fit their specific neighborhood while offering the greatest environmental, economic, and cultural benefits to their neighborhood.

Water is the key. Water, which can be used for irrigation, is a primary resource in creating symbiosis districts because every district needs a food-production component. Food production is discussed at length in Chapters 3, 6, and 7 in relation to both self-sufficiency and its educational advantages for environmental symbiosis. So, it makes sense to first seek at least one business user with a large byproduct of water or grey water. Businesses with a large water byproduct can be plugged into the system of functional symbiosis as an anchor tenant or anchor user.

As we analyze how to maximize the use of water and other byproducts, we can list information for our framework in a simple matrix format. This includes business or other users, their byproducts, and the potential user(s) of that byproduct. Planning and designing districts will be

discussed in Chapter 9, but an understanding of this important relationship—aligning businesses and enterprises based on the efficient exchange of their byproducts—needs to be solid from the very beginning.

A preliminary matrix might look like this:

Byproduct Produced	=	Resources Needed
<i>Grey-Water Producer of 500 gallons per day:</i>	=	<i>Grey-Water User of 500 gallons per day:</i>
15,000-square-foot brewery	=	3,000-square-foot greenhouse

Symbiosis allows for many types of core users in addition to those used in the Ivywild model. For example, a micro-dairy could anchor a district. The first step in getting started is to match a user with a substantial grey-water byproduct and a user with a substantial grey-water need. Typically the grey-water need will be related to food production. We then assess all the other users and the amount of floor area they require. Then we expand the preliminary matrix by identifying all their required resources and all of their byproducts as well.

The notion of a matrix (a table of mutually beneficial relationships), which shows the byproducts of one user related to the needs of another, simply depicts the very heart of Ivywild. It graphically illustrates the functional dynamic at the center of all three principles of symbiosis that Ivywild supports: environmental, functional, and cultural. Each principle brings to life the mutually beneficial associations in that unique domain of symbiosis.

As a symbiosis district, Ivywild provides continual balance through an ongoing cycle of energy exchange: between humans and the earth, between business enterprises and their business district, and between individuals

and their community. In multiple ways, the physical structure of the built environment mirrors and supports these positive associations.

At Ivywild, all features of the district are carefully designed to fuel human innovation in an endless loop of positive interaction. When individuals feel sustained, it generates confidence, optimism, and renewed energy for activities that benefit the community. We find we can actually enjoy creating community and advancing the common good. Fulfilled individuals contribute to the good of all. The vision for symbiosis grows and evolves. In cycles of creative exchange between private and public, between individual and community, a neighborhood invents its own new way of living.

People are beginning to thoughtfully observe current realities in the world around them and ask, “What can we do, where do we start?” We respond by saying, “The first thing to do is: *Build Ivywild!* Build it in every neighborhood.”



Ivywild is near the center of an established neighborhood.

Highlights

1. Ivywild is a repurposed school building and site that promotes local businesses and that builds local community by serving as an informal neighborhood gathering place.
2. Americans can be assured that the idea of symbiosis preserves their freedoms and rights as individuals.
3. A symbiosis district is made up of a unique blend of strong, passionate individuals who freely choose cooperation with others in their neighborhood to increase efficiencies and profits, to be healthier, and to feel happier.
4. In the symbiosis model, districts must be built by entrepreneurs who are passionate about their craft or service and who operate within the district; these districts cannot be built by outside speculators.
5. Individuals align with other like-minded individuals at a neighborhood level to maximize environmental, functional, and cultural symbiosis.
6. Benefits are received both by individuals and by the collective district as a whole.
7. Public spaces are designed to make a person feel comfortable whether functioning as an individual and or within a group.
8. An individual's freedom of expression is blended with others at a district and neighborhood level to create a unique community identity.