

# The Space Between

A CHRISTIAN ENGAGEMENT  
WITH THE BUILT ENVIRONMENT

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**Baker Academic**  
*a division of Baker Publishing Group*  
Grand Rapids, Michigan

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Published by Baker Academic  
a division of Baker Publishing Group  
P.O. Box 6287, Grand Rapids, MI 49516-6287  
www.bakeracademic.com

Printed in the United States of America

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Library of Congress Cataloging-in-Publication Data

Jacobsen, Eric O.

The space between : a Christian engagement with the built environment / Eric O. Jacobsen.  
p. cm. — (Cultural exegesis)

Includes bibliographical references and index.

ISBN 978-0-8010-3908-9 (pbk.)

1. Christianity and culture. 2. Architecture and religion. 3. Religion and geography. 4. Cities and towns—Religious aspects—Christianity. I. Title.

BR115.C8J335 2012

261.5—dc23

2012009190

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12 13 14 15 16 17 18 7 6 5 4 3 2 1



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## Part I

# Orientation

Do you know what this is a picture of?



This is a picture of the most advanced civilization in the world.<sup>1</sup>

Does something about that seem wrong to you? This picture shows a rather unremarkable scene that could be anywhere in North America. You've probably seen places like this countless times and may never have given them a second thought.

More specifically, this is a snapshot of the public realm that most of us have come to expect in our everyday life. In most places throughout history, the public realm was where a country showed the rest of world what it valued

and what it was capable of. The public realm is where a citizenry would put its most gracious plazas and its most beautiful buildings.

But the public realm in this country is, with few exceptions, rather unremarkable and even depressing. And this somehow seems wrong to us. Not only does this seem out of order in one of the richest countries in the world, it doesn't seem like a fitting setting for the human species wherever we happen to be. We are, after all, part of God's good creation—the ones made in God's image and the ones called to partner with God in the redemption and fulfillment of creation. It seems like we were made for better than this.

And in fact, we *were* made for better than this. There is a special word for this “something better” condition in which we are supposed to live our lives. That word is *shalom* and it includes our built environment and much more. Shalom can be translated as “peace,” but unlike our use of the word *peace*, it means more than just the absence of conflict. Shalom involves restored fellowship with our Creator, human flourishing, justice, and relational wholeness for everyone. And shalom is unmistakably beautiful.

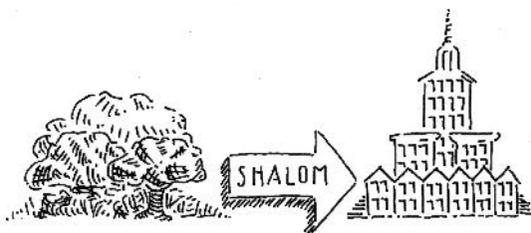
Each one of us carries a longing for shalom deep within. This image of shalom fuels our hope.<sup>2</sup> We respond with a twinge of joy when we see a glimmer of this image in our everyday life. And something just seems wrong when the place that we find ourselves bears not the slightest hint of that blessed condition that is described in the Bible.

In the introduction we looked at a garden and a city as two settings where humanity is shown to be living in harmony with one another, with the rest of creation, and with God. Those settings can be described as being characterized by shalom. But we also noted that we do not currently live in either of those settings. We live somewhere between the garden and the city. The question that we considered then, and will repeat here, is how do we live faithfully between the garden and the city? Or, what should we do in the present time with these longings for shalom?

In the introduction we drew a line between the garden and the city to show how the city can be seen as a realization or flowering of the potential that God intended for the garden. But that line can also be seen as a picture of the possibility for shalom that exists between the garden and the city. When we are obedient to God's command in the context of the communities and places to which we have been called, we often find that we can experience a degree of shalom in the present time. For this reason, this line can be labeled *shalom* or *obedience*.

Of course, “being obedient to God's command” is not always as easy as it sounds. In what ways can we point to the picture shown above in terms of specific acts of disobedience to God's command? And how would a decision

to be obedient to God’s command translate into specific recommendations for this dismal corner of the public realm?



Between the Garden and the City (II)

The first thing we need is to undergo a kind of orientation. We need to be oriented in such a way that we can begin to see where this shalom line might be located in the context of our places and our communities. And we need to be oriented to see how close or how far our places and communities are from the shalom to which we have been called.

There is nothing unusual about a brief orientation before taking on a new challenge. You may remember participating in orientation before your freshman year of college or getting oriented on the first few days of a mission trip in another country. But it is especially appropriate for us to get oriented before exploring the built environment from a Christian perspective, because the very word *orientation* is steeped in geography and theology.

The word is based on the Latin *oriri*, which means “to rise”—as in where the sun rises. From the West, where this term originates, *oriri* refers to the east. The original context for this word has to do with the *siting* of churches. If you are unfamiliar with this word, *siting* has to do with how a building is placed on its lot. The altar of a church (in the West) was supposed to be directed to the east, so that worshippers would be facing Jerusalem as they celebrated the Eucharist together. Churches were built with the narthex to the west, and the apse (where the altar was supposed to be) to the east. When the church building had been properly sited in this way, it was said to be oriented correctly.

The orientation that we undergo in this first section has nothing to do with identifying geographical coordinates so that a church can be properly directed toward the east. Rather, we will be identifying a different set of coordinates that will help to determine whether you are properly directed toward shalom. Rather than plotting your coordinates on a directional grid of north, south, east, and west, we will be plotting your coordinates on a grid consisting of four gifts that have been given to each one of us by our Creator to assist in our striving toward shalom.

- The first gift is *embodied existence*. Your body was not a mistake, an oversight, or a barrier to your relationship with God. Rather, your body is part of the “very good” that God declared when he completed the work of creation. You were meant to experience the world through the mediation of your five senses at the speed at which your two legs can carry you. These things don’t need to be fixed or overcome in order for you to experience shalom.
- The second gift is a *place in which to thrive*. God not only created humanity good, God also placed us in a good setting. This setting was both sufficient to meet our material needs and a delightful place characterized by beauty and variety. To not be attached to a particular place (or to be displaced) is portrayed in Scripture as a dreadful consequence of sin, and not a marker of freedom. To experience shalom is not to be delivered from place, but to experience sustenance and delight in a particular place as we wait for the good place that is being prepared for us.
- The third gift is the *gift of community*. Community is not a panacea against loneliness, nor is it a strategy for making life more interesting. Community is fundamental to our existence. God reveals the divine self to us as a community of Father, Son, and Holy Spirit. We enter the world as part of a natural community of mother, father, and child. And we are called as disciples of Jesus Christ in the context of the community known as the church. We cannot create community from scratch, nor can we truly leave the communities that shape us. We can encourage healthy community, or we can inhibit it through our actions and decisions. But only God can give us the experience of community that we need.
- The fourth gift is the *gift of time*. When God divided the light from the dark, many believe God created time itself as a fundamental condition of created reality. Time is not therefore a foregone conclusion but is an intentional gift from our Creator. If we miss this basic fact, we are likely to misunderstand time itself and subject ourselves to frustration and disappointment. Some, looking backward, see time as a burden as it accumulates baggage from our history. Others, looking forward, see time as a commodity that can be leveraged as we “create” our own destiny. But as God’s people, we can see time as a gift that can be enjoyed as we learn to receive it, attuned to its various rhythms under the careful guidance of the One who gives it.

## Who Are You?

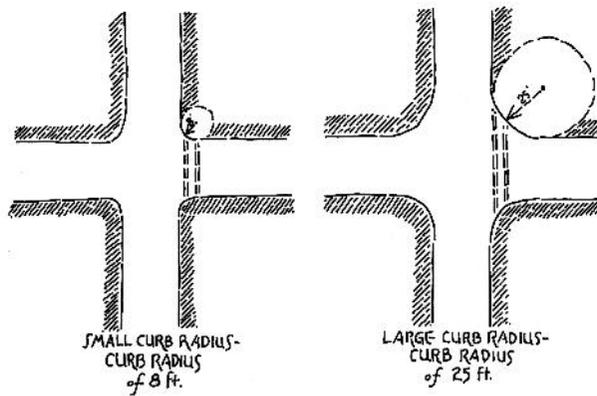
### Human Being or Automobile Operator?

In the movie *Elf*, Will Ferrell plays the part of a human (Buddy) who, due to a Christmas mix-up at an orphanage, is raised by elves at the North Pole. The reality of his situation comes into clear focus when one of the elves lets it slip that Buddy doesn't really fit in because Buddy is a human. As disturbing as this revelation is, it finally makes sense of why he physically doesn't fit in his bed, the shower, or in any of the chairs.

It may very well be the case that many of us need to experience a similar "aha moment" with regard to our built environment. We humans are embodied beings, but for the past half-century many of us have been living in environments designed around the needs of automobiles. Coming to this realization may help explain numerous situations where it felt vaguely as if we just didn't fit in.

### *Curb Radii*

To explore this possibility for yourself, find the closest sidewalk and go to the corner. Look down to where the street turns and note what you see.



Curb Radii

Does the corner look like the diagram on the left or the one on the right? The difference between these two types of turns can be captured by taking a measurement known as curb radius. Curb radius is measured by taking the curve of the sidewalk at the corner as one segment of a circle. If you were to complete the circle and then measure the radius of that circle, you would have the curb radius.

The first drawing above shows a curb radius of eight feet, typical for a traditional pre-WWII neighborhood. The second picture shows a curb radius of twenty-five feet, which is typical for a postwar exurban neighborhood.

The purpose of the larger curb radius is to allow automobiles to travel faster by allowing them to turn the corner without slowing down. Unfortunately, the larger curb radius makes it quite a bit more dangerous for pedestrians.

In addition to the danger of crossing a street that allows fast-moving cars, the larger curb radius increases the distance that pedestrians have to travel to reach the other side of the street. If an eight-foot curb radius creates a forty-two-foot crossing distance, a twenty-five-foot crossing may create a sixty-six-foot crossing distance. The crossing distance is also increased as lanes for traffic are increased; and postwar exurbs also tend to have streets that are four, six, and even eight lanes wide. The larger the crossing distance, the longer the span of time the pedestrian is in danger of being hit by a car.

Pedestrian safety is a significant concern in this country. Every year, roughly four thousand pedestrians are killed, and another fifty-nine thousand are injured.<sup>1</sup> Compare this to residential fires, which in 2009 claimed the lives of twenty-five hundred and injured thirteen thousand.<sup>2</sup>

Concern over residential fire safety has led to numerous requirements for things like smoke alarms and clear access to exits. Why, then, has there not

been a comparable set of rules about putting limits on curb radii? Or why do we continue to build streets with multiple lanes for traffic? The most logical explanation is that when we leave our homes, we are expected to be in automobiles. We are not really expected to walk around. That is to say, when it comes to the built environment, humans in their natural state are in a disadvantaged position.

This may help explain why, when we find ourselves trying to navigate the built environment by walking around, we sometimes feel as if we just don't fit in. But we have become so accustomed to "not fitting in" that we hardly notice it any longer and need to do strange things like measure curb radii and count traffic lanes to begin to perceive the reality of our situation.

### *Pizza and Slice*

Another way to help us see the strangeness of our current situation is to use the human experience of certain phenomena as a reality check for our evaluative criteria. This is how we often think about the medical profession. Not all of us know how to do what medical doctors do, because they are trained specialists who work in a complex field. However, as complicated as the medical field is, the product for which that field is responsible (good health) must at some level be perceptible to the nonspecialist. Most people can recognize whether a doctor has done his or her job well, because we have an innate sense of what sickness and wellness look like.

The architect Léon Krier uses the analogy of a pizza to draw out the commonsense aspect of zoning versus traditional neighborhood development.<sup>3</sup> A traditional city, according to Krier, is like a pizza. There are lots of different sizes and types of pizza, and they are generally well regarded. Despite the great variety of pizzas available, there is one rule that governs all pizza. That rule is that one slice of pizza must be representative of the whole. That is to say, whatever kind of pizza you have, each slice will contain most of the ingredients that make it an enjoyable culinary experience. For example, if your friends have ordered a Hawaiian pizza and you receive a slice that doesn't have any Canadian bacon, you are justified in feeling cheated.

Krier claims that cities are like pizzas, and slices of pizza are like neighborhoods. That is to say every neighborhood should contain most of what you love about your city. You should be able to experience and enjoy the city at the level of your neighborhood. This is a rule that in most cases hasn't needed to be enforced. It was a natural consequence of the fact that most people throughout history have experienced the built environment on foot. When a significant number of people in an area don't own cars, the natural

consequence is that neighborhoods develop where most needs can be met within a relatively short distance.

As populations expanded beyond distances that one could easily reach on foot, new neighborhoods were formed around the emerging populations on the outskirts. These collections of neighborhoods became towns, and then they became cities. But because people continued to experience them on foot, the basic scale of the neighborhood didn't change much. That is why the traditional neighborhood is considered to be a foundational building block for human community.

However, all of that changed in the second half of the twentieth century in this country. Through a policy tool known as functional zoning, we began to separate the functions of the city into different geographical zones. Hence, the emergence of a residential zone for houses, a retail zone for shopping, an office zone for working, and a recreational zone for playing. This idea may have had some merit, but Léon Krier is not convinced of its wisdom. In his mind, dividing up the city in this way makes about as much sense as dividing up the ingredients of a pizza and serving them separately.

Imagine going to a pizza party and being served a lump of dough, followed by a cup of tomato sauce, then a handful of cheese, and finally a stack of pepperoni slices. This way of “enjoying” pizza may have the same nutritional value as the traditional way, but almost all of the enjoyment of the pizza gets lost in this new approach. In the same way, our “cities” today have many of the same components of their traditional form, but because everything is separated by function, cities today are much less interesting and enjoyable than they were before. What we have now is a rationalized grouping of the functions of the city without a city in the traditional sense of that word.

## Embodied Existence

When we stop to think about it, it is very odd that having a body would put us at a disadvantage in navigating our built environment. It is even more odd that we would never stop to ask about the human experience of this ubiquitous automobile-dependent development. From the moment of our creation, God intentionally gave us physical bodies and placed us in an environment that would sustain and even delight the senses with which God had endowed our bodies:

Then the LORD God formed man from the dust of the ground, and breathed into his nostrils the breath of life; and the man became a living being. And the LORD

God planted a garden in Eden, in the east; and there he put the man whom he had formed. Out of the ground the LORD God made to grow every tree that is pleasant to the sight and good for food, the tree of life also in the midst of the garden, and the tree of the knowledge of good and evil.<sup>4</sup>

### *Bodily Faithfulness*

Throughout Scripture, humans are called to live out their lives and even enjoy their time on earth as embodied creatures. Unlike in many Eastern religions or ancient myths, the body is nowhere in Scripture portrayed as a barrier to faithful living or a liability to our relationship with God. In fact, many of the commands we find in Scripture can be obeyed only by including our minds and bodies in the operation; “you shall love the Lord your God with all your heart, and with all your soul, and with all your might.”<sup>5</sup>

When we hear that our bodies are important to human thriving and Christian discipleship, our first impulse is to think of our bodies as a context for applying the truths that we first comprehend through our minds. But this is not the only way to understand this concept. Our bodies can be obedient to God’s leading in a more direct way. We can begin to comprehend this clearly in the use of the word *peripateo* in the New Testament. It literally means “to walk,” but because it is generally understood as a metaphor about the living of our lives in general, it is usually translated in English as “live.” However, because of our tendency to discount the relevance of our bodies to Christian faithfulness, it is a useful exercise to review some of the key verses in which *peripateo* is used, substituting “walk” for “live.”

Be careful then how you *walk*, not as unwise people but as wise.<sup>6</sup>

Brothers and sisters, join in imitating me, and observe those who *walk* according to the example you have in us.<sup>7</sup>

As you therefore have received Christ Jesus the Lord, continue to *walk* in him.<sup>8</sup>

Finally, brothers and sisters, we ask and urge you in the Lord Jesus that, as you learned from us how you ought to *walk* and to please God (as, in fact, you are doing), you should do so more and more.<sup>9</sup>

When we think about walking in obedience to God, or like Christ, or in the Spirit, we can begin to see different ways this might happen. Certainly, there are many situations in which our obedience involves applying what we have learned in our minds to a real-life situation in a straightforward way. But there

are other situations in which the right thing to do is primarily ascertained through our bodies.

We can push this logic even a bit further. Again, we think of Christian obedience as beginning with abstract truths that we comprehend with our minds and then apply to concrete situations that are mediated by our bodies. But sometimes it is our bodies that initially learn the lesson that our minds then have to grasp. Throughout the Old Testament, God's people were commanded to remember. Some of this remembering involved information that was first received cognitively, such as God's covenant promises or his instructions. However, most of what they had to remember was God's faithful actions toward them that they first comprehended with their bodies:

Moses said to the people, "Remember this day on which you came out of Egypt, out of the house of slavery, because the LORD brought you out from there by strength of hand; no leavened bread shall be eaten."<sup>10</sup>

Remember the long way that the LORD your God has led you these forty years in the wilderness, in order to humble you, testing you to know what was in your heart, whether or not you would keep his commandments.<sup>11</sup>

Remembering in this case involves recalling the way their legs ached or their stomachs grumbled as they followed God's leading through the wilderness.

### *Tacit Knowledge*

The kind of information that we can comprehend and know with our bodies is called tacit knowledge. It is a common aspect of everyday life. We cannot claim to know how to play basketball or how to ride a bike from reading books about such things. Rather, to claim that we truly *know* how to play basketball or to ride a bike, we need to have actually done these things with our bodies.

Not only is tacit knowledge a valid form of knowledge, in some cases it can be better or more reliable than knowledge that is primarily cognitive. We can demonstrate this by way of the following scenario. Imagine that you have to get a life-or-death message across a body of water that spans only fifty feet from shore to shore but is too wide to walk around. You need some kind of conveyer of that message for it to be received successfully. The primary qualification for this role is that the messenger know how to self-propel a human body across a body of water.

One of the candidates for this important role is a fifty-year-old physicist who has the requisite knowledge in the cognitive sense of that word. The physicist

can draw you a beautiful chart involving buoyancy and rates of propulsion to explain how a human body moves through water. But the physicist has never actually swum in water. The other candidate is a six-year-old who is just learning to read but who happens to be a very good swimmer. In this case, the six-year-old's knowledge of self-propulsion is not only valid but a more usable form of knowledge. Because of superior knowledge, he would be the better choice for carrying the message.

Once we understand the basic nature of tacit knowledge, we can easily think of a number of situations in which tacit knowledge is to be preferred to cognitive knowledge. Some of the best musical instruments are made by people who rely more on the feel of the materials than on precise measurements. The grading of trees and tobacco is done mainly through tacit knowledge.<sup>12</sup>

## **Bodily Observations about the Built Environment**

As I have demonstrated, our bodies are an indispensable context for Christian obedience. Our bodies may also play a role in understanding certain truths as well as in ascertaining what obedience looks like. These two observations give us permission to “think” about the built environment, not just with our minds, but also with our bodies.

### *Speed*

For thousands of years, the speed at which most people experienced the built environment was fixed by the average person's gait, because the only way for the average person to experience the built environment was on foot. Since the advent of the automobile, all of that has changed. The automobile has not only increased the maximum speed at which we can experience the built environment but has led to the creation of some very distinct settings that are intended to be experienced at differing speeds.

Robert Venturi has suggested that the speed at which we are expected to experience a particular built environment can be understood by paying attention to the way that either signs or our senses are used to communicate pertinent information.<sup>13</sup> On one end of the scale, we have environments designed to be experienced at 65 mph. In these environments, information is communicated to us through iconic shapes and color schemes. At this speed you can see the familiar shape of a big-box store adorned with, say, the trademark Home Depot orange.

This particular landscape changes in scale as we slow down to 35–45 mph on a major arterial road. Here are large lollipop signs letting you know which of the buildings you are passing contain food and where to turn if you want to change your tires.

Driving at 20 mph on a traditional main street, you are still primarily using your eyes, but you are not using them to read signs. From this speed you can see actual merchandise in the plate-glass storefront windows. This environment actually is designed for driving or walking, so you can also experience it walking at 3 mph. As you walk along a typical main street, your eyes can see more detail, and perhaps some of your other senses get involved in communicating to you what is available. You don't need a sign to tell you that you are passing a hardware store or a barber shop; you can read this information more directly by the paraphernalia that you see through the window.

At the far end of the spectrum is the Middle Eastern bazaar or, perhaps, in the United States, a busy neighborhood farmers' market. In this environment, because of the crowds and the sometimes irregular layout of the stalls and the products, you can move only at a very slow pace. Here signs are completely unnecessary because you can see and smell the products that are offered for sale. In this environment touch, taste, and even sound may be used to navigate your options.

One implication of Venturi's observation about the relationship between speed and signs and senses is that the environments through which we travel more slowly engage us more as bodily creatures. The higher the anticipated speed the environment is built for, the fewer of our senses are engaged. At 65 mph only our eyes are engaged, and even then they are not as fully engaged as they could be. Whereas at 1–3 mph our eyes, ears, nose, and even sense of touch can be engaged. Therefore, we can surmise that environments designed for slower navigation may be better suited for the faithful living of an embodied human.

### *Distance*

Not only do humans move on foot at about three miles per hour, but we do so as creatures embodied in a particular way. Our experience of the environment would be very different if we walked on four legs like dogs, or if we could easily transcend the horizontal plane like birds. Jan Gehl claims that our status as “linear, frontal, horizontal mammals” has a great impact on how we experience the built environment.<sup>14</sup>

Because of the way our bodies are shaped, we experience the built environment standing erect and moving forward. We need to think about the built

environment in terms of the distance at which we see things right in front of us, in our peripheral field of vision, and above and below us.

The most significant objects that we see directly in front of us are other human beings. Gehl observes how our experience with another person is impacted by the distance at which we see him or her in front of us. He calls this metric the *social field of vision* and notes the difference of experience along certain gradations:



Distance and Intimacy

### *Sight*

- At 330–550 yards we can identify people as humans rather than as animals or bushes.
- At less than 110 yards we can begin to see movement and body language in broad outline.
- From 55 to 75 yards we usually can recognize a person and can note hair color and characteristic body language.
- From 24 to 27 yards, we can read facial expressions and dominant emotions.<sup>15</sup>

### *Hearing*

- At 75–55 yards we can hear shouts for help.
- At 38 yards we can conduct one-way communication using a loud voice.

- At 27–22 yards, short messages can be exchanged.
- At 7.5 yards genuine conversation can take place (as we move closer, the conversation can become more intense).<sup>16</sup>

One of the unintended consequences of the automobile-oriented development that we pursued in the second half of the twentieth century is the way that it has increased the distances at which we encounter one another. It has pushed our homes farther from the places that we work and shop. And because of the large parking lots and wider streets that are needed to accommodate all of those cars even when we are engaged in the same activity in the same place, the distance between us has increased significantly. And where the distance is not terribly great, we are often shielded from one another by the windshields of our automobiles. By increasing the distance between people in the built environment, automobile-oriented development tends to decrease the intimacy that people can have with one another in their environments.

Gehl also believes that our “horizontal sensory apparatus” is key to our experience of the built environment itself:

Our senses and our locomotor apparatus paint a clear picture of an extremely alert pedestrian who looks ahead and down, but has only a limited field of upward vision. Thus hiding in trees has always been a good idea. Looking down is easy enough, but looking up is another story: we literally have to crane our necks.<sup>17</sup>

This means that skyscrapers and very tall buildings are of very little benefit to the pedestrian on the street. If skyscrapers are designed to be visually interesting, this might be good for postcards but won’t typically be enjoyed by pedestrians walking along the streets. Also, this limits the ways that pedestrians can interact with other people who are situated on the higher floors of a building. Gehl claims that above the fifth floor our ability to connect with other people is greatly reduced.

This also suggests that the first floor of buildings is the most important floor for engaging pedestrians. If a building comes right up to the sidewalk and is filled with rich detail and variation, it tends to keep us interested. This kind of visually interesting environment was virtually a foregone conclusion in the traditional downtown or the main street in a small town. But now, one is likely to encounter stacked rows of parked cars or completely blank cement or glass walls when walking in a city or town.

## *Connectivity*

One of the distinct advantages of navigating the built environment on foot rather than in an automobile is that more of your senses are engaged in moving through the environment. As we have noted, the accelerated speeds at which the cars propel our bodies through the environment means that we receive limited sensory input from the landscape outside of our cars. We tend to compensate for this lack of environmental stimulus by supplementing our experience with sophisticated entertainment systems for the interior space of our cars.

As a sensory experience, walking the built environment is fundamentally different. In many cases, one finds oneself enjoying the environment while using one's feet as a method of transportation. While walking to our destination, we may decide to follow a path that takes us by a view we'd like to enjoy or under a tree that is in blossom. One of the joys of navigating the built environment on foot is the ability to choose from among multiple options to get from one place to another.

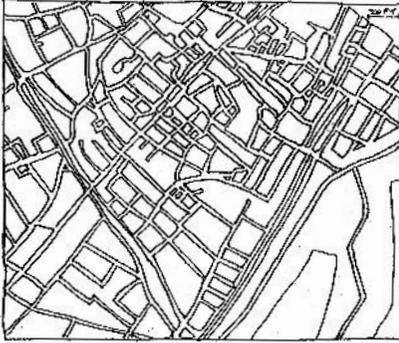
The exurban environment is not only engineered for the convenience of automobiles but also usually fails to accommodate this kind of sensory exploratory delight that we seek while walking. The cul-de-sac/arterial street layout often dictates just one path to get from point A to point B. Not only is that path often indirect, it does not allow any variation on a whim. The traditional neighborhood grid with small blocks provides a very different experience. In this kind of layout, one can often choose dozens of options for getting from point A to point B. This makes every errand somewhat of an adventure.

The term that is used to measure this different way of laying out streets and sidewalks is *connectivity*. A traditional neighborhood grid has a high degree of connectivity. An exurban subdivision tends to have a low degree of connectivity. Connectivity is measured by the number of intersections per square mile. One hundred fifty connections per square mile is considered to be the minimum for a vibrant community; having twice that is considered even better. The images on the next page show some cities with differing levels of connectivity. They range from a high degree in Portland, Oregon, to a low degree in Forest Hills, Michigan.

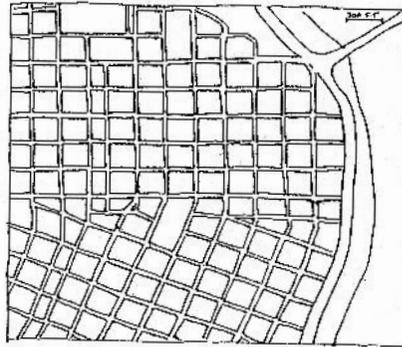
## **Perspective**

One of the reasons that the built environment does not always feel very comfortable or enjoyable to experience on foot is that our perspective on foot is

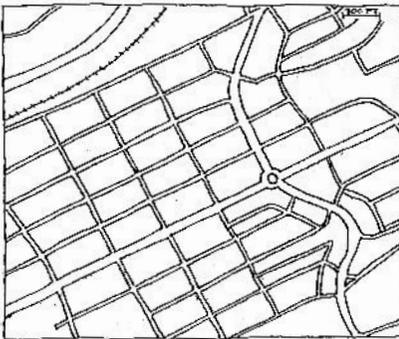
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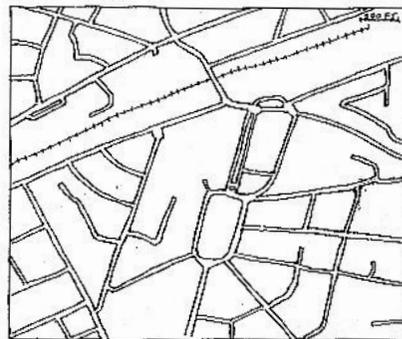
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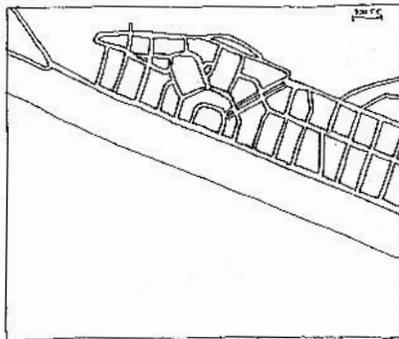
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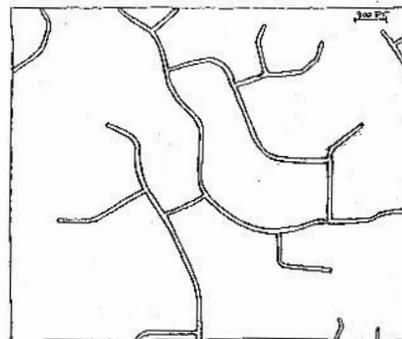
LEICESTER, ENGLAND



SEASIDE, FLORIDA



FOREST HILLS, MICHIGAN



## Connectivity

different from the perspective of those who planned and organized this space. Planners have often formulated their plans first by looking at abstract statistics (traffic projections, census data, growth models) and then drawing out their visions for the built environment on a map that is scaled at something like 6,600 to 1. In some cases, this map is then built into a 3-D model to help communicate the vision to the public.

The perspective of the planning map and scale model is a distinct way of viewing the built environment. It is almost godlike (in perhaps a Greek-god sense) and not like the perspective of the mere mortals who live and move in these spaces. What seems attractive and pleasing at the godlike perspective can be very different from what pleases and attracts us while experiencing the built environment on foot.

For this reason, some of the most insightful commentary on the built environment has come not from planners and other “specialists,” but rather from untrained nonspecialists who make their observations about the built environment from the perspective of a human body on the street. One of these commentators is a woman named Jane Jacobs, who has been called one of the most influential voices in city planning of the twentieth century. I return to Jane Jacobs at length later in this book, but I first want to introduce a simple methodology that Jacobs employed throughout her career.

Jacobs practiced what Philip Langdon called “learning through immersion.” That is to say, she walked through neighborhoods and observed what worked and what didn’t. And she enjoyed riding public transit without a particular destination in mind just to see what she would discover in a city. It is important to learn through immersion when we are first forming impressions about the built environment, and it is perhaps even more important to employ this methodology if our interest in the built environment leads us to accumulate some degree of technical expertise in this area. In many cases, it is easy to convince ourselves of the truth of a particular planning principle even if it really doesn’t work from the perspective of the ground.

## Inviting People

Jan Gehl asserts the simple observation that people will generally do what they are invited to do in the built environment. Throughout much of the twentieth century, our cities and towns had been inviting people to either drive their cars or stay at home; “interrupted lines of vision, large distances, high speeds, multistory placement and orientation away from people deter people from seeing and hearing others.”<sup>18</sup> It may not have been an intended outcome, but the result of this tendency has been to express a rather low opinion of human beings within our public realm.

One task before us, then, is to rethink the public realm of our cities and towns to invite pedestrians to use and enjoy these areas and thus recover some dignity for our species. Again, Gehl has a good read on what a human-inviting environment looks like: “unobstructed views, short distances, low

speeds, staying on the same level and orientation toward what is to be experienced.”<sup>19</sup>

## The Rise of Auto-Oriented Development

It is relatively easy now to raise questions about the wisdom and viability of automobile-oriented development. In retrospect, we can look at the impact that zoning and other policies had on traditional neighborhoods and wonder what in the world we were thinking. Why would we have deliberately destroyed the very things that made city and neighborhood life enjoyable? And why have we developed a built environment in which it is dangerous to navigate as a human being?

I don't think that our intention was to dismantle these things per se. Rather, we failed to consider the impact our decisions would have on these elements, and we were busy pursuing other ends.

### *Material Factors*

There were a few material factors that strongly shaped our thinking in the postwar years. We were flush with wealth, land was plentiful, and oil was cheap. In this context, it made sense to develop a way of life around the assumption of universal automobile use. These particular factors may help to explain why zoning and the decimation of walkable neighborhoods were characteristic of development patterns in the United States and not in other countries during the same time.

There are always new buildings and elements of infrastructure being built, and at the same time, there are lots of old buildings and infrastructure being preserved. The ratio between the former and the latter correlates roughly with the relative wealth available to each generation. In general, a generation with a lot of wealth is going to build more and preserve less. Beginning during the postwar years and extending into most of the latter half of the twentieth century, America was a very wealthy country, and Americans created a lot of new buildings and infrastructure during this time. If it was just a matter of wealth, the aesthetic tastes of postwar Americans would have had a disproportionate influence on the look of the landscape, but when wealth was combined with other key resources, the impact on building practices was unprecedented.

America is unquestionably a spacious country. In many countries it would be unthinkable for an ordinary citizen who wasn't a farmer to have a home on five acres of land. However, in the United States, it is typical to have entire residential areas where it is required that every house sit on five acres of land.

When land is plentiful, there is a premium on being able to develop land quickly and cheaply. The developer who can clear a couple hundred acres and build hundreds of houses at roughly the same time will be able to keep her or his per-house cost well below that of the builder who has to build one house at a time. By the same logic, a company that can get land cheaply on the edge of town and build a fifty-thousand-square-foot megastore will be able to keep prices on its goods significantly lower than its smaller-scale competition. Such economies of scale favored the kind of tract housing and big-box store that blossomed in the latter half of the twentieth century.

An abundance of wealth and land played a significant role in postwar development patterns, but probably the low price of oil had an even greater impact. Because oil was inexpensive, gas was cheap. This made it economically feasible and even reasonable to completely abandon the walkable neighborhood pattern in favor of a form of development that required that every adult drive to fully participate in society. This gave us the boldness to build a transportation infrastructure that focused almost exclusively on privately owned gas-powered vehicles, which gave consumers the confidence to buy a home that was anywhere from fifteen to sixty miles from the place that they worked as well as a car trip away from other necessary amenities for daily living.

### *Zoning*

Zoning in this country technically began in New York City in 1916, but by the end of the Second World War it had become the dominant mode of land-use regulation in just about every city in the United States. A watershed event for functional zoning, however, was a Supreme Court case argued in 1926 that ruled that cities did have rights to restrict land uses according to functional zones.

Prior to this decision, land use was regulated by municipalities, but it was done primarily through nuisance laws. If someone was planning to build something next door to your house that would have been dangerous, noisy, or smelly for your family, the city could have deemed that project incompatible with the residential character of the neighborhood and prohibited it.

The case we examine here came about when the town of Euclid (a suburb of Cleveland) passed a zoning law prohibiting commercial buildings and apartment buildings in a particular residential zone of the town. A local real estate company that owned land in the newly designated residential section had planned to develop that land for commercial purposes and felt that the creation of a residential zone made its land less valuable and therefore constituted an unfair intrusion on its land rights.

*Village of Euclid, Ohio, et al. v. Ambler Realty Co.* became a landmark case in land-use law. Once it established the precedent that municipalities could restrict private land uses into geographical zones, most cities pushed forward to adopt their own zoning laws.

*Euclid v. Ambler* cleared the way for a major shift in development patterns and, ultimately, the way most of us live. In addition to this legal precedent, however, there were other institutional factors that helped tip the scales in the direction of an automobile-oriented rather than a person-oriented built environment.

### *Lending Institutions and Infrastructure Bias*

The Federal Housing Administration is a governmental agency created to help Americans own their own homes. This program has been wildly successful in terms of encouraging home ownership; however, during the postwar era, it helped create an institutional culture that had a corrosive effect on the form of the traditional neighborhood. For a home to qualify for an FHA-supported loan, it needed to be new construction. From the perspective of minimizing risk, this was a sensible stipulation. However, the impact that this had on the housing market was that it diverted a huge number of potential homeowners away from older traditional neighborhoods into the outlying suburbs. The FHA has since made adjustments to these kinds of policies, but the impact of such a bias during decades of home building has left an indelible imprint on the landscape.

Another factor was the Federal Highway Act of 1956. This act was initiated by President Eisenhower with the express purpose of creating an interstate highway system that would greatly increase the convenience of traveling long distances via automobile. Such substantial federal investment in road infrastructure established a pattern for development that would persist for the rest of the twentieth century. Throughout most of the century, development decisions were made with the assumption of universal adult automobile ownership. This in turn meant that people could purchase houses farther and farther from their places of work and other destinations to which they required access.

## Two Models

### *From Suburb to Exurb*

As these material factors were encouraging more and more automobile use, new development templates emerged that cemented the automobile-oriented

lifestyle into our imagination. The first wave of suburban development was the streetcar suburbs popular in the second half of the nineteenth century. Streetcar suburbs were developments located outside of major cities along major streetcar lines. They were geographically proximate to the larger city and were set up so that residents could travel into the city for work and for cultural activities. These early suburbs consisted of relatively compact and walkable neighborhoods. The development was laid out on a grid plan, and the house lots were small.

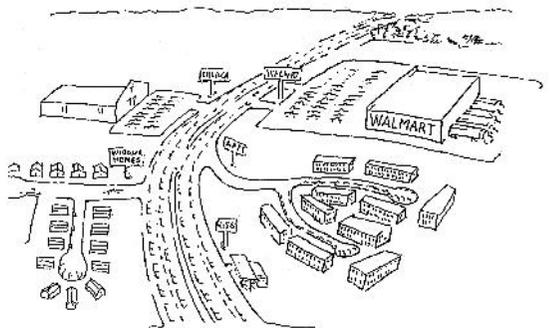
Over time, this original suburban pattern gave way to what has been called the automobile exurb. What is different about the automobile exurb is that there is no longer a centralized city to which the outlying suburbs must relate. Places for working, places for living, places for shopping, and places for cultural events are all located outside of any city center. And each of these things is strictly separated from the others according to function.

Another difference is that in the traditional suburb, the breadwinner might have to drive or take the train to work, but many of the other tasks of life could be done on foot. In the postwar exurban environment, one must drive everywhere. Besides the single-family house, one of the most characteristic sights in the automobile exurb is the strip mall.

The strip mall provides a clear picture of the lack of connectivity that exists in the exurban environment. In the first place, the strip mall is set back from the street (and perhaps the sidewalk) that constitutes the public realm. The goods and services of the stores in the strip mall are not directly visible to humans on foot but must be announced through the use of bold signs. Strip malls are disconnected not only from the street and sidewalk but typically from neighboring buildings. There is usually a fence or impervious landscaping that prevents movement from a strip mall to a neighboring business. While one might see a whole block of detached single-family homes in a suburb and an exurb, the strip mall is unique to the exurb.

It is important to understand the difference between the suburb and the exurb, because they may help point us to a workable solution for the future. Many people think that being critical of automobile-oriented development means to be opposed to the use of automobiles in contemporary

### THE AUTOMOBILE EXURB



life. But in fact the one doesn't follow from the other. The problem with automobile-oriented development represented by the exurb is that the car becomes the only viable transportation choice for navigating daily life. One needs to get into a car to go to work, church, the store, or a friend's house. The classic suburban environment is different in that those neighborhoods were set up to be navigated by foot, bicycle, public transit, or car. That is to say, people could choose to travel by car if they wanted to get to their destination more quickly or if they had a lot of stuff to transport. But if one didn't want to take a car (or if one didn't own a car), there would still be options for getting from point A to point B.

The important distinction here has to do with the wisdom of constructing our built environment first and foremost at a human scale. One can then make certain adjustments or concessions for automobiles, but not to the point of destroying the human scale. What is most important, then, is to understand how human-scaled neighborhoods work. One can find such neighborhoods in streetcar suburbs, in traditional downtowns, and in small towns. The next section tells the story of how the human-scaled neighborhood has been undergoing a renaissance in the late twentieth and early twenty-first centuries.

### *The Traditional Neighborhood*

Throughout the period of time when the exurban model was being developed, traditional neighborhoods continued to exist and functioned perfectly well in older parts of town. However, because of strict zoning laws, such traditional neighborhoods were no longer being built by developers. Near the end of the twentieth century, people finally began to question the wisdom of the exurban experiment that had dominated most of that century. These critics observed that the quality of life in traditional neighborhoods seemed to remain pretty high, while the exurbs seemed to become less pleasant places in which to live and work as they became more and more crowded and residents began to retreat into the safety of their private homes and yards.

This group of architects, planners, and developers who wanted to offer an alternative to exurban development began collaborating on projects in the 1980s, and in 1993 they formed the Congress of the New Urbanism. They laid out their critique of exurban development and presented a coherent alternative in a Charter of New Urbanism.

We advocate the restructuring of public policy and development practices to support the following principles: neighborhoods should be diverse in use and population; communities should be designed for the pedestrian and transit as

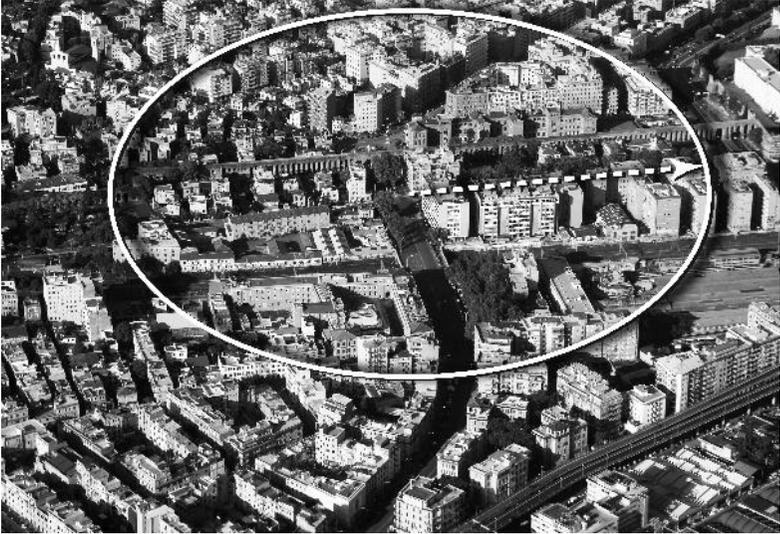
well as the car; cities and towns should be shaped by physically defined and universally accessible public spaces and community institutions; urban places should be framed by architecture and landscape design that celebrate local history, climate, ecology, and building practice.<sup>20</sup>

Over the past few decades, New Urbanism has become a powerful and well-known reform movement. Although the title for this movement is catchy, it is also a bit misleading, in that what this group is advocating is not exclusively urban and is not very new. New Urbanists advocate community-enhancing development at a variety of scales. By “urbanism” they tend to mean the shape of the public realm that is formed in between buildings. And this group uses a transect model to show what good urbanism looks like along a wide continuum from dense inner city all the way to rural settings.

Many of the ideas advocated by New Urbanists are taken from traditional neighborhood- and town-planning principles that have withstood the test of time. What is “new” about the movement is that building traditional neighborhoods has become a lot more difficult since the onset of postwar exurban development. Whereas things like a coffee shop on a corner of a residential neighborhood, alleys behind houses, and square blocks used to be common features of neighborhood design, all of these things would typically be forbidden by a contemporary zoning code. The newness of New Urbanism is not usually the ideas being proposed, but rather the hurdles one has to overcome to implement them.

One of the more helpful ideas that the New Urbanists have recovered from the dustbin of history has been the elements of a traditional neighborhood. In their book *Suburban Nation*, Duany, Plater-Zyberk, and Speck articulate six features:<sup>21</sup>

1. **The center.** There should be a clear center for activities that residents share in common (shopping, civic, entertainment). The center draws people in and creates connections. The term *sprawl* is an apt moniker for exurban development, because of its spreading, centerless character.
2. **The five-minute walk.** A resident should be able to access most of the needs of daily life within a five-minute walk. This parameter is usually defined as somewhere between one quarter and half a mile and is also called the pedestrian shed. What is so challenging about exurban development is how impossible it is to walk to any meaningful destinations. One can go on a walk for exercise or perhaps walk to a neighbor’s house, but walking to the store, hair salon, or coffee shop is not a realistic option.



Pedestrian Shed

3. **The street network.** There is a complex network of streets (usually some kind of a grid) that allows pedestrians and drivers to choose multiple routes to any destination. Exurban style development follows a cul-de-sac-to-arterial pattern, in which most streets terminate in a dead end and direct traffic toward high-volume feeder roads.
4. **Narrow, versatile streets.** Streets in a traditional neighborhood tend to be relatively narrow (one to two lanes of traffic in each direction), and the street includes amenities such as sidewalks, trees, benches, and café tables that support other uses of the street besides driving. Exurban streets tend to be built for the sole purpose of moving automobile traffic as quickly and conveniently as possible.
5. **Mixed use.** Within a five-minute walk in a traditional neighborhood, one is likely to find places for living, shopping, playing, working, worshipping, and enjoying culture. In addition, there are homes for people of a wide variety of socioeconomic status—large single-family homes, small single-family homes, townhouses, condominiums, and apartments. Exurban development is strictly segregated according to house price.
6. **Special sites for special buildings.** Traditional neighborhoods allow structures that are important to the collective identity of the citizenry to have prominent placement. In exurban development, the placement of individual buildings (so long as they meet zoning requirements) is a

function of the market. If you are willing to pay more, you can have a more prominent site.

## The Car as Idol

One of the primary barriers to faithfulness in the Bible is not unbelief or even hedonism, but rather idolatry. Idolatry involves placing something in the center of our existence that has no business being there. The path to idolatry is both predictable and surprisingly elusive. It begins with transferring the credit for our well-being from God to something else. When the Israelites had been delivered from slavery in Egypt by the powerful actions of God and were on their way to the promised land, they inexplicably decided to fashion a golden calf from the jewelry that God has procured for them and claimed that object as their savior.

He took the gold from them, formed it in a mold, and cast an image of a calf; and they said, “These are your gods, O Israel, who brought you up out of the land of Egypt!”<sup>22</sup>

Perhaps part of the dynamic here is that we don’t like feeling beholden to a God that we cannot control and would rather give credit to gods of our own making. The gods we make (we convince ourselves) are better, since they exist to serve us. And so we transfer our hope and ultimately our worship from the one true God to various idols.

One problem with idols is first and foremost that they distract us from our worship of the one true God. But the other problem is that rather than idols serving us, we end up serving them, and they continually demand more and more from us.

Bel bows down, Nebo stoops,  
their idols are on beasts and cattle;  
these things you carry are loaded  
as burdens on weary animals.  
They stoop, they bow down together;  
they cannot save the burden,  
but themselves go into captivity.<sup>23</sup>

It may be too much to say that the car has been an idol in contemporary American culture. There are some who do worship their cars, but many of us simply see them as a necessary feature of contemporary life.

However, we can see that the automobile has taken on some of the characteristics of an idol for our culture at this point in our history. The car was introduced as a kind of salvation from the burden of embodied existence. Rather than seeing embodied existence as an intentional aspect of the lives God has called us to live, and even as a wonderful gift, we bought into the lie that we needed to be relieved of the burden of our bodies. As the extravagant promises of automobile-oriented development have failed to materialize, rather than rejecting this model, our tendency has been to give over more and more of our resources and efforts to meeting the insatiable needs of our cars. This has led to a built environment that is both ugly to look at and inconvenient to navigate as embodied humans. Perhaps if we could remember that our bodies are good and, in fact, a gift from our Creator, we could begin to build settings that are more useful and enjoyable for embodied creatures.

### For Further Reading

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### Other Resources

Walkable and Livable Communities Institute <http://www.walkable.org/index.html>. This organization encourages communities to support pedestrian-friendly environments.