

## **Announcing Leverage Points for Accelerating Social Change**

Construction on the new house is already well underway. The old house will fall on its own; instead of tearing it down, let's redirect our precious energy toward reinforcing the new structures. The old house can serve our transition to the new one.

Tracy Kunkler

There are no cheap tickets to mastery. You have to work hard at it, whether that means rigorously analyzing a system or rigorously casting off your own paradigms and throwing yourself into the humility of not-knowing. In the end, it seems that mastery has less to do with pushing leverage points than it does with strategically, profoundly, madly, letting go.

Donella Meadows

America, I believe, not so differently from many other countries in the world, stands at a crossroads. Trump's government has enshrined denial to the level of a national policy: denials of the environmental crisis and of climate change; denial of human dignity, denial of the most elemental human values. Denial after denial, down to losing the sense and meaning of the word denial. A reality of denial, if that were possible. If it were only for these trends we would be spiraling down to destruction in an irreversible fashion.

And yet there are other forces and equally strong. I have found this reality articulated from yet other angles than that of the present work in two examples. Both of these come from as late as 2018.

### **Two Houses**

Thomas L. Friedman asserts **"if you want to be an optimist about America, stand on your head. The country looks so much better from the bottom up."**<sup>1</sup> In his article he follows the fate of cities trying to counter economic and civil decline without the help of state and federal interventions. He looks closely at the development of "complex adaptive coalitions" in various American cities, bringing together business leaders, philanthropists, social visionaries and innovators, non-profit leaders, educators, and local government in order to advance common interests and counter national American polarization and paralysis. The fate of American cities, it seems, depends much more upon the possibility of finding this common will and

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<sup>1</sup> Thomas L. Friedman, July 3, 2018, "Where American Politics Can Still Work: From the Bottom Up Civic coalitions are succeeding at revitalizing old towns where governmental efforts have failed." See <https://www.openpolitics.com/links/where-american-politics-can-still-work-from-the-bottom-up/>

building exceptional conditions of trust among motivated individuals than on what the initial objective economic conditions may be.

James Fallows, writing for the Atlantic issue of May 2018 conveys his experience of traveling one year through small American towns, particularly the most economically depressed.<sup>2</sup> He writes about contradictory and coexisting layers of reality. On one hand there is no denying the downward trends in national politics, the failures of the health system, the plight of economically depressed cities, the polarization around immigration to quote just a few.

Relying on extended first-hand experience he reports that while Americans see little light at the end of the tunnel in national politics, their outlook is almost the reverse at the local level; at that level issues like immigration are not perceived as strongly, even in conservative cities. He notices that younger generations are consciously returning in numbers to their small towns of origin to make a difference; community colleges are focusing resources on the regional economy; downtown revitalization efforts are a growing reality; local land conservation efforts are on the rise, even as the complete opposite takes place nationally; city after city in half of the country is aligned with the Paris climate goals that the Trump administration has denied; informal networks are naturally emerging towards common goals, though they may lack the full picture of what other like-minded groups are doing.

The result of his observations is confirmed by recent polls that he quotes. The Pew Research Center periodically conducts polls about national issues that most concern Americans. Matters of immigration rarely emerged in the top five in the five years previous to Trump's election. Neither were things all that different six months after: two thirds of Americans felt comfortable with the level of immigration or thought it could go up. During the 2016 primaries, a Gallup poll commissioned by The Atlantic and the Aspen Institute highlighted the split between local and national politics. While 64 % of interviewees was pessimistic about where the nation is heading, two thirds expressed satisfaction about their own financial situation; 85% were from somewhat to fully satisfied with where they were in their present life. Other **polls over the last 6 years have highlighted that most Americans have little faith in what the nation as a whole is doing but see positively what is happening in their own communities.**

The journey of this book started likewise with an injection of hope. It started when I attended a conference called Frontiers of Democracy in June of 2016 in Boston. The annual conference explores ways to improve our democratic discourse, or to set it on other foundations. The first proposition is the one

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<sup>2</sup> James Fallow, The Atlantic, May 2018 issue, "Americans don't realize how fast the country is moving toward becoming a better version of itself", <https://www.theatlantic.com/magazine/archive/2018/05/reinventing-america/556856/>

most strongly articulated; the other is present alongside in a creative dialogue. I knew I was coming for the second one and I quickly made the connections to three individuals who work on this field: Tom Atlee whose work on *Empowering Public Wisdom* had left an imprint on my thinking; Tracy Kunkler, who has expanded to new levels the work with sociocracy and has worked with facilitation, governance and socially generative networks; and Steve Waddell whose books occupy an important part in this exploration.

I left the conference energized and for 1 ½ years I collaborated in the mapping of 'socially generative networks' that work across two or three sectors—government, business or civil society. My horizons enlarged and I started to recognize a 'frontier of democracy' and source of hope for the social future. This played in contrast to my views concerning the dissonance and cacophony that is our national discourse. So yes, there is a tremendously impactful discourse of denial, and on the other hand waves after waves of renewal; myriads of surprising entrepreneurs and visionaries across the land, who are strong voices of innovation and in so many places. Each one of these in isolation may not amount to much; but all of them in unison may create a powerful concert.

One image started to guide my path; that of the houses which we want to inhabit. The tone for this was set by the dynamic of the dialogue at the Frontiers of Democracy. It was reinforced by reading from Tracy's work.<sup>3</sup> **We are at a crossroads; our old house is crumbling and most of us know it or feel it.** However, that's not all of the truth. A new house is being built alongside and those who are building its new parts may not know each other, nor see the whole picture. **While shoring up the old house is undeniably important, this book is all about building the new house,** seeing the emerging reality as fully as possible and rendering it more approachable both conceptually and practically.

Armed with this inspiration I decided to take the road and meet many of these innovations and innovators on a four-month road trip to targeted areas: New England (mostly RI and VT) and the Midwest (mostly MN and WI) to look at innovations in the fields of the food system, and to a minor extent in the energy system and climate change field. I started with some set goals and adapted to others. As I expected I was inspired by the variety and strengths of the initiatives I saw, though I realized that I was partly naïve in expecting to gather enough inside information about each and every one.

I nevertheless managed to test all the hypotheses I was interested in, and to generate insight that would allow me to string together ideas, methods and initiatives. The stimulating dialogue and exchange of views gave weight

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<sup>3</sup> Tracy Kunkler, The Path Forward is Under Our Feet, Dec 30, 2016; see <https://www.circleforward.us/2016/12/30/the-path-forward-is-under-our-feet/>

and nuance to the ideas I was started to formulate. I could start to see the larger patterns at work. And most of all I asked myself how this could be put together and offered to a reader.

Along the way I was offering a powerpoint of my growing perceptions of the paradigms of change that can counter the prevailing predicament and act as levers for change. This was an effective tool for dialogue that I would either discuss as a slide show or send out via email. On one hand it allowed me to evolve what I will present below, and on the other it made me think about the format of the book. This is how I resolved to write a primer about a large field of inquiry. As such, it is divided in three parts (chapters 2 to 4) and the reader can go through these according to her interest. Each paradigm can be read separately from the others, though they are written in a sequence that is also in itself organic. And each of the three main sections is no more than an introduction: resources may actually be the most important part of the work, after the chapter itself should allow you to have a bird's eye view and some significant vignettes of each field.

### **Paradigms as Leverages for Change**

Paradigms are somehow worlds in themselves, worlds in which we either live or could live. We presently are part of one paradigm, a worldview about which we can form some judgments when we raise our perspectives towards embracing all its aspects, or as many of them as possible. **By managing to gain some distance, with effort we can formulate how the paradigm operates, what are its assumptions and ground-rules,** whether it fulfills the goals it pursues, etc.

This book approaches other paradigms than the prevailing ones when it comes to social change. It looks at paradigms as leverage points which can accelerate social change. Why more than one paradigm? Wouldn't it be sufficient to predicate that one paradigm is the solution and the next destination? As a researcher and author, but first of all as an individual participating within my means in the creation of a new social reality, I have not set out to find paradigms. They have come my way and naturally I did not see them at first. It is only through immersion in a paradigm that something surfaces into consciousness, and that I start to realize that I live between paradigms and can choose which one fits me best, and which one has the greatest potential to more fully embrace reality and create new, more life-fulfilling scenarios. Ultimately the validity of a paradigm lies in how faithfully it embraces and encompasses some part of our given reality. **Because, ideally a paradigm is a fuller way of relating to reality around us, acting from an understanding of it offers us a powerful leverage point to more effectively affect social change.**

However, there is a problem, or a challenge! A paradigm cannot be given an easy definition, nor be used in the spirit of a manifesto, a quick solution, a political platform. In fact the reverse is true. At first, and even for a long time,

it is not possible to perceive the reality of a paradigm. **To know a paradigm is to grow into it, to be *altered and made new* by it.** When the reality of a paradigm fully penetrates our own inner world we become aware of a before and an after, and of a gap between the two. The paradigm in which I live now—better said *predominantly live in* now—cannot be referred to in terms of what I knew before. **In describing a new paradigm I enter into a collision course with the prevailing paradigm from which I have to borrow words and usual terms of reference in order to portray what is essentially different.** An alternative lies in looking for examples, analogies and a contemplation of the results of embracing another paradigm. In essence, unless I want to take an epistemological or philosophical approach, I need to take a pragmatic approach to a larger world of ideas or experiences. This will be my choice.

Parts of what I will offer will sound self-evident to those who have lived and explored a given paradigm. Others will find that something of the paradigm is already known and/or speaks to them, either because they have been exposed to it, or because we could say they are 'naturals.' Other paradigms will simply not approach their horizon of experience.

So how do I propose to move into this ever-shifting territory? I will explore the lay of the land with stories, analogies and a very basic field exploration before directing the reader to the resources that will allow her to accomplish her own paradigm shift. For the purpose of this book I will start by looking at the food system; what it looks like under the present paradigm, and what new directions future-looking paradigms are mapping out. Occasionally I will offer examples from other fields as well especially in the energy and climate change fields.

All throughout the book I will compare a paradigm to an iceberg. A paradigm makes itself visible through what comes to the surface in our present culture. Much of it remains hidden as potential yet untapped. The overview I will offer will be like exploring the tip of the iceberg: what is most visible. Through some examples I will sound the depths of the iceberg in a few particular spots and direct you to the whole iceberg if you intend to explore it further.

I will start with some general considerations. We don't need to encompass and understand a paradigm to walk towards it. But we do need to practice with discipline new ways of seeing / thinking / relating / connecting / operating / being in order to make the new reality perceptible over time. An example from my life. I took on Nonviolent Communication (NVC) with extensive training and practice especially over the first five-six years of complete immersion. NVC was already satisfying in terms of a tool/method that allowed me greater expression of self-disclosure, empathy and self-connection in my life. It allowed me and still allows me to better respond to life challenges and better meet my needs.

It could have continued to be a 'method,' except that every now and then some experience stood out from the routine of all other little experiences. I was seeing that at those moments the practice was allowing me to pierce behind the veil of everyday experience, as it were. When it came time to express it to myself and put it into words, I could awkwardly say that I had what amounted to a spiritual experience, no matter how faint that may be, that I pierced through a veil of everyday reality into something else. I had in fact no doubt that the new experience had led me to something more real than what I normally perceive. It became a beacon, an indicator of what is possible. The same I can say for myself I have often heard from others in very similar terms; thus I knew it wasn't just an arbitrary, subjective experience.

Over the years it became less and less important to impart to people that I practice NVC; I would actually perceive this as a stereotype. Rather I would say that I prize the consciousness for which NVC has opened the door, and that is where I want to live rather than in the practice of the NVC method alone. This is how I can put it into words. I know of many others who express this inner reality in different, though very convergent ways. They have come to similar conclusions from tools other than NVC. We know the same level of reality and we each see various facets of it, though I would dare say only some facets of it. When we all express what these facets are we may come to a fuller articulation of the paradigm and what degree of change it creates in our lives.

In essence, to return to my example, I know that there is another way of being and relating than what I was used to that gives me deeper satisfaction and understanding of myself and other fellow human beings; that I have no reason to revert to the old paradigm in which I experienced separation and alienation to a high degree. **Soberly speaking I still live between the two paradigms but am more and more anchored in the new. I daresay I will never cease this dialogue and tension in my lifetime.**

I encountered the reality of the paradigm through NVC, but NVC is not the paradigm. What I have achieved through NVC others have reached through a multitude of other practices. When we talk to each other we can recognize the bedrock of truth from which we can all have parallel and similar experiences. When it comes to expressing the bedrock of the paradigm we all encounter the limitations of prevailing words, expressions and ideas from which we try to express that which is different and new.

### **Prevailing Paradigm / Future Paradigms**

We live in a time of great evolutionary potential as well as escalating challenges. Trailblazers are first intuiting, then offering the world new ways forward. Those who seek will hear right and left about new territory charted into the unknown, of new ways to confront seemingly intractable problems. Below are a few examples just within the food system.

In Burkina Faso, a man by the name of Yacouba Sawadogo has found ways to reclaim land from the advancing desert in the Sahel region.<sup>4</sup> Before his ideas took root he was naturally believed crazy. The Tigray, in North Ethiopia, is reclaiming hundreds of square miles that seemed lost to desertification. A man by the name of Aba Hawi, and many other organizations, have played a pivotal role.<sup>5</sup> Now the effort is spreading over the whole of Ethiopia and even beyond. Aba Hawi too was branded crazy and mistreated before his ideas and hopes gained ground. Before then the world knew of the work of Wangari Maathai in reforesting Kenya, so much so that she received a Nobel Prize.<sup>6</sup> Through the Green Belt Movement, which she helped start, Kenya has been reforested on a large scale. Wangari deeply embraced her own culture, but also threw it some unique challenges. For a time, as a woman who loudly challenged culture and regime, she was the laughing stock of Kenyan elites, and large majorities in Kenya who bought into their message. That too passed. The community of Gaviota, in western Colombia, has found ways to reclaim the rather infertile llanos and revert them to the original tropical forest from which they came. What seemed an irreversible natural process—the loss of the rain forest—can now be reversed.<sup>7</sup> These are few examples among a multitude.

And yes, for all of the above, the good I mention goes hand in hand with obvious downward trends, continuing and even accelerating the destruction of the past. Who will win, there is no way to tell. Those who engage in this epochal struggle don't even ask the question. They just play their part, moved somewhere deep inside by a quiet hope that they have wrested from the forces of destruction, within and outside of themselves.

Since the fifteenth century the European West, then North America have inaugurated the paradigm that accompanied the scientific revolution. It was marked by the empirical and deterministic approach to knowledge—a change oh so necessary, since it has emancipated the individual from all tradition, from all dogma and habits of the past, and allowed the expression of full individuality, at least potentially. All individuals who speak against this paradigm today, the various Aba Hawi, Yacouba Sawadogo, Wangari Maathai, Allan Savory... are almost invariably those who, even while respecting them, break away from all those traditions of the past that stifle the future; who are able to stand as one person against all when necessary; who are willing to be maligned before, not themselves, but what they have to offer will be

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<sup>4</sup> See the documentary *The Man Who Stopped the Desert*, directed by Mark Dodd.

<sup>5</sup> See the documentary *Ethiopia Rising: Red Terror to Green Revolution*, directed by Mark Dodd.

<sup>6</sup> See the documentary *Taking Root: The Vision of Wangari Maathai*, directed by Lisa Merton & Alan Dater

<sup>7</sup> See Weisman, Alan, *Gaviotas: A Village to Reinvent the World*.

recognized. They have benefited from being modern human beings, fully emancipated from tradition.

The paradigm of the past is one of separation. It can be expressed in terms of a spectator consciousness. By separating we are able to be individuals against all odds; able to offer something different from what all past ideas have offered to humanity. Because it is a spectator consciousness we can so detach ourselves from nature and our fellow human beings that potentially, if we so choose, nothing matters any longer. Herein lies the possibility of destruction that we witness on so many levels and on such large scale.

The present paradigm predicates that only that is true which can be apprehended through analytical thinking, through indirect observation (microscope, telescope, chemical analysis, spectro-analysis, etc.) and quantitative measurement. Quantity is the norm. Humanity has collectively lost sight of qualities and of a more synthetic/holistic way of thinking, relating and acting. By quality I mean such things as what we can learn from colors and forms and what they express of plant or animal nature, gestures such as we can find them in the movements of water or in the tides, patterns of relation both in the natural world and in the social world, etc. All of these things reach us through the senses, but unlike everything else of this nature, are discarded from the scientific method.

We could say that the scientific revolution has set the trend for what can be characterized as dualistic thinking: black and white, right and wrong, good or bad, more or less, yes or no, 1 or 0 of binary computer language, etc. All of these criteria can be quantified. While this thinking emancipates, it also sows in itself the forces of isolation and destruction because it originates from a one-sided perspective, that of quantity. By excluding quality it is constantly at war with self and world. **Nature all around us does not know of dualistic patterns; nor does our mind or soul. Neither one can be so simplistically explored and understood.** In final analysis we seem to stand powerless in front of the enigmas and riddles of the human being and of nature, because so much depends on those qualities that we leave out of the equation and which mean so much in the expression of every living being.

The forces in nature cannot be understood through dualism; rather through a wholistic gymnastics of yin and yang as traditional cultures intuitively knew. In the living world growth holds the balance with decay, expansion with contraction, night with day, winter with summer, anabolism with catabolism, photosynthesis with respiration, plant with animal, etc. Problems in nature arise when there is imbalance. The forces at work in our soul/minds are likewise forces that hold each other in balance: attraction and repulsion, love and hate, depression and mania, wakefulness and sleep, introversion and extroversion, individualistic and communal, etc. Problems arise when one pole loses the balancing power of the other.

It has often been pointed out that science has gone awry because it has been used for selfish purposes. It can be argued that science itself has set in motion the larger, inherent limitations of exclusively dualistic thinking. But science also has in itself the capacity to overcome, to break through to a more living understanding of world and self. Ultimately we need an enlarged scientific perspective, not a return to pre-scientific worldviews. It is the lot of the modern human being of wanting to act because he understands, no longer because he has been told or he blindly believes.

**The paradigms we will present here set the tone for breaking beyond dualism, while retaining the scientific mindset; they are paradigms that move away from either/or to both/and, from 'thinking in twos' (opposition) to 'thinking in threes' (synthesis).** This is the great watershed of our time, which is articulated in many ways.

The new paradigms are not paradigms of opposition, not even to the paradigms of the present. They seek to include and transcend. That is the greatest strength of the paradigms of social change when they are fully practiced and internalized. It is by transcending and including that what looks like unsurmountable obstacles becomes approachable. **The greatest leverage point for the problems of the present is neither inward nor outward. It is both. It is a continuous dialogue between self and world.** Through what others have made their own we can borrow the tools they have generated and see their effects in the world. Conversely, through the effects of this work we can change and strengthen our consciousness and better use the tools... When we start to align with powerful inner forces we express ourselves in the world in ways that do not oppose and say no; they say yes and invite the new from unforeseen leverage points. They no longer oppose the world because they no longer fear it, or at least don't fear it as much.

### **How to Read This Book**

**Paradigms we will approach are powerful antidotes and exacting masters. They require our full attention and participation.** We cannot quietly observe them from the outside; if we do so we cannot understand them and let them touch us and change us. Each of the three paradigms explored here can require our life's attention; each can set us on a life-changing path to the end of our days. This obviously means that I who am presenting these paradigms could not possibly master them. In fact I know that I have differing degrees of penetration and embodiment so to speak; that for each aspect that I present I know of others who can do it far better than I. For this very reason I intend to continue walking my talk and integrating them in my life journey as best I can, and without illusions. And for this reason the book will be nothing more than a primer.

In the first chapter of the book we will look at prevailing paradigm(s) of the present and where they lead us. Then I will offer a vista in three different

directions with succinct examples (chapters 2 to 4). In keeping with the analogy offered earlier on, the examples are only the tip of the iceberg. They are meant to offer food for thought. In fact I invite the reader at the end of the exploration to gage her own reactions to each of the paradigms. Ask yourselves: Which one speaks the most to me? To which one do I relate more from experience, from character and temperament? To which other one do I feel attracted? To which one do I feel antipathy and resistance?

In each of the three chapters I will explore the larger expression of the paradigm, but still as it were only probing at depth in only some points of the iceberg. Through examples I will try to round off an exploration that lends weight to the inner coherence of the paradigm. From there I will direct the reader to resources that explore the paradigm in depth; an invitation for a course of study and practice that can take each one of us on a long journey.

Finally I will explore the open territory of what it means to practice the three paradigms, collectively rather than separately, and bring them to cross-pollinate and fructify efforts for social change.

### **My Own Journey**

If paradigms are whole worlds in themselves and if they take time to assimilate and internalize, how could one person possibly be guiding you into such vast territories? The answer lies at two levels. First of all I am guiding you to only a few areas of the icebergs and for that I have enough of a field overview. Secondly I want to qualify my answer and explain my connection with each field of experience.

I have already offered an important piece of my journey with the deepening of the practice of Nonviolent Communication. But the first paradigm came under my field of scrutiny already thirty-five years ago. It met me under the name of "social threefolding" and the ideas of Rudolf Steiner. I delved into it wholeheartedly but my strong political persuasions at the time prevented me from fully entering it. Somehow **I was holding to the past and the usual and could not make room for the new because it required a leap and a discontinuity.** I had read about these ideas, in fact read as much as I could. My enthusiasm did not allow me to break through at the speed I wished.

Why this delay you may wonder? I know of other people who could take these ideas in much more straightforward fashion. Well, after some seven or eight years I approached anew the thoughts of this great thinker and first of all those most accessible to the public and this time I could let them touch me more deeply. Ever since then they have been organically growing until I can say I have made them my own to a high degree. In the intervening years I have also seen how these lively and living ideas sprout right and left, so to speak, independently from the one who articulated them first, and for each thinker or practitioner independently from the other thinkers or schools of thought. And I have only inquired about them in this continent mind you! It

seems that these ideas are organic and they sort of impregnate the air we breathe.

The second paradigm entered my life wholeheartedly from very early on. It met me first in my mid-twenties when I entered the practice of men's groups and support groups, practices like Jungian dream work and interpretation, Destiny Learning of Coen van Houten first and Nonviolent Communication later. I had embraced the work of Bert Hellinger in between and what came through Hospice. I called this the field of experiential spirituality.<sup>8</sup> In between I also took a mastery in Technology of Participation, dabbled into Future Search and World Café, Dynamic Facilitation and Conversation Cafes and Consensus Decision-Making. It was only through the work of Otto Scharmer, as it is formulated in Theory U, that I realized together with other people in the field, that I was dealing with a paradigm. Here even though all of the methodology had come naturally to me and I could not get enough of it, it was only much later that I could give a name to the paradigm that I most often recognize and operate from.

Finally, the third paradigm I will refer to came to me from various horizons and more fully in the last three years, through an in-depth immersion. First I timidly met the ideas coming from Argentina's Horizontalism some eleven-twelve years ago, and later the ideas about self-organizing expressed in some of the chapters explored by Frederic Laloux's *Reinventing Organizations*. I was deeply immersed in learning about sociocracy, aka dynamic governance, and in rendering it operational at the community level when this new aspect lit up at the Boston conference that I mentioned.

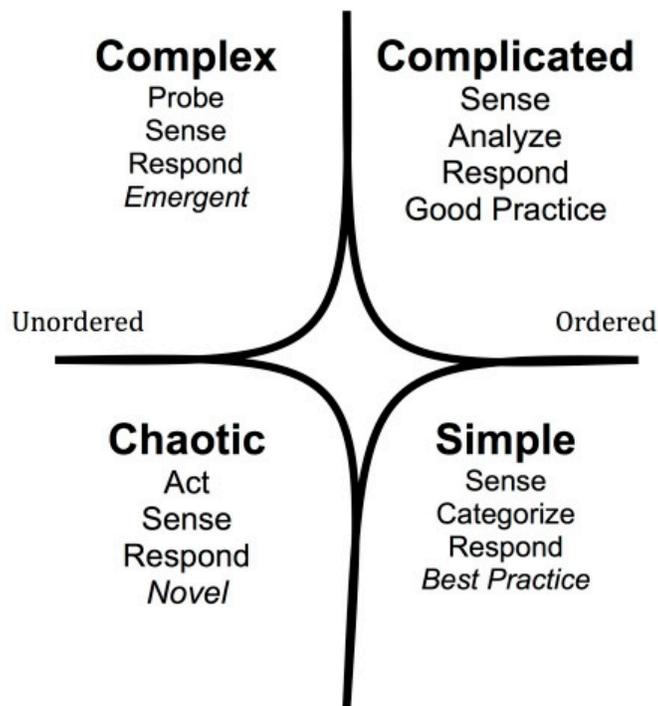
At first the field itself eluded my grasp. When I started mapping networks I was not sure I was proceeding in a coherent way. The idea itself of what we called "multi-sector, multi-stakeholder, multi-scale networks" was hard to encompass in my thinking or level of experience. When it finally hit me after trial and error, I realized it was a new goldmine. I absorbed everything I could hear from people with more experience and I avidly read the few books on the topic that are available at present. The more I read the more I got inspired. So much so that I launched on a four-month road trip to explore it further. Only towards the end of the journey could I start to realize what united all the various threads I had met previously. In retrospect the idea that got me going may have seemed naïve to many, myself included. The results, however, started to trickle and I could test the hypotheses I wanted to firm in my mind. Thus, of all the paradigms this is the newest one, and also the one that is biographically fresher. It is the one about which I remain most actively curious.

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<sup>8</sup> Luigi Morelli, *A Revolution of Hope*, see chapter 6.

## What Will This Book Address?

The breakdown of societal safety nets, the inability of national governments to take care of the commons, the sheer complexity of multi-layered issues, such as climate change, and how these affect all other endeavors mean that most of **the important issues we need to confront at present are so complex that they defy our understanding, or the understanding of any single group of stakeholders.** The first step in this exploration is to realize the dimension of problems that we want to tackle. It is useful to place the situation within a visual context (figure 1).



**Figure 1:** source Waddell

We can distinguish

- "simple" realities as those that we can sense, categorize and respond to with best practices.
- The "complicated" level of reality can be thoroughly analyzed, as in the case of some piece of sophisticated machinery, and addressed with sets of strategies.
- **In the "complex" systems we cannot predict how parts will interact with each other and interactions are non-linear; it is not possible to discern root causes or act from single control mechanisms.**
- Finally, "chaotic" situations (e.g., emerging after natural or manmade disasters) can be approached through the parts that

respond as complicated systems, then resort to the approach of complex systems, outlined above.

The last two levels introduce us to a qualitative shift, a discontinuity from the previous two levels. At present more and more of our challenges come from here, but we still want to address and act upon them as if they were complicated at most.

How can we address complex or chaotic situations and bring at the same time deep change? We can characterize progressive stages of change as:

- incremental change (variations within a given context)
- reform (breakthroughs obtained through activism and political action)
- transformation that requires what Otto Scharmer's calls "listening to the future that wants to emerge."

Incremental changes will be effective with simple systems. Reform will work with complicated systems once they have been fully understood. To enter transformational pathways we need to operate away from the control and command paradigm to one of "sense and respond": by foregoing the illusion of predictability; creating multitudes of paths and alternatives we can explore and with which we can experiment; and associating the experiences with rapid cycles of learning that allow to map out further steps. Most of all we need to engage in out-of-the-ordinary approaches.

Reforms and political activism of all kinds are certainly necessary. This book, however, follows only the challenge of complex systems and consequently the path of transformation: a both/and which encompasses political reform but does not take its departure from it. In the next chapter we will give examples of the problem and the alternatives. We will start with one major example in our national food system and contrast it with three short, succinct examples of possible alternatives. Welcome to the collective effort of building our new house alongside the old one.