## Escaping THE GRID

A STRANGE, TWISTED TALE OF SPACE

by Chris Moffett

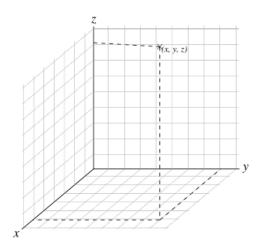
What is a grid? On the one hand, we seem to know them intimately. We have no problem visualizing a grid, or finding countless examples of grids in our modern life. On the other hand, we are so immersed in grids that it can be difficult to recognize them or how they work. They are the quintessential background. Grids are such a deep part of our cultural heritage that it is difficult—even if we want to—to see how they shape our experience. To use a pop culture reference, this is why the movie *The Matrix* begins with our hero living an everyday life, immersed in his life of boxes and cubicles, merely haunted by the question, only whisperable, "what is the Matrix?" It is both a given, found everywhere, and a mystery that eludes us.

As someone once said: if you don't know what you are doing, you can't do what you want. But this presents a real paradox, because it is precisely because we are doing something that we don't "know it." Isn't, for example, one sign of skill a kind of automatic instinctiveness. Or as they say these days: flow.

If we are so busy using grids to understand our reality, how can we recognize how deeply they shape not only what we are doing, but maybe even what we want itself?

One answer that might sound familiar is to "go with the flow." Maybe by going along with the grid, aligning ourselves to it for a moment, we can begin to tease out different variations and alternatives. So let's see if we can follow the grid a little.

A good place to start may be with poor Descartes, often made to shoulder the full blame for our frustrating duality, our feeling of being a bit out of touch with ourselves. And of course, Descartes is also the father of the Cartesian grid, the abstract framework for space itself, an endless series of cubes. Greatly facilitating Newtonian physics, you may recognize it from Algebra class.



Or maybe you recognize it from the classroom itself with its distribution of chairs, or even the architecture of the school building.

We should pause to reflect how much the grid facilitates our collective organization, as well as creating a foundation for work across disciplines. Descartes is of course famous for writing the body out of the picture, with his dualism. But in fact, few paid the body closer attention. He was constantly trying to work out the geometry of vision, the workings of the nervous system, the hydraulics of blood, breath, and movement. It was this insistence

on self-guided, cross-disciplinary observation that in many ways moved away from the formal hair-splitting abstractions of the scholastics.

And it is in Descartes' multi-disciplinary effort to place the individual at the heart of the learning process again, that we may find a clue to the origins of the abstract grid.

In fact, Descartes was driven to solipsistic study out of practicality. He simply lacked the political power to see through his vision writ large, and so he turned inward to examine and reshape himself. But his true dream was urban planning. His intellectual project is sort of a miniature of this larger dream for a well ordered city. The old cities—accumulating haphazardly, seemingly without order, and dangerously disorganized—could not, like the rickety scholastic edifice itself, be worked with. The only solution was to raze the city to the ground and start fresh. Say, on a nice, orderly grid.

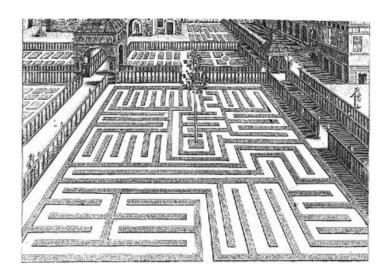
Interestingly enough, this was not a strictly modern solution. Indeed any (misguided) search for the origins of the grid would take us back to the "dawn of civilization," which tends to be code for the emergence of cities. Descartes' dream of orderly grids is part of a long legacy of urban planning. The first orthogonal city layouts seem to appear as a stark contrast to just the sort of "messy" urban accumulation that plagued Descartes.

Take for example the port city of Athens, the Piraeus. The prototypical "inner city" full of chaos, commerce, and "foreigners," the labyrinthine Piraeus of ancient times was eventually razed and rebuilt on a proper grid. (Before returning to "chaos" as vibrant, thriving places tend to do, despite the planner's objections.)

At first glance the grid and the labyrinth seem opposed. But as I will argue elsewhere in more depth, the grid is more properly understood as an organized labyrinth. The inner city—like the original mythic labyrinth under the city of Knossos in Crete, built by Daedalus to hold the Minotaur—was full of dead ends and false

steps. "Hell," in other words, is modeled on the fear of getting lost in the wrong part of town.

The grid, however, is not the opposite of this hellish labyrinth as much as its codification. The ritual stories of down-going and sacrifice—to ensure the well being of the city—involved a retelling and dancing out of these journeys into the underworld. The dance, in its repetition becomes ordered and sure-footed. The mysterious path becomes repeatable. This is the allure of the geometrical precision, often remarkably gridded, of the later Renaissance garden labyrinths of the upper-class: one gets to play at getting lost, thus reenacting the return to one's proper place of noble height.



But wait, it gets even more interesting. Just as the first labyrinth is "cracked" by following Ariadne's thread, allowing the hero to retrace his steps, the first city grids may owe more to thin threads than to solid blocks. (Otherwise we are left hanging: cities are gridded because grids are orderly; but why, of all the possible orders, are we left with a grid? Why the reign of the right angle?) As Indra Kagis McEwen argues, the city emerges out of cloth. It is in weaving on looms, found in every proper Greek home, that the city and the grid find their model. Working the warp and weft of the loom, is what holds the tapestry of society together. Ariadne's thread brings order to the

<sup>1</sup> McEwen, Indra Kagis. *Socrates' Ancestor: An Essay on Architectural Beginnings*. Cambridge, Mass.: MIT Press, 1993.

labyrinth.

It is worth noting that both the dance as a ritual journey and weaving as a ritual clothing of society, are based in movement. That is, we do not so much move in space, as create our sense of space by skilled movement. In "going with" the grid, we have discovered underneath its abstraction a hidden dynamism.

This tale is not without pitfalls, however. And just as the ritual down-going of the city involved sacrifice, the body is often cut up in the process. Descartes' observations of the body took place with cadavers in much the same way that the architectural parts of early Greece shrines are named after the body parts that are separated in sacrifice. (More on the relationship between architecture and the body at another time.) The point is that the grid involves a kind of sacrifice, at the very least a sacrifice of the actual journey for its predictable retelling. That is, in the name of sure-footedness, the complexities of the situation are unfortunately sacrificed.

This should hint at some of the difficulty and ambiguity in the apparently simple task of "escaping the grid," even (or especially) if you think you have already left it behind. The grid, in fact, already stands for this escape, the ritualized return from the underworld. How do we escape the drama of escape itself? It's not so simple.

Take for example the admirable book, *The Brain's Sense of Movement*, by Alain Berthoz.<sup>2</sup> Finishing his argument for the neurological centrality of movement, he seemingly abrubtly turns to a critique of the grid, or as he puts it, a "diatribe." In a chapter provocatively titled "Architects Have Forgotten the Pleasure of Movement," he writes:

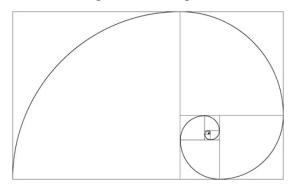
I realized [the shock of the grid] the day a young architect told me that she had to construct the grid for her project. This rectangular network is a yoke on the imagination. Of course, had it not been for Thales of Miletus, who invented the grid [sic], there would be no modern cities. But this is not the point...

He goes on to state the point directly to the grid itself:

You express the triumph of the most ordinary, lazy, petty geometric mindset over the sense of finesse, which might save me from despair.

Surrounded everywhere by the grid that threatens to engulf his mind and mood, he is nevertheless confident of an alternative, an escape route. And yet, the odd thing about this chapter is that Berthoz himself seems to have forgotten movement. Or rather, he has reduced it to an almost abstract, aesthetic dimension, treating architecture itself like a kind of adornment. Architecture is, it seems, meant to "move us"—that is, to give us a sense of movement, a spectacular illusion.

One could say Berthoz has just wandered out of his area of expertise in this brief foray into architecture. But it is perhaps more accurate to say that this difficulty cleaves to our conception of movement itself. His daring foray only highlights the extent of the difficulty. It is not by insisting on movement, however complex, that we escape the grid. It is not even by insisting on the spiraling nature of movement or on the beauty of baroque architecture. The Greeks knew well enough how to form a beautiful spiral out of nothing but rectangles.



<sup>2</sup> Berthoz, A. *The Brain's Sense of Movement, Perspectives in Cognitive Neuroscience*. Cambridge, Mass.: Harvard University Press, 2000.

Even Calculus, the math of curved space, in it's Newtonian absolute dimensions, is built right on top of the Cartesian grid.

So where do this leave us movers? It leaves us with a task: to unravel Ariadna's thread, retracing our steps without getting fooled by easy oppositions. What are the ways in which we restrict our effectiveness as teachers and movers by abstracting from the lived experience of movement? How can we inhabit the space of movement more fully?

As convoluted as the labyrinth may be in theory, at a practical level experiencing another option can be very simple and powerful. By both going with and constraining the use of the grid—in the myriad ways in which it shows up in our language, experience, and movement—we may discover, as the saying goes, "what we're doing."

