Frequently Asked Questions about *Confluence*

These are answers to questions people have asked about my book *Confluence: Tools for Thinking about How Organized Plans and Self-organized Patterns Flow Together*. You can download this document from cfkurtz.com/confluence.

Thank you to everyone who has sent questions. If *you* have questions about *Confluence*, send them to me at cfkurtz@cfkurtz.com.

Last revised 13 December 2021.

Questions about reading and using the book

What is this book actually *about*? Is it about [gardening, slime molds, ghost towns, etc.]?

Confluence is a toolbox. It has seven tools in it. I designed the seven tools to help you and me and everyone live and work in a world in which organization (intentional plans) and self-organization (unintentional patterns) intermingle and interact. When you open the book/toolbox, in addition to the seven tools, you will find (a) a set of instructions and (b) a set of worked examples.

What's a worked example? In a math or physics textbook, mixed in with lots of rules and methods, you will often find boxed sidebars that say things like:

> Matt has a problem. He dropped his keys somewhere in the park, and he needs to figure out the most efficient way to search for them before his lunch hour is over.

The point of the sidebar is not to help Matt find his keys. The point is to help you understand the rule or method on the page. Similarly, the examples in *Confluence* are not the point of the book. The **tools** are the point of the book. The examples are there to help you understand the tools. In the words of one savvy reader, "This book is very meta."

If the examples are not the point of the book, why are there so many of them? And why are they so long?

Each worked example in *Confluence* is as long as it needs to be to show you how to use that particular tool. The simpler tools have shorter examples. The harder-to-use tools have longer examples. That's why the chapters get longer as the book goes on. I made each example as short as I could make it – while also making sure it explained what it needed to explain.

Why did you write so much about [a topic]? I'm not interested in that.

Each of the examples in *Confluence* works better for some people than for others. I saw this in the book's early readers. Quite often I got pairs of emails like these, sometimes on the same day:

- Why on earth did you write so much about [a topic]? What was the point of that?
- It was in the part about [*the exact same topic*] that I really began to understand what I can get out of using these tools.

Every example helped some people and hindered others. I am not sure if there is anything I could have done to avoid this. I thought about it a lot, but I never came up with a solution (other than writing a much longer book).

If one of the examples in *Confluence* seems useless to you, *translate* it into another domain you find more interesting. If you find ecology boring, for example, think about how those examples might apply to health care or manufacturing. If you find the folk-tale part tedious, see how the same dynamics might play out in education or ecology. That's how I hope you will use the book in any case - to apply the tools to situations you care about.

In the diagram on page 35, you place six of the book's thinking spaces "inside" the first space. Does the diagram indicate situations, contexts, or domains in which the six other spaces should be used?

No. When I said the six other spaces "fit inside" the first one, I meant it in the same way as you'd say a tool fits inside another tool, like a hammer that has a screwdriver inside its handle. I meant that you can use the first tool as a sort of carrying case for the other tools.

In other words, I drew that diagram as a memory aid, not a diagnostic. I did not mean to specify any situations, contexts, or domains of use for any of the tools. They can all be used in any situation. Use the tool that aligns best with *what you want to do*. For example, if you want to think about how organization regulates self-organization - in *any* situation - use the "Regulation" tool. And so on.

Having read the book, how can I start using the tools myself?

Do what it says to do in Chapter Three ("Using the Confluence Space"). Start with the first tool, because it's simplest. But don't stop there. Keep using the seven tools to think about situations you care about. The more you practice doing this, the better you will get at it.

Eventually, you will be able to write your own *Confluence* book, with your own worked examples, and you will know that you have mastered the use of the seven tools. You might even decide to publish your book. Then, when people ask you why you wrote a book about your examples, you will write a FAQ entry explaining that the examples are not the point of your book.

***Confluence* describes a group exercise. How can I use the tools without a group?**

You can do the exercise in a group; you can do the exercise alone; and you can use the tools without the exercise. Just choose a topic to think about, choose a thinking space to work in, and start drawing diagrams. Where can you draw your diagrams? You have three options.

1. **Write** the axis names and/or draw the corner diagrams for any thinking space onto a plain piece of paper.
2. **Download** the exercise-materials file (PDF or PPTX) from the "Printables" section of the *Confluence* web site, then print as many "coloring-book pages" as you need.
3. **Buy** a copy of *The Confluence Workbook*, a mostly-empty bound volume you can draw in (and use to keep your drawings together). Click "Workbook" on the web site for a link to the workbook.

What if I *did* write my own *Confluence* book? Do I have permission to use your diagrams in it?

I would love nothing better than for there to be ten versions of *Confluence,* written by ten different people, covering ten different topics: health care, education, manufacturing, economics, governance, racism, the pandemic, climate change, and so on. That would be *amazing.*

I considered releasing the "printable" exercise materials on the *Confluence* web site under a Creative Commons license that would allow anyone to use them in any publication. However, after some thought, I decided to release them under the Creative Commons No-Derivatives License. This means you can redistribute the materials *exactly as they are*, but you cannot extract the diagrams and use them in your own book (at least not more than is allowed by fair use). I chose the CC BY-ND license because I realized that someone could potentially use a more open license to publish a *Confluence* book that is badly written, confusing, wrong, or even misleading. I feel a responsibility to make sure there are ten *useful Confluence* books in the world, not just ten *Confluence* books.

So, if you want permission to use my confluence diagrams in your own *Confluence* book, write to me (cfkurtz@cfkurtz.com). Tell me what your book will be about. Send me a sample chapter. If I am convinced that your *Confluence* book will be well thought out, well researched, well written, clear, useful, and respectful, I will give you permission to include my diagrams in it. Plus, I will promote your book on the *Confluence* web site and on my blog. I reserve the right to refuse such permission to anyone for any reason, without having to say what the reason is; but I am also open to many possibilities. I might be open, for example, to co-authoring a *Confluence* book on a topic you know well and I don't (there are many such topics).

Questions about organization and self-organization

Why do you describe a spider web as an example of organization and a swarm of bees as an example of self-organization? If spiders are organizers while building a web, why aren't bees organizers as well?

When bees swarm, each individual bee has no idea what the entire swarm is going to do. There is no overall plan. What the swarm "does" emerges out of many local interactions among the individual bees. If every bee in a swarm was *told* where to fly by some super-smart bee with a global plan in mind, the swarm would be organized. But there is no super-smart bee with a plan. The shape of the swarm is emergent.

When a spider builds a web, it alone - its one mind - makes all of the decisions involved in the creation of the web. It has a single plan that covers the entire web. If the parts of the web somehow came together on their own, the web might be self-organized. But the web does not form itself; the spider builds it.

The difference lies in the scope of consideration. A swarm is made up of *many* bees. A web is built by *one* spider. If you were to consider a field upon which *many* spider webs had been built by *many* spiders, the shape of the entire *field* of spider webs might be self-organized. But it would not be organized - unless a super-smart spider told each spider where to build its web to match an overall plan.

You say on page 8 that animals are "weak" organizers. Why do you say that? How do you distinguish between weak and strong organizers?

Every organizer has some degree of awareness, intention, and access, but some have a lot more than others. That's why I call non-human organizers "weak" organizers. Primates and some other highly social species come closer to "strong" organization than any other species. But we are still way out ahead. Crows can recognize individual people, but they can't send them emails. Orcas cooperate as they hunt, but they don't build supermarkets. Chimps form alliances, but they don't hold constitutional conventions. It's all organization, but it's orders of magnitude different in its strength.

Whether organization is weak or strong has primarily to do with the *scope* of awareness, intention, and access. A spider has awareness, intention, and access *within the scope of the web it is building*; but only within that limited scope. It cannot see or understand enough of "the big picture" to organize anything beyond that scope.

When people vote in an election, for example, it is not difficult for them to understand that everyone else is also voting, and that the final vote will rely on what everyone does. Also, people are capable of trying to *act* on a bigger scope - to try to *change* everyone's vote - or to take over in a coup and destroy voting itself.

A spider might avoid the territories of other spiders, but you would never see a spider deliberately place its web in an ugly or hard-to-reach place to spite the people who live in a house because they ruined its last web. A spider might *avoid* a spot where people ruined its last web, but I'm talking about knowing *why* the web was ruined and

wanting to send a message to the people who ruined it. That's a much higher level of awareness and intent than simple avoidance, and it would almost certainly be impossible for a spider.

Could an orca act out of spite? Maybe. Could a chimp influence an election? Probably not. We haven't seen evidence of strong organization in animals, though of course it's possible that we just haven't found the right way to test for it. I did read that one chimp that was taught sign language would sign to its keepers something like "you, me, go out, hurry" - but does that mean it *knew* it was living in captivity? Does it mean the chimp was asking to be released? Who knows?

If you put a *person* in a jail, though, the very first thing they would do is try to figure out how they got there, who put them there, why, and what they could do to get out. That's what I mean by strong organization. A spider in a jar doesn't ask who put it in the jar. We do. Spiders and people organize, but at very different scales.

Questions about writing the book

Where did all of this come from?

The **topic** of *Confluence* came about in the late 1980s, when I discovered complexity theory for the first time. At that time I was in graduate school studying ecology, evolution, and animal behavior. I got very excited about how self-organization interacts with planning and decision making (that is, organization). I've been thinking about the same topic ever since, even though I now work with people instead of animals.

The basic **form** of *Confluence* – the two axes that define its first thinking space – came about in 2001. That was when IBM asked me to work with Dave Snowden on his Cynefin sensemaking framework. I looked at what Dave had written about Cynefin, and I could not make any sense of it. It didn't match the way I thought. So I put it aside and said to myself, "If *I* was going to help people make decisions in light of complexity, how would *I* go about helping them?" And I drew the first confluence space. That happened one afternoon in April of 2001.

So the form of *Confluence* was a solution to a specific problem (Cynefin and my not getting it). The solution was based on my previous work, but I would probably never have developed the solution without the problem. The rest of the *Confluence* spaces grew out of thinking more about the first space in the years afterward. (I also talked to and worked with lots of people and groups during those years, and I took in a lot of feedback on what I was developing.)

The **name** of *Confluence* came about in 2010. That was when I decided to stop calling my version of Cynefin "Cynthia's Cynefin" or "Continuous Cynefin" and start calling it "Confluence." People did use and talk about my version of Cynefin at first, but gradually they stopped, mostly because I was busy working on other things and didn't do much to develop or promote it.

I knew that some people had found my version of Cynefin to be helpful, so I wanted it to survive. I decided I needed to come up with a real name for it. So one day I was walking with my son next to the stream near our house, and I realized that organization and self-organization flow together like the rivulets of water in the stream. That's where the name "confluence" came from.

The **book** called *Confluence* got started in 2018. I had been meaning to get around to "doing something" about confluence for a long time, but other projects kept getting in the way. Then my mother passed away, and I realized that I had better do what I want to get done while I still have time to do it. I spent most of the next two years working on *Confluence* and finished it in early 2021. I have a few more books still left on my bucket list, and I hope to be able to get to them in the years to come.

Okay, nobody has actually *asked* this question. But I have been *thinking* about it a lot over the past two years. In that 2010 blog post, I said:

> I asked Sharon ... to help me, and we two scientists sat down and for several hours talked about complexity and systems and societies and decision making. We asked ourselves: if one was to help people make decisions in many situations, what axes of variation would it be reasonable to consider? We came up with two axes that we thought mattered more than anything else: "the degree of imposed order" and "the degree of self-organization." We drew up a two-dimensional space with those axis labels on it and began to place examples into different areas on it (the French revolution, guilds, dictatorships, bees, pulleys, and so on).

As many know, I feel very strongly about giving credit where credit is due, maybe more strongly than is good for me. When I started working on the *Confluence* book, I looked back on that blog-post statement and realized that I may have given Sharon a little *too* much credit for what happened on that day. We did talk for hours (I doubt it was "several," but it was at least two and maybe three) about organization and self-organization in various situations. But we didn't "come up with" the two axes together. I'm pretty sure that was just me. I don't remember her suggesting any axes or drawing any diagrams. As I recall it, she was more of a sounding-board.

Of course, I could have *edited* this memory to make myself seem like the sole creator of *Confluence* when I was not. I'm as capable of being blinded by pride as anyone else. But I have searched my memory of that day many times, looking for disconfirming evidence, and I can't remember any axes she proposed, diagrams she drew, or models she "came up" with. I can only remember her *reactions* to my axes, diagrams, and models.

Looking back, my guess is that I reached out to Sharon in that 2010 blog post because I felt that her part in the work we did on Cynefin during that time (2001 to 2004?5?6?) had been insufficiently recognized. For example, she helped us carry out many of the sensemaking workshops we used to test and improve both versions of Cynefin during that time. Perhaps my sense of wanting to respect Sharon's part in the overall work led me to overstate the case in her favor regarding the creation of confluence.

Later in that same blog post, I invited Sharon to step up and claim mutual ownership of the confluence framework. She has never seemed to want to do that, possibly because she knows that I drew it and she reacted to what I drew – unless, again, I cannot trust that memory, and she has some other reason not to speak up. Sharon has since moved on to many other good things, and we have not spoken about any of this directly. I still welcome her to tell her story about what happened that day, if she cares to. In any case, the fact that she deserves credit for helping me think through the thing is undeniable, as is the fact that I would never have drawn it in the first place if Dave had never created Cynefin (as it was at that time).

Even if we said that Sharon was responsible for some part of the first confluence space, that would mean she put two or three hours of effort into it. At this point I've put in a few thousand hours of effort. So there's that.

Still, should I have said in my book that confluence was not my idea alone? I don't know. How could it be my idea alone when the same idea appears in dozens of thinking frameworks, some thousands of years old? On the other hand, I have worked hard on what I have created over the years – I've poured my heart and soul into it – and I would like to think that my *effort*, at least, deserves some degree of respect and recognition.

I still believe, as I said in a 2011 [blog post](), that "ideas are like whales that let us swim along if we behave ourselves," and that "part of behaving ourselves is not putting ropes on them." However, I have come to realize that when a person has invested a significant effort (in the form of time, energy, and money) in a thing, it is only fair to recognize that effort by calling that person the owner, or maybe the parent, of the thing. I feel like confluence is my whale. But I use the term "my" to refer not to ownership but to stewardship, responsibility, care, and yes, respect, which goes both ways.

Probably nobody in the world needed to read that answer, but I needed to write it.

You used to call confluence "The Confluence Sensemaking Framework." Why don't you call it that in your book?

I never much liked the term "framework." It sounds like a thing, a product that can be bought and sold. And it sounds restrictive, constraining, like something you have to "buy into" completely. I am more interested in the *process* of thinking about organization and self-organization.

What about "Confluence thinking"? Could you have called it that?

That way of framing things bothers me too. I've noticed that every time somebody coins an "X thinking" term, it isn't long before people start calling themselves "X think*ers*." And then the thing turns into an identity group, an us-versus-them thing, even a religion.

So I don't know how to talk about a "thing you can do and get better at doing" without creating a product or a religion. I've tried to solve the problem by calling confluence *a set of tools*. Tools are products; they can be bought and sold. But everyone is allowed to learn how to use them. Picking up a tool doesn't make you a different sort of person. Also, tools in a toolbox can be mixed and matched, picked up and put down, without the world-building constraint implied by the word "framework."

I'm not sure that calling confluence a set of tools will work either, but it's my best attempt to address the issue.

On page 36, you said that you considered many more examples than you included in the book. What are some of the examples you didn't include?

These are some topics for which I started developing examples but decided not to continue. Some of these explorations took an hour or two, some took days or weeks, and one sucked up four months. All of them went into "the unbook," my term for everything I took notes on but didn't write, or wrote but didn't use.

Confluence

- The history of cities, ancient, medieval, and modern: how they formed, were planned, or both.
- Laws, regulations, and protocols: how their creation and application has changed throughout history in various parts of the world.
- Planned and spontaneous order in science fiction: *A Wrinkle in Time*, *The Left Hand of Darkness*, etc.
- Climate change, recently and throughout history: causes, effects, cultural factors.
- Proverbs and sayings related to complexity: types, topics, juxtapositions.

The Jungle

- Due to my background in ecology, all of the examples I used in this chapter sprang to mind quickly, and I had no trouble picking which ones to use.

The Plan

- Conceptions of children across time (history) and space (geography): the child as angel, demon, property, animal, mini-adult, human being, citizen.
- Power and awareness in Nietzsche's master and slave morality systems.
- Power and awareness in computer games: puzzles, stories, simulations, sandboxes, etc.
- Power and awareness in warfare: Sun Tzu, Clausewitz, other strategists.
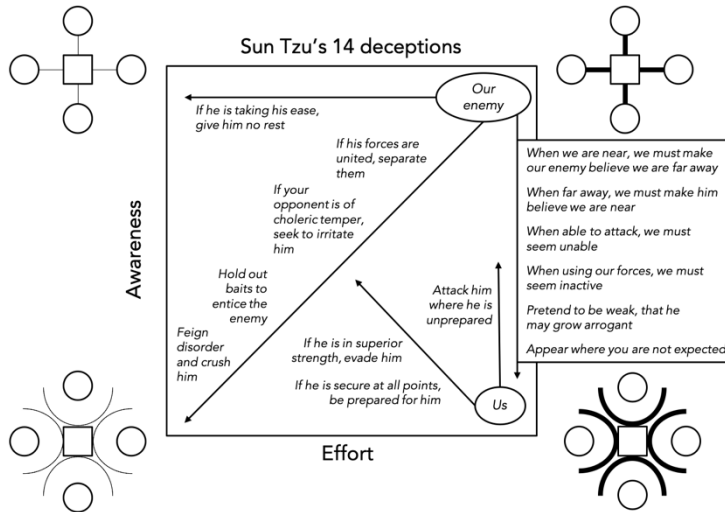
Inundation

- This was another obvious-example chapter. Ghost towns immediately and forcefully presented themselves as the best examples. However, I did look at two other examples: The Seven Ancient Wonders of the World and what happened to them; and Thomas Kuhn's work on scientific revolutions.
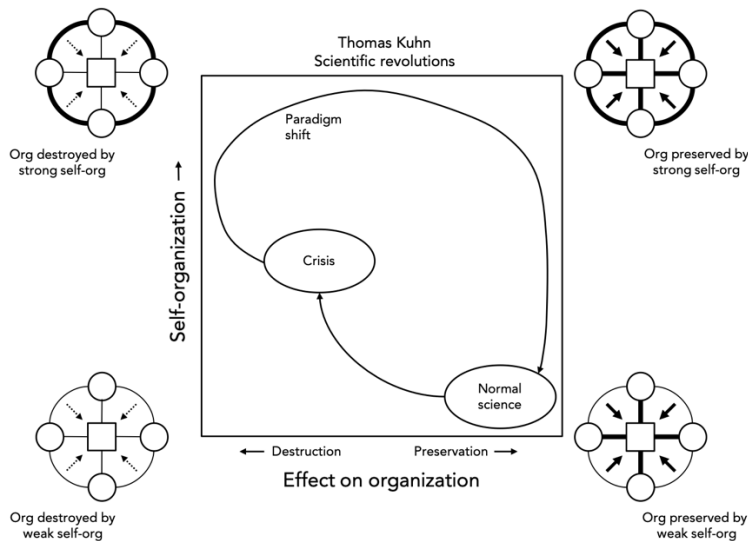
Regulation

- The history of food preservation, including fermentation, canning, salting, boiling, freezing, and so on; plus the culture of food preparation and presentation. (This was the four-month journey that ultimately me to explore how we get food in the first place.)
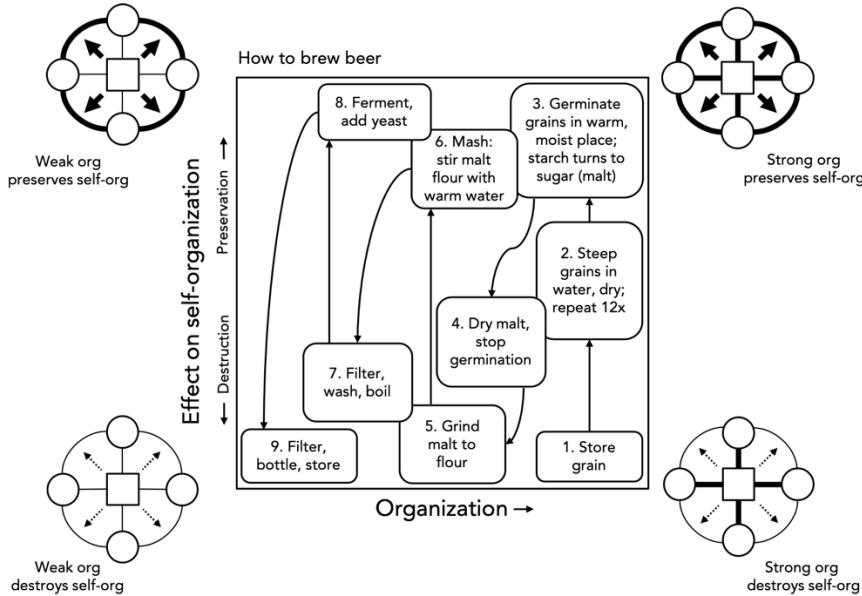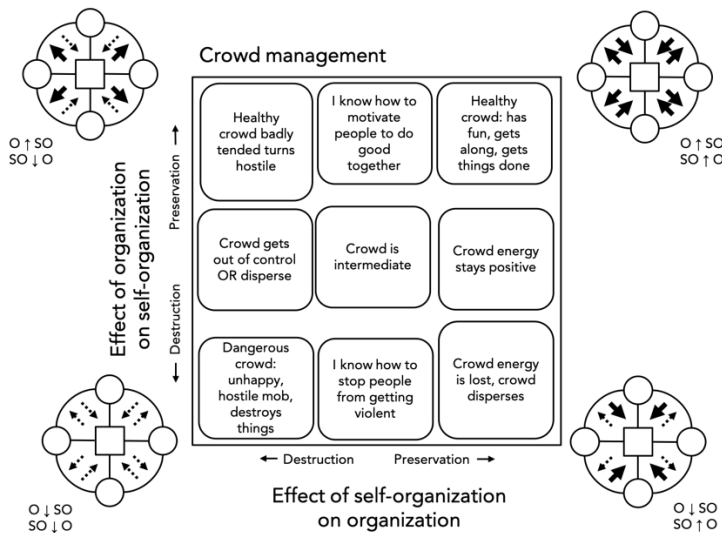

- Dovecotes, botanical gardens, experimental farms, forest exclusion zones, and other organized attempts to regulate self-organized patterns in nature.
- The art of Bonsai tree growing.
- Forestry, land reclamation, urban forestry, heat islands, other attempts to regulate the impact of human habitation on the environment.
- House maintenance: dealing with mold, mildew, mice, and other things that pull apart houses.
- Bridge and building collapses and disasters, and what engineers have learned from them.
- Shearing layers in building design (Site, Structure, Skin, Services, Space Plan, Stuff) and how they require different maintenance approaches.

The Mix

- Research on crowds and how they move around in public spaces, every day and during public events (concerts, games, parades, campaigns, protests), which influences the design of doorways, barriers, corridors, and spaces (regulating traffic flow and avoiding crowding accidents). Specific crowding accidents (e.g., The 1979 *The Who* Concert, the 2013 Kiss nightclub fire) and how specific conditions led to tragedies.

Crowd management

Effect of organization on self-organization

Preservation ↑ / Destruction ↓

|		
Healthy crowd badly tended turns hostile	I know how to motivate people to do good together	Healthy crowd: has fun, gets along, gets things done
Crowd gets out of control OR disperse	Crowd is intermediate	Crowd energy stays positive
Dangerous crowd: unhappy, hostile mob, destroys things	I know how to stop people from getting violent	Crowd energy is lost, crowd disperses

← Destruction   Preservation →

Effect of self-organization on organization

O ↑ SO / SO ↓ O

O ↑ SO / SO ↑ O

O ↓ SO / SO ↓ O

O ↓ SO / SO ↑ O

- Our complex-complicated relationship with fire, and the history of the use and prevention of fire.

Fire management

Effect of organization on self-organization

Preservation ↑ / Destruction ↓

Hearth fire tended badly turns into house fire	I know how to start a fire, I know how to keep it going	Hearth fire: well managed, warming, long-lasting, controlled, healthy
Fire burns too hot, gets out of control – OR fire dies out too easily	Fire is possible but requires proper tending	Fire is easy to manage, warms, lasts a long time
House fire: out of control, destructive, dangerous	I know how to put out a fire, I know how to keep a fire from getting too hot	Hearth fire tended badly goes out, people freeze

← Destruction   Preservation →

Effect of self-organization on organization

O ↑ SO / SO ↓ O

O ↑ SO / SO ↑ O

O ↓ SO / SO ↓ O

O ↓ SO / SO ↑ O

- The design of roads, highways, sidewalks, and rail lines to facilitate traffic flow, avoid accidents, and prevent decay.
- Models of (and debates over) policing (iron fist, three strikes, broken windows, trim tabs, profiling, community support, vigilantism, community watches, shame/guilt cultures, mob rule, etc).
- Fictional utopias and dystopias (Plato's Republic, Zeno's Republic, *Erewhon*, *Brave New World*, *1984*, *Candide*, *The Plague*.
- The Jewish Council in the WWII ghettoes, and the intricacies of resistance to and collaboration with the Nazi regime: friends, relations, strangers, zealots, opportunists, rule-followers, rule-makers, etc (with examples of particular individuals who influenced the dynamics of the situation around them).
- The business ecosystem, with its mix of friendly and hostile competition and cooperation.
- "Street-level bureaucracy" and the many intricacies of contact between citizens and the state.

Connecting the dots

- Scientific discoveries that morphed from unreal to real (or the reverse): tectonic plates (Alfred Wegener), surgical antiseptic procedures (Ignaz Semmelweis), jumping genes (Barbara McClintock), endosymbiotic mitochondria (Lynn Margulis), trepanning, phrenology, spontaneous generation, Lamarckianism, phlogiston theory, etc. There's an excellent list of "[superceded theories](#)" on Wikipedia.
- Concepts of the real and unreal in thought and fiction: doublethink (Orwell), what is normal and what is an aberration (Dostoyevsky), Cognitive dissonance (Festinger), Opposing ideas (Fitzgerald), negative capability (Yeats), the story of Belaqua (Dante), nihilism, pluralism, relativism, utilitarianism, common ("canny") and uncommon ("uncanny") sense.
- Pareidolia (seeing faces in patterns) - where it comes from, why it happens, how people have used it to suit their purposes.
- The known and unknown in *Star Trek* - an episode-by-episode guide to whether that strange cloud is trying to communicate with us (this would have been fun, but . . . not everyone is a Trekkie).
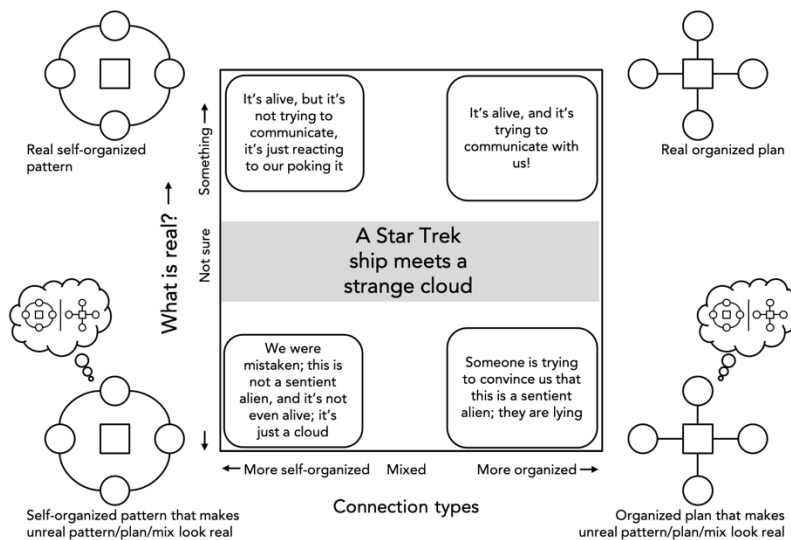
Have a question? Send it to me at cfkurtz@cfkurtz.com.