Piazzas and their Thresholds
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Abstract:
Few deny the extraordinary sense of placed-ness, or at-home-ness, one feels in great European piazzas. A quick glance at a few examples creates the impression that the materials and techniques required to construct such places are few in number and rather easy to emulate. A vast expanse of cobblestone, a near continuous enclosure of three- to five- story buildings, perhaps a fountain or sculpture, and a view of open sky. The proportions vary but fall within a rather narrow range. The formula is rather simple, and it has been followed in many places around the US.

Unfortunately, very few American piazzas create a sense of place or home even where the physical formula has been followed. There are two reasons for this. First, American piazzas are seldom surrounded by the mix of types and hours of usage that frame European examples. Jane Jacobs wrote the seminal analysis of this problem in The Death and Life of Great American Cities 56 years ago. As a result, this paper focuses on the second reason American piazzas fail: too little attention is paid to differences in physical context.

This second reason is a variant of the first. But where Jacobs focused on contextual programs and uses, this paper addresses the fundamental architectural notion of thresholds and how these frame experience. Specifically, it argues that the design of streets, gates and other transitional markers are more significant to the creation of sociable piazzas than quality or proportions of surfaces contained within.

Keywords:
Context, Experiential Design, Piazzas, Streets, Thresholds, Urban Design
The best way to appreciate urban spaces is being there. Short of that, the best way to understand urban spaces is through images. And not just any images, or my images, or just any park, or my favorite park, but via images of places you know and have visited; those you have loved and hated. Obviously, I cannot foresee what those places and views are. So, in order to begin, I ask you to play along with three quick mental exercises.

First, call to mind your favorite well-known urban space. In America, we call them city parks or town squares. In Italy, arguably the country that exceeds all others in the art of public space-making, they are called piazze. Regardless of the name or the place, if we could each print that image directly from our mind and pin it to the wall so that others could see it, most of us would recognize most of the images as urban spaces. We probably would believe that these are, in fact, great urban spaces. This, I suspect, would be true even if those spaces differed considerably from our own. Why that is the case has been much analyzed, written about, and discussed. If you are curious about the rules for making great urban spaces, I urge you to read Jane Jacobs, Jan Gehl, and Suzanne and Henry Lennard. Or attend one of any number of lectures at the Making Cities Livable conferences. For the sake of the information I wish to convey, however, I ask you to leave those images pinned up but mentally disregard them for the time being. Great urban spaces serve the following only by way of comparison.

Second, call to mind an urban space you have visited that is very much like the one you just imagined – one that is constructed of the same materials and has similar proportions and amenities; in other words, one that follows all the rules for making good public space – but, despite the physical similarities, left you feeling flat. And not just you. By the evident lack of use, this is a space that the inhabitants of that city do not appreciate. No one hangs out there. This example might not come as readily to mind as your favorite well-known urban space, seeing as it is not a place you’ve stored in your memory as a positive experience, but all of us have encountered such spaces. Why such seemingly well-designed parks or squares or piazzas fail to work is a slightly greater mystery than why some do. If we all printed these spaces from our minds and pinned them to the wall mixed with the successful ones, I suspect most of us would be unable to sort the successful from the unsuccessful by any criteria other than how many people are inhabiting the space. Why we would not be able to readily tell one from the other is significant – particularly given that many of you are responsible for providing good public space, either directly or indirectly. It is a far more interesting problem than enumerating the characteristics of successful spaces. So, unlike your favorite well-known space, I ask you to hold on to this image.

Third, call to mind an exterior space in a city – a space that you enjoy walking through or visiting during a lunch break to read a book or drink a cup of coffee – but is relatively unknown to the public, even though it is accessible to everyone. It is possible that this space wasn’t designed to be an urban space at all; in fact, it may be a purely residual or unintentional space, such as an alley. I cannot read minds but this example is probably in the city in which you live or at least one in which you spend considerable time. This place you are calling to mind now should not be a place that you could show to friends and expect them to immediately “like it” the way you do. It is a space that you have to spend time with to know and love. Perhaps you are the only person who appreciates it. The qualities of such spaces and the reasons we come to love them are so varied that it would be futile to try to list them all. To print these images and pin them up would serve no purpose. And yet, these lesser known, almost private, urban spaces – with all
their wild variations from the first two images I had you call to mind – offer insights into why the second image failed to live up to the first.

Obviously, this last statement requires some explaining.

One advantage to thinking of the problem of great urban spaces or piazzas through the third image is that this last example, regardless of what you pictured, demonstrates just how secondary many of the features of great spaces are. The ground surface of these quasi-private urban spaces may be cobblestone, but may just as easily be brick or grass or concrete. It could, in fact, be gravel or dirt. The surrounding walls might be three to five stories in height, as is often the case with European piazzas, but they are just as likely to be one-story shops or skyscrapers. The enclosure might be continuous in color and material or vary wildly in one or the other or both. In some directions, there may be no enclosure at all. Many of the spaces imagined were well-shaded, I suspect. A few, no doubt, bask in the sun (particularly in the minds of those of you from places where snow is measured in feet). In terms of amenities, it is possible that these hidden spaces have fountains and benches, bike racks and playground equipment, and the occasional forgotten statue, but it is unlikely. More importantly, none of these amenities prove essential.

This is not to suggest that none of these things matter. Obviously, materials, colors, textures, form and proportion, shade and sunlight, as well as benches and other amenities all matter. Carefully designed, each of these can enhance an otherwise benign space or make a good space better. But their carefully designed presence did not rescue the second image I asked you to call to mind from banality. Nor, I suspect, did their absence diminish or disqualify the third image as a great urban space.

What I have said thus far is hardly revelatory. Most of us know that there is no magic bullet, no perfect combination of materials and amenities that will always result in good urban space. In fact, this is so well known that most of us set this information aside and, if we are diligent and hardworking, busy ourselves with figuring out what combination we will test next (or, if we are not so inclined, we build the same park or square over and over again resigned to the fact that some will be loved and others avoided). The revelatory character of what I have said only surfaces when we don’t set the facts aside and instead ask difficult questions. What the third image, those quasi-private urban spaces, teaches us is the importance of very fundamental relationships. More fundamental than selecting street furniture or trees or building materials. More fundamental even than the space’s layout or shape. I am referring to the psychological and physiological foundations of spatial or architectural experience.

Yes, that sounds dull. But I ask your patience as I rehearse the fundamentals of experience: the progression from surface to space, spaces to barriers, from barriers to thresholds, and finally how thresholds remake spaces. Consider it Architecture 101. With this information in hand, we can return to the question of why the second set of images fail to live up to first with new insights.

**Surface to space**

Naïvely, many architects talk about space as if it is the fundamental unit of architecture. But, if the question before us is how we come to “see” or “know” what we see or know, we have to start with the essential elements – in other words, with the most basic things that actually exist. In order to perceive a space, we must first perceive at least one surface which forms the datum
against or from which space emerges (see figure 1a). The orientation of that surface matters little. There are great floors or grounds, walls, and even ceilings throughout history that have served this purpose to extraordinary ends. But for our purposes the greatness of the surface as well as the resulting space is irrelevant.

What is of prime importance here is recognition that “space” – that warm and fuzzy term popular with architects, landscape architects, planners, and interior designers as well as writers for HGTV – isn’t real. Space is a user illusion; an after-image; at best, an interesting and useful fiction. It is a projection of the perceiver not a thing perceived (see figure 1b). And its “character” is derived from an amalgam of the perceiver’s understanding of the background surfaces, his or her predilections, and the context as he or she has understood them that day.

Spaces to barriers

While spaces are fictional entities, once we recognize them they become as operative or meaningful as any other fictional characters in our lives. Public spaces, private spaces, religious spaces, and performance spaces are as real and as recognizable as Captain Kirk or Wonder Woman. They have a host of generic names: street or sidewalk, park or square, bedroom or
kitchen, church or mosque or temple, movie theater or opera house, etc. In addition, we often give them proper names: Central Park or Piazza Navona, for instance. This ability to identify spaces transforms their bounding surfaces into more than mere supports or backdrops. Once two spaces gain independence by becoming recognizable – here a street, there a park; or, more generically, here space $A$, there space $B$ – the surface or surfaces separating them become barriers (see figure 2a). This transformation of surfaces into barriers occurs, to some extent, regardless of the orientation or completeness of that surface (see figure 2b).
The more identifiable the two spaces, the less material is needed to affect a separation. In other words, as the degree of difference between spaces $A$ and $B$ increases, the area of physical surface necessary to create the experience of a barrier decreases (see figure 2c). In places where extreme differences exist between adjacent spaces, a psychological barrier can emerge even in the absence of a physical barrier. The rim of the Grand Canyon is a prominent example of this.

![Figure 2c](image)

**Spaces in barriers**

Setting aside extreme examples, such as the Grand Canyon, I ask that you look again at the everyday situations represented in figures 2b and 2c. These partial or incomplete barriers show up in the real world as fences and doorways (figure 2b), countertops or gates, and columns or lampposts (figure 2c). Where a surface is understood to constitute a barrier because it denotes a separation between two distinct spaces, and where that barrier is broken or includes spaces that allow actual or visual communication between the two spaces, something special happens. The zone of space, or spaces, that interrupts the barrier is transformed into a threshold in experience (see figure 3a). Thresholds can be thick or thin, subtle or elaborate, physically impassible or generous enough for enormous crowds. Most important to making public space, thresholds impact people’s perception and they can be designed. In other words, like the prologue to a story,
Thresholds change our understanding of everything that comes after and they are within our purview to author.

**Thresholds define space**

Thresholds alter our perception of space. Stated the other way around, we never see space $B$ simply or purely as space. We see space $B$ in contrast to space $A$ through the filter of the threshold, or thresholds, between the two spaces. Simplified to these diagrams and descriptions, such an assertion of filtered or layered perception is relatively unproblematic. But, some of you may ask, how is this useful to the complexities of the real world? This implicit question contains two others: why should we extrapolate from such simplified fundamental conditions? And, even if we understand why such fundamentals matter, how do we make use of these ideas to create better urban spaces?

I’ll take the former question first and answer it in two ways. First, call to mind again your third image, that quasi-private urban space that you appreciate more than other people seem to and which lacks most of the features that we typically associate with great spaces. As I’ve said before, I am not a mind reader. Perhaps some of you are picturing spaces that are extraordinary in their own right. But, I suspect, many of you are lost as to what makes your space so compelling. My guess is that part of its appeal is its difference from the dominant conditions of the city’s streets and other public spaces – in other words, its contrast to space $A$. And, in part,
some of its appeal is attributable to the space you traverse to pass from those typical conditions, the street or space $A$, to get to your area of refuge, or space $B$ – in other words, the quality of the threshold through which you enter is significant in itself.

The other way to understand the value of fundamental conditions returns us to the beginning of this paper. Recall the first two images I asked you to pin to your mental wall: a great, well-known urban space and a physically similar but ineffective or non-affecting space. For me, perhaps because I am an architect, the examples are the Parthenon in Athens, Greece, (figure 4a) and the copy of the Parthenon in Nashville, Tennessee (figure 4b). Physically very similar; experientially, worlds apart.

Whatever your images and wherever they were taken, they are essentially variations on a theme – a space $B1$ and a space $B2$ – that can be plugged into the preceding diagrams in the location of space $B$. As with my example of the two Parthenons, because the first two spaces you visualized are so similar, few of their experiential differences can be explained by analyzing the spaces themselves. If you broaden your analysis to include the contrasting spaces – space $A1$ and $A2$ – as well as the thresholds leading to your great urban space and its similar but ineffectual kin, however, I suspect you will find a host of differences (see figure 4c). In short, the spaces and surfaces and figural elements leading to urban spaces are essential to the perception of those parks and squares and piazzas. Even shorter, context matters.
Using thresholds to create piazzas

I think I’ve answered the first question regarding why we should extrapolate from simplified fundamental conditions and, by doing so, I hope some of the mystery that surrounded the difference in affection you feel for your first and your second mental image has vanished. The context around public spaces and particularly the thresholding elements that one must pass through can greatly modify, to enhance or detract from, the experience of the destination space. The practical ramifications of this are fairly clear: it is useless to focus a project’s design efforts (and more importantly, its design budget) into the confines of a designated space – be it park, square or piazza – without giving equal consideration (and perhaps equal funding) to its context and entry sequence. Without such investment of time and financial resources, both are likely to be wasted. But the comments so far do not address the question of how we make use of these ideas to create better urban spaces, and fall far short of the ambition with which I began – namely, to demonstrate that the design of streets, gates and other transitional markers are more
significant to the creation of sociable piazzas than quality or proportions of surfaces contained within.

It’s a bit of a leap from arguing that “context matters” to suggesting that “context matters more than the urban space it surrounds.” Cities all over the world have invested extraordinary sums of money to develop or redevelop underutilized areas as new civic spaces. Parks and promenades, picnic areas and amphitheaters. These are the markers of a healthy concern for community and many of these have been wildly successful. The High Line in New York, by Diller Scofidio + Renfro and James Corner of Field Operations, is the posterchild for such community-oriented interventions (see figure 5a). And, at first blush, the High Line seems to prove that context and thresholds are largely irrelevant as it successfully snakes through nearly one and a half miles of highly varied – good and bad, both beautiful and ugly – Manhattan context.

![figure 5a. Image: Field Operations](image)

The mental exercises with which we began reveal the flaw in such an interpretation. Let’s face it, if you had selected the High Line as your favorite well-known urban space and pinned it to your mental wall, you would have had little trouble calling to mind dozens of less effective, or less affective, walking trails of similar materials and vegetation. Walking trails, bike trails, nature trails are ubiquitous urban interventions and very often dull. The power of the High Line lies almost entirely in its context, both the backdrop of hundreds of buildings and the powerful grid of Manhattan streets, and in the low continuous rails on either side which act as barriers and transform the open space above into an extraordinary three-mile-long threshold.
I cannot prove that context matters more than the urban space it surrounds. There are always exceptions. But I think it is safe to say that context almost always matters more than the urban space it surrounds.

Given this, what is within our power to control? With the exception of very large, single-developer projects, direct control of the design and construction of the myriad buildings necessary to frame the typical piazza is out of reach. We can take the long view and opt for form based codes to make or remake a neighborhood. Even under the best of circumstances, however, the eventual buildout of a cohesive urban fabric via form based codes could take decades. And during the intervening years of buildout, under less than ideal circumstances, changes in priorities or economic crises could lead to modifications to or even abandonment of those codes and thus result in an urban fabric at least as fragmented and disjointed as development left to market forces. And all of this assumes that there are either many undeveloped lots or many buildings in need of replacement or serious renovation. If most of the surrounding area is already developed and those buildings’ aesthetically banal (or worse) but not in need of replacement, then there is little that codes and other civic initiatives can do to improve the context.

The place where city officials can act – that is, where they have both the jurisdiction and financial wherewithal to make immediate impacts on the quality of piazzas and parks and squares – is in the design of streets, gates and other transitional markers within one block in every direction of those urban spaces. The combined effect of driving surfaces, sidewalk patterns, lampposts, and signage that are cohesive but not ordinary serve to transform the mundane surfaces and figures at the urban space’s perimeter into a threshold separating the city-as-it-is (space A) from its piazza (space B).

In conclusion, I ask you to indulge me in a fourth and final mental exercise. Call to mind an existing park or square in your own city that is, by all measures, okay. Not great. Not bad. Just adequate. See it as it is. Now, imagine a new public domain at its edges, where it meets the community. Picture sidewalks, signage, lights, etc., unique to this location and different from the remainder of the city. Refine this mental image until it is ready to print. It is my hope that you will take that image with you when you return to your city, post it on the wall of your office, and make that your vision for a better built environment.