



## Cities in Imagination

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**R**esilience is the word of the decade, as sustainability was in previous decades. No doubt, our view of the kind and quality of cities we as societies want to build will continue to evolve and inspire new descriptive goals. Surely we have not lost our desire for *sustainable* cities, with ecological footprints we can afford, even though our focus has been on resilience after what seems like a relentless drumbeat of natural disasters around the world. The search for terms raises questions: What are the cities we want to create in the future? What is their *nature*? What are the cities in which we want to live? Certainly these cities are sustainable, since we want our cities to balance consumption and resources so that they can last into the future. Certainly they are resilient, so our cities are still in existence after the next 100-year storm, now due every few years. And yet, as we build this vision we know that cities must also be *livable*. Indeed, we must view livability as a third indispensable leg supporting the cities of our dreams: resilient + sustainable + livable.

But we have to hope that *justice* hasn't gone out of style. Because while resilience is the word of the decade, we've struggled with just cities for a much longer time. Largely we have come up short.

So this imagining needs a fourth leg. These are the cities of our dreams: resilient, sustainable, livable, *just*.

Let's imagine.

We can imagine sustainable cities — ones that can persist in energy, food and ecological balance — that are nevertheless brittle, socially or infrastructurally, to shocks and major perturbations. That is, they are not resilient. Such cities are not truly sustainable, of course — because they will be crushed by major perturbations they're not in it for the long term — but their lack of sustainability is for reasons beyond the usual definitions of energy and food systems. We can imagine resilient cities — especially cities that are made so through extraordinary and expensive works of gray infrastructure — that are not sustainable from the point of view of energy consumption, food security, economy or other resources.

We can imagine livable cities that are neither resilient nor sustainable.

And it is easy to imagine resilient and sustainable cities that are not livable — and so are not *truly* sustainable.

Easiest of all is to imagine cities of injustice, because they exist all around us. The nature of their injustice may be difficult to solve or even comprehend within our systems of economy and government, but it's easy to see.

The point is that we must conceive and build our urban areas based on a vision of the future that creates cities

that are resilient + sustainable + livable + just. No *one* of these is sufficient for our dream cities of the future. Yet we often pursue these four elements on independent tracks, with separate government agencies pursuing one or another and NGOs and community organizations devoted to a single track. Of course, many cities around the world don't really have the resources to make progress in *any* of the four.

## Metaphor

A key problem for us, in all of these concepts, is that they exist so beautifully in the realm of metaphor. They *work* in metaphor. Everyone can agree that “resilience” is a good thing. Who wouldn't want that? Raise your hand.

I thought so.

But an operational definition is really about difficult choices. Bringing a word like resilience — or sustainability, or livability, or justice — down from the realm of metaphor is hard because it quickly becomes clear that it is about nothing else but difficult choices. Choices that often produce winners and losers. We have to be *specific* about the choices involved in resilience or sustainability or livability or justice, and the trade-offs they imply. As societies we have to be explicit about these trade-offs — about their consequences. I think often we don't have open and fair conversations about these issues because we don't *want* to know about these trade-offs, maybe not so much because we care about the losers but because the winners of the world have so much to lose. Think developers who consume green space — often with the government's blessing — without concern for sustainability issues or accommodations for the less wealthy. Or the growth- and consumption-obsessed nations driving the climate change that may destroy communities around the world, communities that have little responsibility for that climate change.

## Green

Most people in my circles make strong claims about the critical value of nature and ecosystems. Nature is thought to provide key benefits for resilience, such as technical aid to storm water management. Nature — and the way we use it — is the key foundation to sustainability. Nature cleans the air and water. It provides food. Nature provides beauty and serenity for people. This is all to say that nature and “green” provide immense and diverse benefits to societies, cities and their people.

Do we believe these benefits are real? Are true? I do. If we believe in these benefits, then who should have access to them? Everyone. Does everyone have access to these benefits? No. That's as true in Cape Town as it is in Los Angeles or Manchester.

If the benefits of green are true — in the broad sense of nature and in our approach to the built environment — then it is clear that issues of green and nature are also questions of justice, and that there is a key and essential role for nature to play in the notion of just cities.

The U.S. Environmental Protection Agency has long had a definition of environmental justice. It intends to specifically address the fact that environmental “bads” — dumps, incinerators, legacies of industrial pollution and so on — are disproportionately placed in poorer neighborhoods. That's a fact that results from a host of reasons: inadvertent, economic, political and sometimes more cynical. Here is the EPA's definition. Environmental justice will be achieved:

*... when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn and work.*

Many have written about the limits of this definition, although to me it is pretty strong and progressive, especially the part about decision-making. But it lacks the idea that everyone also deserves equal and fair access to environmental “goods” and the services they provide: healthy food, resilience to storms, clean air and water, parks, beauty. So an improvement to the definition, a more complete manifesto of belief, would be that environmental justice is achieved:

*... when everyone enjoys the same degree of strong protection from environmental and health hazards, the same high level of access to all the various services and benefits that nature can provide, and equal access to the decision-making processes for both to have a healthy environment in which to live, learn, work and prosper.*

Although some of the world's cities are better than others at fulfilling this dream, probably none fully achieves it, although more embrace the idea of it. Most don't even come close.

For example, there is a crisis of open space in many of the world's cities. My city, New York, offers about 4 square meters of open space per capita in the form of parks and plazas. Although the distribution of this open space is not entirely equitable (and some of the parks in poorer neighborhoods are of lesser quality), New York is to be commended for an explicit PlaNYC (New York's long-term sustainability plan) goal that says every New Yorker should live within a 10-minute walk of a park. We're about 85 percent of the way to achieving this goal. This is the kind of specificity that can take green's contribution to livability down from the level of metaphor and into on-the-ground evaluation and action.

Other cities could learn from New York's example. *The Washington Post* reported that in Washington, D.C., there is a strong correlation between tree canopy and average income — the richer people get the benefit of trees. In Los Angeles, areas dominated by Latinos or African-Americans have dramatically lower access to parks (as measured by park acres per 1,000 children) than areas dominated by whites. Countywide, only 36 percent of Los Angelenos have close access to a park.

These are patterns the world over: When there are open spaces and ecosystem services at all, they tend to be for the benefit of richer or more connected people. This has to change in any city we would call just.

## Values

*It is as difficult to take in all the glory of a dandelion, as it is to take in a mountain, or a thunderstorm.*

Charles Burchfield (1893–1967) is legendary for his watercolor landscapes, painted near his Buffalo, New York, home. He was also a great journalist and over his lifetime wrote over 10,000 pages in various handmade volumes. It was there, on May 5, 1963, that he wrote the quote above.

And so they *are* difficult to take in, both for their beauty and for their complexity. How can you describe and assess them? Convey them to one who hasn't seen? You finally stumble, awestruck, into saying that they are "beautiful," or "majestic," or just "amazing." But all of us — as scientists, decision-makers, participating citizens — typically have to comprehend, describe and quantify such entities and then communicate the results in ways that aren't hopelessly obscure — that are somehow specific and not just metaphorical. That is, we need to communicate a very complicated thing in a simple, essential and, above all, useful way.



We need to communicate what we value and build our cities accordingly.

Words like improvisation and imagination and intuition can sound awkward in the context of city-building and policy. Yet these are the very abilities that we require to be able to see past and beyond the details — this object is here, that process is there — to create and understand how a vast and majestic thing works and how it might change.

Perspective is another important word — a sense of what you value in the vision you are creating. The dandelion seeds are close up in Burchfield's picture. He values them. The sky is there too. You need to see the patterns and perspective and not only the details — the beating of the heart and not just the heart's location in the chest.

How do you "take in" a complicated multidimensional thing like a mountain? Or a park? Or a community garden? Or a city? Or justice? It starts with an act of imagination.

It is this act that requires of us that we imagine, in specific terms, what the just city would look like. I think it would look something like the modified EPA definition I presented above. We already know what this just city doesn't look like. You probably just have to drive around your own city. (My apologies if your city has solved this. Shout your solution from all the rooftops and soapboxes. The world needs to know.)

We need the imagination to dream about what this just city looks like, — the nature of it, if you will. And then we need the courage to make it happen on the ground, by creating actual urban plans that address justice explicitly, that put justice into literal practice, in law and regulation and real action — the imagining of, say, the EPA definition, in detail, in all cities around the world.

To say this requires a sense of hope. Given the distance we have to travel to achieve just cities, in greenness or most any other sense, we have to hope.

A closing idea from Buzz Holling:

*One key [to resilience] is maybe best captured by the word "hope."*