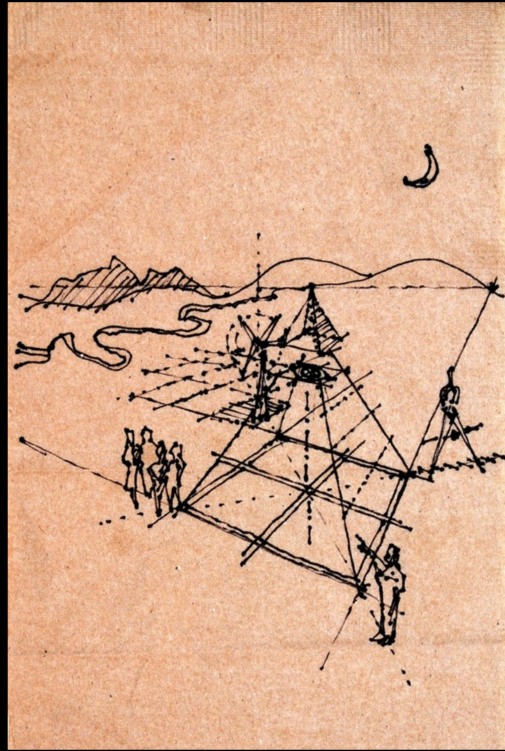


exploring **NEW TERRAINS**

THE NEXT DESIGN SCHOOL



Mark DeKay

EXPLORING NEW TERRAINS The Next Design School

Prof. Mark DeKay, RA
University of Tennessee School of Architecture

My topic today is “Exploring New Terrains, the Next Design School.” Let’s look together at what that means.

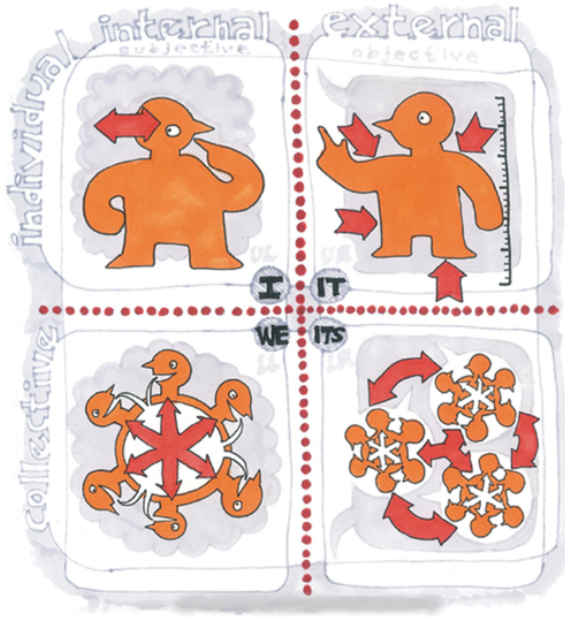
Organizations evolve and develop or they wither and die. Design schools are organizations that each of you help lead into their future. By the “Next Design School” I mean *both* the next level of development for your particular schools *and*, just maybe, the next major viable paradigm for design education—not just here in Africa, but as a model. It’s like being an explorer and there’s no map yet. Therefore, I’m casting out a big audacious intention.

What's next? What could the next design school embody? We've had 350 years of education influenced by the mostly pre-modern Beaux Arts, a hundred years of the modern Bauhaus influence, and thirty-five years of post-modernism in design education, with both light and dark sides. Design education's future is calling. What is it? I don't know exactly, *but* I believe that I am beginning to sense some of it. I want to present some hypotheses that we can explore together.

Where no design school has gone before. I will show you propositions in four different knowledge domains. This is one of the frameworks used in my book *Integral Sustainable Design: transformative perspectives* [1]. It is a framework that I like to use to study any issue because it helps me touch all the bases. The cartoon in Figure 1 helps to explain these four perspectives, which are simply the inside and the outside of the individual and the collective [2, 3].

There are two primary distinctions yielding the four perspectives. Everything on the right side is objective. You can see it; it has form and location. Everything on the left side is subjective. You cannot see it at all. If I want to know your experiences, I have to ask you. The upper part is individual, the lower part, collective, or singular and plural if you prefer.

- The Upper Right quadrant I call the *Terrain of Behaviors*. It is objective and is defined by what we can measure and weigh in the empirical world. In design schools, it is the perspective of engineering and building science.
- The Lower Right quadrant is the *Terrain of Systems*, which is inter-objective, and can be urban systems, ecological systems, or social systems. In design, this is both the study of contexts and of spatial organizations, along with the complex processes that interact with space.
- The Upper Left perspective is the *Terrain of Experiences*, that is, the subjective interiors of individual humans, with their feelings and intentions. In design this is the domain of aesthetics, phenomenology, and the designer's intentions.
- In the Lower Left quadrant, we find the *Terrain of Cultures*, an inter-subjective perspective, in which we search for meaning. In design this is most often the perspective of history, theory and the narrative explaining of ideas. It is the domain of interpretations.

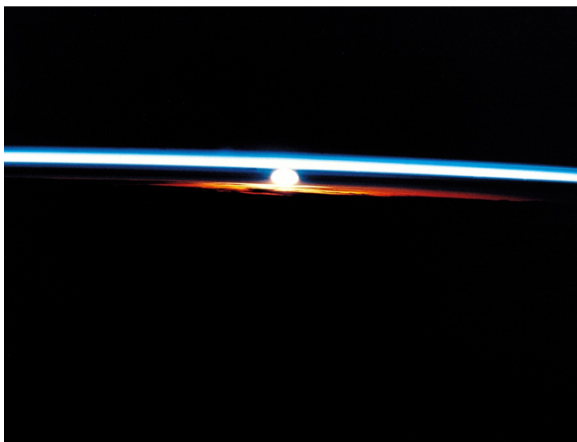


[Figure 1. The four quadrants]

Exploring the Terrain of Behaviors.

Let's begin with exploring the Terrain of Behaviors. This is the perspective of how things work. It is where designers shape form to maximize performance. From the perspective one takes in each terrain, I will identify a major challenge. In this terrain, I believe that:

The Next School will explore solving the climate crisis by design.



[Figure 2. Sunrise from space]

The image in Figure 2 is shot from the orbiting International Space Station and catches the sunrise across the thin film of our atmosphere over the even thinner green film of life on the surface [4]. It gives us the perspective that the atmosphere we usually think of as immense is actually quite a fragile thing.

Climate change, I propose, is *the* defining performance issue of our time. In a recent *Design Intelligence* magazine survey, 73% of design college deans in the US say that climate change is the most pressing issue facing the profession.

It is happening. The energy trapped by man-made global warming pollution is now “equivalent to exploding 400,000 Hiroshima atomic bombs per day, 365 days per year,” according to James Hanson, former Director of NASA’s Goddard Institute for Space Studies. It is a big planet, but that’s a lot of heat! Fourteen of fifteen hottest years occurred in the last 16 years. 2015 was the hottest ever, and 2016 is predicted to be hotter still.



[Figure 3. Receding glacier in Glacier National Park]

All this heat is having a huge effect on the things we all love. The climate crisis is also happening in the USA. The US Geological Survey’s Repeat Photography Project has dozens of photos just like Figure 3 where they reproduce historic shots and compare the glaciers in Glacier National Park to today [5]. The large boulder was used by scientists as a baseline to measure the retreat of Grinnell Glacier’s terminus. The glacier’s terminus is no longer visible from this point. A glacier is defined as at least 25 acres (about 10 hectares). In 1850, an estimated 150 glaciers were present in the park, but now less than 25 exist, that’s 83% gone!



[Figure 4. Nearly dry well, Gokwe, Zimbabwe, 2015]

Figure 4 shows a dry well in Zimbabwe last year, but this is the case across much of the African continent, especially southern Africa [6]. I understand that the worst regional drought in nearly a decade has caused crop failures and affected harvests in many countries and is particularly severe in Zimbabwe. In 2010, the Gamka Dam in South Africa dried up for the first time in history. I read recently that you may be in the midst of the worst drought in history.

But there is good news, too. The US and many other countries have been moving very powerfully towards renewables. Of all the energy production expansion last year, two-thirds were solar and wind, almost nothing from coal, .01 percent. Coal is *dead* in the US as a source of electricity generation. That's good news for the climate.

Educational opportunity. Although buildings are a huge cause of climate change because of all the fossil fuels they use, design education has been slow to respond to the climate crisis. The 2010 Imperative was an educational initiative in the US from the "Architecture 2030" organization in 2006. It called for three commitments:

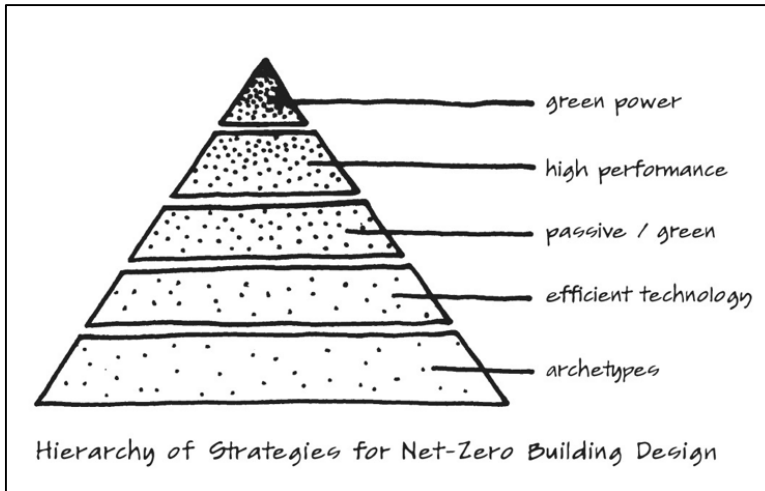
- All design studios would require *reducing or eliminating the need for fossil fuel*.
- Schools would achieve *ecological literacy* across *all* aspects of the curriculum.
- The design school campus would be renovated to achieve a *carbon-neutral footprint* as a working example for students.

2010 has come and gone. Ten years ago, climate change seemed far off to most of us. A few schools signed on, but they were all too timid, including my school. The effort failed. Unlike the profession, the academy is still debating the problem—or worse, ignoring it.

I do not know of a school that has truly claimed this territory.

Hierarchy of Strategies. How I think we get to a school like the one envisioned in the 2010 Imperative is both developmental in education *and* hierarchical in a design process. This graphic in Figure 5 is from the newest edition of my book, *Sun, Wind & Light*:

architectural design strategies [7]. It suggests that we can solve technical design problems at the lowest levels first.



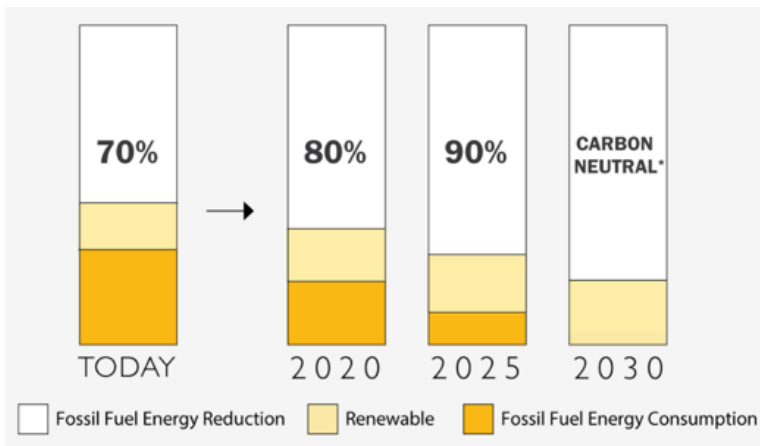
[Figure 5. Hierarchy of strategies for net-zero building design]

1. *The Level of Archetypes* is the most fundamental and includes traditional and historical wisdom about design. I call this the level of “embedded practices,” because it is knowledge built into the cultures of various places about how to build to fit nature and society. Remember we are talking about the domain of technology here, but that includes local materials, construction, and formal space-making solutions to climate.
2. *The Level of Efficiency* is the level of modern “building science.” Ideally, it builds on the knowledge of traditional archetypes, by using what works, but transcends it by adding modern perspectives on energy flows, access to tools and data, structural efficiency, and so on.
3. *The Level of Passive Design* transcends the linear thought of classical building science by making buildings that fit the rhythms of nature, using the sun for heat, the wind and earth for cooling, and the sky for lighting. I refer to this level as designing for “cyclic analogues.” It is post-modern technical thought, if you will. However, to make use of the weak and distributed forces of nature, one first has to have an appropriate and very efficient building, which is handled in the first two levels.
4. *The Level of High-Performance* integrates active and passive systems in smart buildings, whether controlled manually or by automation. This allows for responsive structures that adapt to changing conditions. What I am saying is that it makes no sense to put smart high-tech systems in dumb buildings. You can’t skip the lower levels.
5. *The Level of Green Power* only makes sense when the rest is taken care of. It is not a level in the sense of the others. It could provide power to any building, but not

intelligently. If your building is facing the wrong way, or if it is so thick that it needs electric lights all the time, or so over-glazed that it overheats too much, or if it uses incandescent lights, then you have no business spending money on PVs to run it.

The point is that learning and applying technical thought is developmental. It has a vector.

Creating a target. For each terrain, I will propose a topic, and for each topic an *action*. You can take these as examples. You might have a better idea. Collectively we certainly would have many better ideas.



[Figure 6. The 2030 Targets for buildings]

The graphic in Figure 6 shows the “2030 Targets” from the Architecture 2030 group, with all new buildings and major renovations dramatically reducing fossil fuel operational energy in stages and moving toward carbon-neutral performance by 2030, that is, operating without any fossil fuels at all [8]. In my opinion, design education needs to set a target where:

In the Next School every student will graduate with the requisite skills and knowledge to design a carbon-neutral and net-zero energy building.

Those who *can* will lead the profession. Those who cannot will become irrelevant. More than half the large firms in the US have signed on to these targets. In California, all new housing will be net-zero energy by 2020. President Bush, the junior, signed the 2030 Targets into law for federal buildings and Obama has accelerated the timeline by ten years. Confronting our carbon-based energy addiction is both a great challenge and a great opportunity. Solving the climate crisis by design is a vast and unexplored terrain for education. Yet, despite how many deans say it is the number one issue, *no school has actually claimed this territory.*

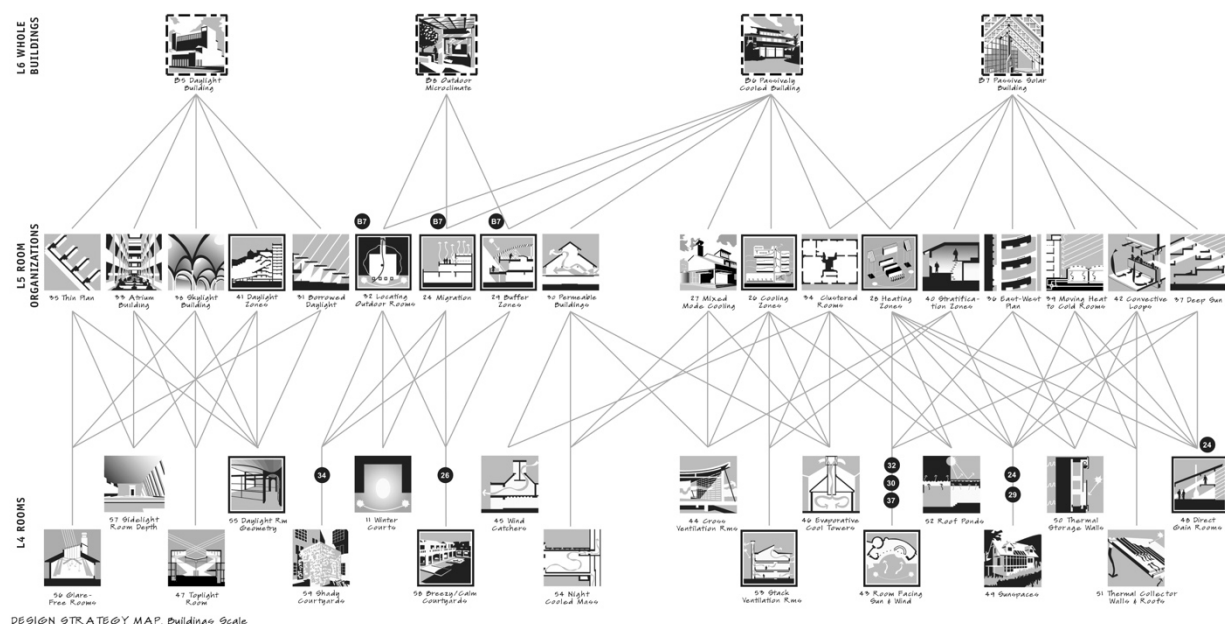
Terrain of Systems

So far we have been looking at the Terrain of Behaviors. Now let's look at the Systems perspective and then we will take up the left side terrains. The Terrain of Systems is the perspective where we look for fitness to contexts, where we see that everything is both a whole and a part. In this terrain, designers use various forms of systems thinking. In this terrain, I believe that:

The Next School will construct an ecology of shared design knowledge.

When we work in collaborative interdisciplinary teams, we need to make our knowledge and working methods transparent to others. Some scholars and architects have collaborated with others over time to build an understanding of the built environment in ways that can be shared with others. One of the early examples was Christopher Alexander and his colleagues who generated the book, *A Pattern Language: towns, buildings, construction*, at Berkeley. But so far as I know, no school has tried to take the minds of its 300 or 400 people and make their work add up to something larger.

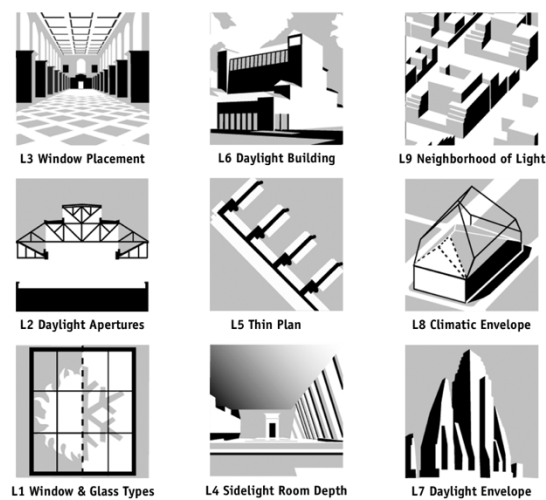
A knowledge ecology. In the 3rd edition of *Sun, Wind & Light*, I've begun building a system of shared knowledge about climatic design. In Figure 7, each icon represents a "design strategy" for sustainable design from *Sun, Wind & Light*. These are then combined in what I call a Design Strategy Map [9]. It shows the nested hierarchical relationships across nine levels of scale and complexity—from neighborhoods to materials (only a few are shown in this excerpt). The lines represent certain relationships among the strategies.



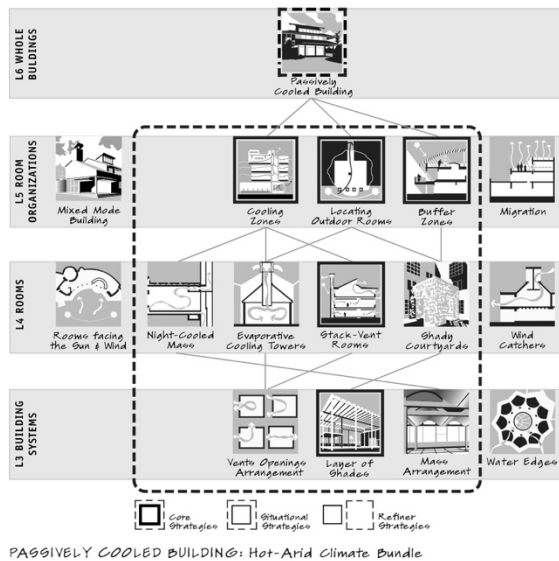
[Figure 7. Design strategy map, excerpt, from *Sun, Wind & Light*, 3rd edition]

There are three levels of complexity at the scale of “Building Parts;” three at the scale of “Buildings,” and three at the scale of “Neighborhoods.” For architecture these levels are nested and have increasing scale. Strategies at higher levels help to organize strategies at lower levels and those at lower levels help build strategies at higher levels. So, again in this quadrant we have the idea of levels of complexity and development having directionality.

Figure 8 shows one example from *Sun, Wind & Light*, showing some of the many strategies for daylighting. This is not just a theoretical construct. If you pull out any of the lower levels, the daylight building will simply not work. Each level of design idea, linked to the next, is necessary.



[Figure 8. Daylighting strategies at nine levels of complexity]



[Figure 9. Strategy bundle for passively cooled building]

What I discovered with my students in this mapping was that there seemed to be families of related strategies that could be used to solve a common or recurring problem. I call these Strategy Bundles. Figure 9 shows one example. We have now made a collaborative learning game called “Bundle-Up!” based on this idea [10].

Levels in the Systems Terrain. We can think about systems themselves in different ways that are more or less complex [11]. Each level of complexity has value to contribute and more complex levels can build on the less complex. Each has its strengths and limitations. In order of increasing complexity, we can think of systems like this:

- [Level 1] *Traditional Systems* are *tacit*, embedded, and employ workable local, ethnocentric knowledge.
- [Level 2] *Modern Systems* are *logical*, linear, and see systems like parts in a machine.
- [Level 3] *Postmodern Systems* are *complex*; they place everything into a context and link parts together in multiple cycles.
- [Level 4] At the *Integral Level*, systems are *living*. They are multi-leveled, nested, networked and ecological.

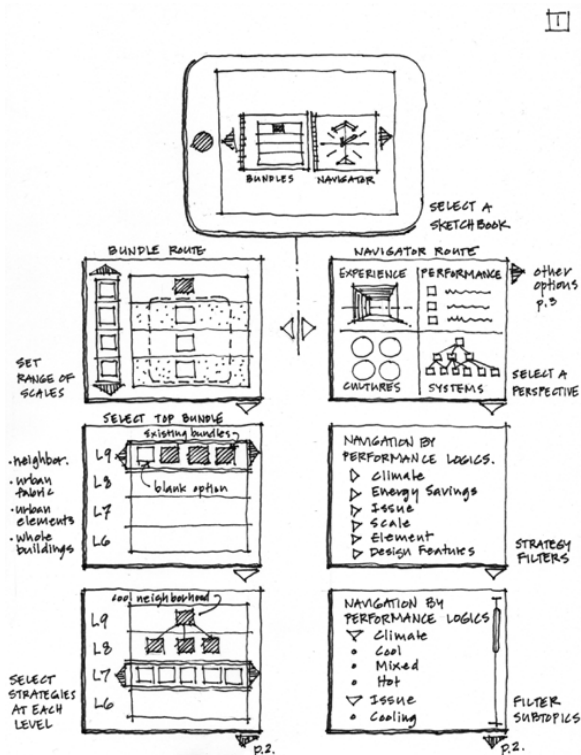
Design education mostly treats these various levels with discomfort and often unconsciousness. It turns out that thinking at each increasing level of complexity requires greater and greater cognitive development. Here’s the rub: most students in US design students enter with an ability to think in [level 2] logical systems and after four or five years, they leave having moved up one level to be able, more or less, to operate on the

[level 3] level of complex systems. That's how long it takes to move up a level in thought complexity. This has some big implications for design schools.

The Next School will teach, value and develop design methods for each level.

Connecting knowledge products. Design schools are terrible at sharing knowledge. We constantly reinvent the wheel, exploring the same well-known territories over and over, as if we are actually in an unmapped terrain. But this is not the reality in the profession. Every large firm has its in-house research squad working away to capture the knowledge generated on each project and share it throughout the firm network.

This image in Figure 10 shows one of several story-boards for a grant application to support a software application (app) for combining the knowledge structures of my two books, *Integral Sustainable Design* and *Sun Wind & Light*. It is one of many ways to connect academic and professional knowledge products.



[Figure 10. Design strategies app concept storyboard]

What if the African schools of architecture where to create an open source “design knowledge app” that was cheap or free to all students and architects? What if *your* learning communities worked collectively on mapping and filling in design knowledge around key questions? What would it mean for your effectiveness if faculty scholarship, student theses, and the work of design studios got fit together, organized and made

accessible? I believe the impact of your work could be made so much more powerful by first connecting it together and then giving it away powerfully. You know, Elon Musk has given away to the world all of the patents from Tesla.

The knowledge ecology of design is a vast and unexplored territory for education. It is both a challenge and an opportunity for the Next School—a place no design school has gone before.

The Terrain of Cultures

The Terrain of Cultures is the perspective of the intersubjective, of worldviews and shared meaning—of stories and myths, and collective values. In architecture it is the terrain of history, theory, and design ideas. It is the territory of “Us,” of the “We.” I believe that:

The Next School will explore cultivating a collaborative work culture.

This is the single most important of the four terrains for an organization, because innovation depends on the ways we interact and the purposes we share. Collective results that are not our past depend on creating a different way of *being together* (we will get back to that later) that manifests new *social actions* and results in creating the outcomes we say we want. What kind of work culture does it take to be the crucible for collaboration and innovation?

This quote is from Elon Musk’s SpaceX company recruiting site:

SpaceX is like Special Forces... we do the missions that others think are impossible. We have goals that are absurdly ambitious by any reasonable standard, but we’re going to make them happen. We have the potential here at SpaceX to have an incredible effect on the future of humanity and life itself. [12]

How is it that SpaceX creates the crucible for unreasonable achievement? The fellow who recently married my niece was on a winning collegiate rocket engineering team from Vanderbilt University. He went to work immediately after graduation for SpaceX and is designing the environmental controls system for the rocket to Mars. He can work whenever he wants. His time is totally flexible and benefits include discounted super-healthy organic meals, day-care, free gym, all the frozen yogurt he can eat, and even free beer. Essentially they have created a workplace that is so fun and removes so much life stress that these 20-something rocket scientists never want to go home.

In a culture that facilitates collaborative genius, a greater level of collective excellence requires less fragmented days, because the contemplation of possibility is fed by focus. It also needs a culture that rewards teamwork, rather than privileging individual competition. Universities simply don’t yet get the importance of that idea. In the practice world, the one we prepare students to enter, what counts for success is the collective

completion of the best built project of which the firm is capable. Big projects, thorny questions, and indeed the very practice of architecture require a culture of collaboration.

The future that's calling us, the one, like SpaceX, that some will say is unreasonable, asks us all, I believe, for three things that Otto Scharmer outlines in his book, *Theory U* [13]:

- *An Open Mind*, which is the capacity to suspend judgement and inquire
- *An Open Heart*, which is the capacity to take the perspective of the other *and* of the whole organization.
- *An Open Will*, which is the capacity to let go of old identities and let your authentic Self to emerge, and thus, the authentic future also.

These ways of being for individuals are the gateways to accessing our deepest sources of inspiration and vision.

Four Contemporary Structures in Design. OK—collaboration with multiple voices—everyone seems to see some value in that, but there appears to be a problem. The problem is both in our cultures and in the discipline of architecture itself. The problem is that contemporary society has at least four simultaneous cultures in differing proportions. These cultures have different values and language, essentially, they are contemporaneous worldviews. Each also has an expression in architecture, both historically and in the present day [14]. I've been using these terms already, and at least the lower three from Figure 11, Traditional, Modern and Post-modern, are familiar to designers.

Worldview			Design structures
Level 4	Integral	>	Transformative Networking
Level 3	Postmodern	>	Pluralistic Practices
Level 2	Modern	>	Independent Professionalism
Level 1	Traditional	>	Guild Traditions

[Figure 11. *Four contemporary structures in design*]

The Next School honors both timeless truths and emergent knowledge. You can imagine, for instance, two modes of working in brick, on one hand using traditional techniques in beautiful ways, such as in the work of the Colombian architect, Rogelio Salmona—and on the other hand, using computer scripting to optimize the masonry form. Yet each can be done in a way that honors the compressive nature of the material.

The Next School distinguishes between the dignities and the disasters of each epoch of design.

We are now in a time when we can see the value of each epoch. We can see both the dignities and the disasters of each stage in cultural and architectural development. Without rejecting the baby with the bathwater, we can transcend and include the traditional, the modern and the post-modern in culture and in architectural thought. That is:

The Next School transcends the disasters of each epoch and includes its dignities in a more sophisticated, more integral formulation.

But how do we achieve this?

Alignment. In this terrain, the task is not a target or product, *it is an alignment*. An alignment is not an agreement; it is a choice to take a stand with others for an idea. 2500 years ago, Lao Tzu said, “The best way to do is to be.”

A great organization, according to recent work coming out of the Harvard Business School requires *four ways of being* that are the foundation for an extraordinary organization [16]. I will briefly touch on these, and note that none of the several institutions that I have been involved with have had even a small commitment to these. So here are four ways of being that are the foundation for an extraordinary organization:

- *Authenticity* means to be and act consistent with who you hold yourself to be for yourself and others.
- *Being cause in the matter* means to take a stand for creating the future in spite of circumstances. We give up the right to blame others and to being a victim.
- *Being Committed to something bigger than oneself* is the source of passion and joy. That ‘something’ is simply what inspires you and your organization.
- *Integrity* is being whole and complete —in the sense of keeping your word, that is, doing what you say you will do.

These I believe are the foundations of the Next School’s internal culture that can create the extraordinary. To recapitulate: to solve the great design problems of our time, and *have* the results we want, we have to *perform* new work together. And to do that we have to *be together* in radically different ways.

The Terrain of Self

Finally, the Terrain of the Self is the perspective of individual experiences and intentions. It is also the perspective with which we can understand human development. In this terrain, I believe that:

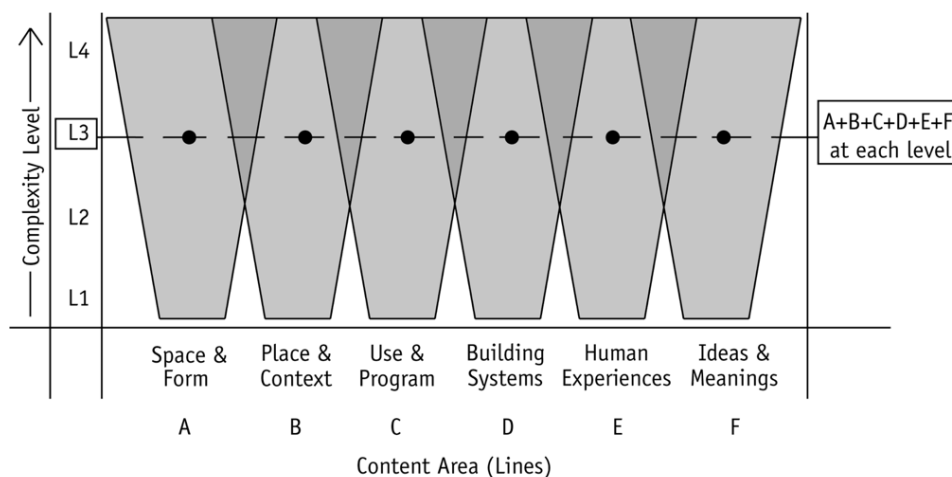
The Next School will explore the interior human territory by “developing the inner architect.”

To develop the inner architect is to unfold the capacities and consciousness of the person capable of acts of architectural merit in today’s complex professional context. Without much of a plan, most students who complete college experience a profound change. They move in the direction of expanded care and concern to include people of other races, classes, genders and sexual orientations. Their worldview shifts to consider the validity of other points of view and other cultures. Students expand cognitively to handle greater complexity of design challenges. These are changes happening *inside* the young designer. What would be possible if design education took this transformation on purposefully?

Like culture moves through stages, adult human beings also develop. To educate designers and builders is to *develop* designers and builders: physically, mentally, artistically, and interpersonally. It turns out that how we move through stages is based on our *practices*, those things we do over and over again, which then develop our awareness, for better or worse.

Architectural education is a process of developing the architect’s consciousness of complexity—from contexts to concepts to implementation. One can think of this in two ways, in an *additive* way or in an *unfolding, developmental* way.

A developmental curriculum. Instead of a conventional curriculum that begins with a singular focus on form, we can envision multiple content themes unfolding simultaneously *from fundamental to complex*. The diagram in Figure 12 shows six capacities that make up the bulk of an architectural education [16]. The developmental line of *Space and Form* awareness is informed by the parallel lines of capacities in *Context, Use, Technology, Experience and Ideas*.



[Figure 12. Model for a developmental curriculum]

Even a beginning curriculum can be constituted by multiple relationships among the fundamental levels of each line—and in this model, the same is true with every other level of learning.

In the Next School, integration is fundamental; it goes all the way up and all the way down.

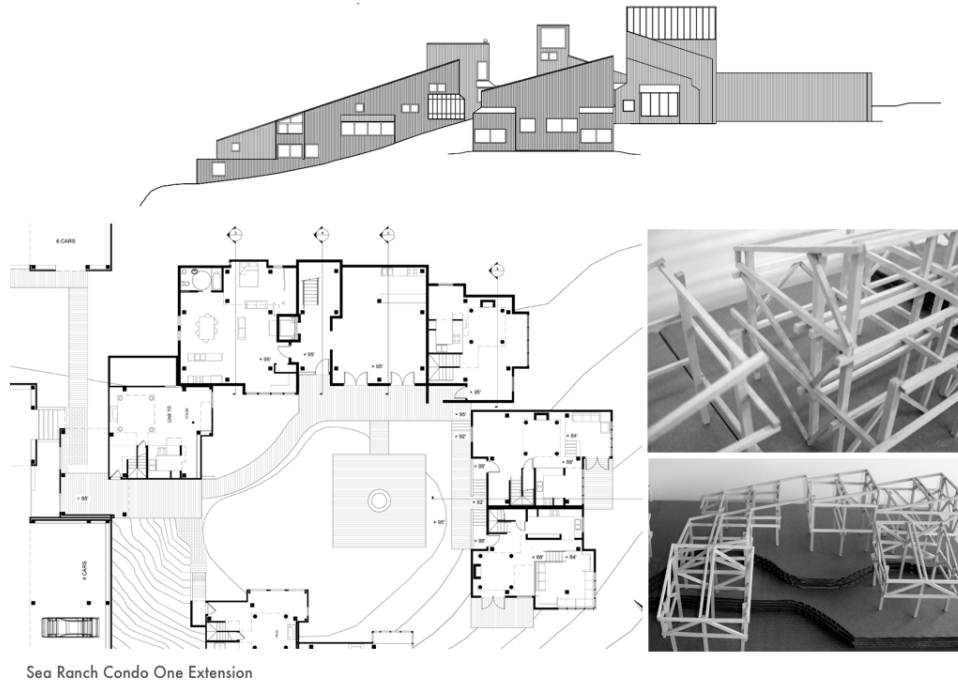
When my colleagues and I redesigned our beginning design program, we imagined it was possible to learn to design buildings and to include all the things that, if left out, would make the design *not* a building. In our professional graduate program for rank beginners, we challenged them with designing both gardens and houses in projects where tectonics are governed by materials and natural forces, space arises from its five fundamental progenitors (as in Figure 12), and site and community design exist in contexts (Figure 13). From the beginning, we had architects collaborating with landscape architects, designing places inhabited by people, in a living landscape.



[Figure 13. First semester work of beginners; starting with simple wholeness]

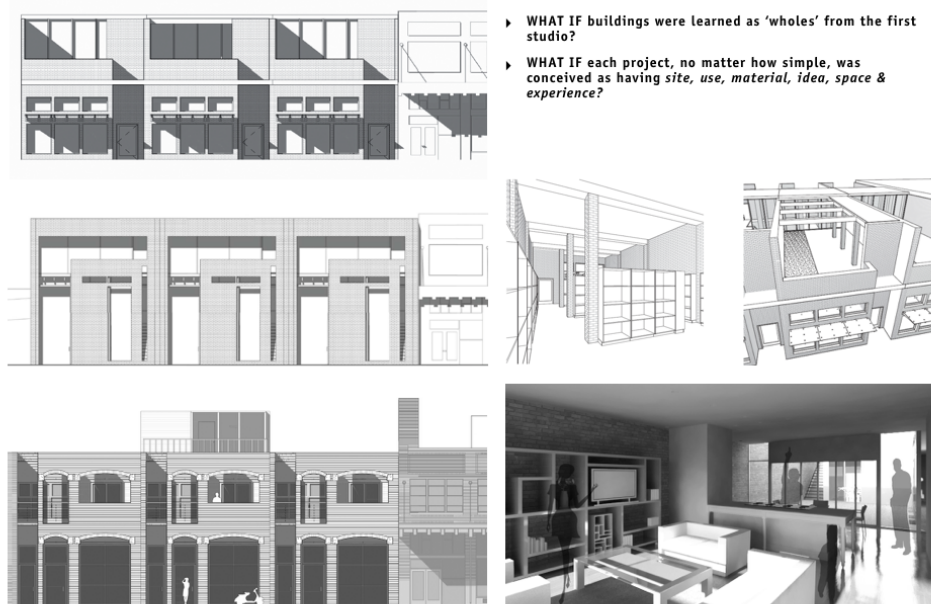
Our intention was, from the beginning, to teach design by having students design buildings with all of the major themes present in real buildings and over time, to increase their capacity in each of the six aptitudes, from fundamental to complex. Nine short weeks later, the subsequent second semester project, an addition to MLTW's Sea Ranch (Figure 14), followed the same six ever-present themes in architecture, but at one step up

in complexity: 1) Spatial order present in the precedent, 2) A coastal, rural site, 3) Timber construction logics, 4) Private and community uses, 5) Experiences along an intimacy gradient, 6) The ideas of vernacular expression and relationships to landscape. Students collaborated in teams for cluster and courtyard design and also individually designed condo units. They built structural models of their designs and learned both ink drawing (in the elevations) and CAD (for the plans).



[Figure 14. Semester two: Sea Ranch addition; same six themes, a little more complex]

We also used *Sun, Wind & Light*, which has 150 schematic design tools and strategies. Even at a first year level, students were able to design with Level One concepts and solutions: buildings that were lighted by the sky, cooled by the wind, and heated by the sun (some results in Figure 15). By employing this model of simultaneous learning along multiple lines at developmentally appropriate levels of complexity, we were able to achieve results in two semesters that the concurrent Bachelor of Architecture program took six semesters to achieve.



[Figure 15. Semester two: Live/work project, same six themes, again]

Discipline. In the Terrain of Self, the action required for development is a *discipline*. To develop the inner architect:

The Next School will need an “architect’s yoga” of transformative practices.

Developing the inner architect is the prerequisite to outer architect actions. Yoga means, among other things, the *practice* of being aware of the Self. A transformative practice is something we do repeatedly that creates developmental change. The more aspects of the Self we simultaneously exercise, the greater the transformation potential.

The future of practice leadership requires high-performance designers who are not just smart, knowledgeable, and creatively skilled, but also personally and inter-personally skilled—that is, compassionate, emotionally intelligent, collaborative, and highly self-aware. This is the terrain where practice leaders are developed. Consciously developing the inner designer is a vast and unexplored terrain for education and a core characteristic of the Next Design School.

We have briefly touched on exploring four Integral terrains (Figure 16), expressed as four possibilities, these being provisionally:

- Solving the climate crisis by design
- Constructing a shared knowledge ecology
- Cultivating a collaborative work culture
- Developing the inner architect



[Figure 16. Innovation in four terrains]

These terrains are not actually separate things but interrelated and co-arising. Even though the mental model of these four perspectives is just a tool, it is a good map to take into account the major domains of the university: the arts, the humanities, and the sciences, both basic and complex. While the future here might involve these propositions or other potential expressions, I believe that:

The Next School will be defined by distinctive innovations from the perspective of each of these fundamental terrains.

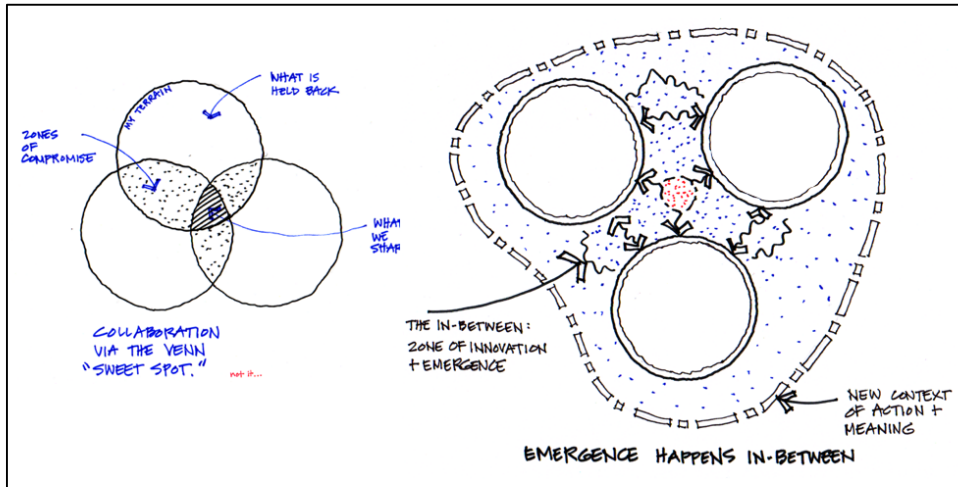
In doing so, The Next School will be the first Integrally-informed design school.

Emergence. The Next School emerges and unfolds in purposeful conversation with everyone involved. It's not about changing what you're doing right now. It is about investigating what gets presenced, what gets created when what you are collectively doing generates a "new field." For example, when I was writing the *Integral Sustainable Design* book, I was also teaching the material in seminars and studios and talking about it every day with my wife and editor, Susanne. In that conversational field, applying a simple framework, what *emerged* was over a hundred research questions. That was something totally unexpected.

Emergence in this context means this: that the most successful and adaptive responses to complex problems arise from a situation in which three conditions are present [17]:

- Diverse individuals in a system working around a shared goal
- Acting with their own agency (meaning independence), and
- Interacting with each other as much as possible.

Emergent solutions do not happen by dividing up a problem among the players. Something bigger can't unfold from the reduced space of where we overlap in the so-called "sweet spot." Look at the diagram on the left side of Figure 17. The sweet spot is impoverished. Look at how much we hold back; look at what never gets shared in this thought model!



[Figure 17. Emergence: arising in the in-between, within a new contextual field]

Instead, we have to look for what emerges, all by itself, from focusing on what's trying to gel "in the in-between" (right side of Figure 17). Like in a great marriage, what's in-between gives rise to a new context. For Susanne and I, that relatedness creates something larger than both of us. That larger purpose empowers both of us to create larger contributions. In the diagram on the right, you have the same three actors, the same three circles, but they have a new context of meaning that encompasses their wholeness.

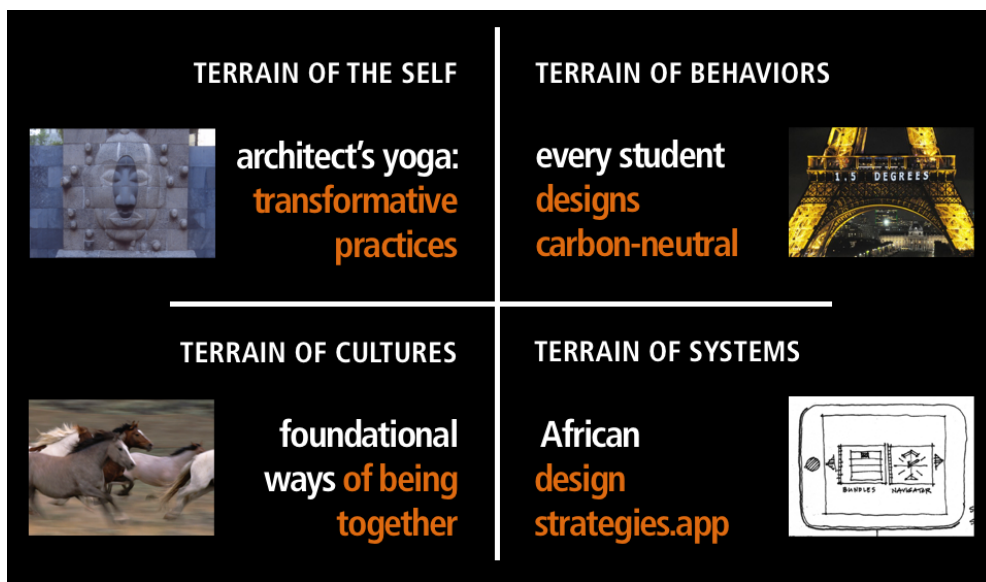
Just like the design process, we have to give up the certainty of a known outcome and trust that a process-driven inquiry can lead somewhere we haven't been.

Integral actions

The Next Design School is created not in theory or discussions alone, but in actions. I've offered you four representative collective actions (Figure 18), one from each terrain:

- *Solving the climate crisis by design* requires that we educate every student to be able to design carbon-neutral buildings.
- *Constructing a shared knowledge ecology* integrates our collective research and design efforts to become interconnected and available, and one way to do that is via an open-source digital design strategies app.

- *Cultivating a collaborative work culture* means including what works from the traditional, modern and post-modern by enacting the four foundational ways of being together:
 - + Acting with authenticity
 - + Being cause in the matter of your concerns
 - + Being committed to something bigger than yourself
 - + Practicing integrity
- *Developing the Inner Architect* requires a developmental curriculum founded in practices that accelerate students' development in consciousness along several lines of design intelligence.



[Figure 18. Integral actions in four terrains]

You may agree or disagree with these propositions. That does not matter! What does matter is that you align on collectively taking real actions as a learning community to move education developmentally to higher levels of complexity in *each* terrain. What matters is that you are powerful together, and that it is time you use that collective power to make the biggest contribution you can.

What does matter is that we as faculty put all our diverse voices at the table and stop making the terrain so contested, and instead focus on what's actually *on* the table. Let's use that diversity to solve the most important social and environmental issues we face. What's on the table is *urgent*. What's on the table is the future of our built and natural world and the children of all species that will inhabit it.

That's Integral. That's the Next Design School.

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Author Contact

Prof. Mark DeKay, School of Architecture, University of Tennessee, mdekay@utk.edu

Publications: Academia.edu, <https://utk.academia.edu/MarkDeKay>

UTK Faculty Page, <http://archdesign.utk.edu/faculty-staff/facultystaff/mark-dekay/>