

*Translation from “L’Essai sur l’oeconomie” by Pierre Calame, published at [Editions Charles-Léopold Mayer](#), Paris, 2009. Translated from French by Michael C. Behrent, reviewed by the author. All rights reserved.*

## **Part I: Putting Things into Perspective**

### **Chapter 5: From the Economy to the ~~Economy~~**

“One of the principle reasons for the poor progress of the moral and political sciences, and particularly for the difficulty in spreading and ensuring the adoption of their true principles, lies in the imperfections of the language they use.”

Condorcet, Sieyès, and Duhamel, in the *Journal d’instruction sociale* (1793)

We should now be convinced of the need for a radical change in the systems of thought and the institutional arrangements upon which production and exchange are currently based. We have identified several forks in the road that could serve as new starting points, a few emerging trends that could be followed, and a number of intuitions that could be deepened. We see, in short, a broad range of insights and ideas. By deconstructing false assumptions, we have discovered an abundance of material out of which a new outlook can be built. What we are still missing, however, are the blueprints and tools necessary in order to start rebuilding. *What will*

we build? How? And with whom? This is what I now propose to explore. I will do so first by defining our ultimate goal and coining a new word to name it: *oeconomy*. Next, I will explain why bifurcations occur in systems that are congenitally opposed to change. This will lead me, in third place, to propose that we think of strategies for change in terms of their actors, the level at which they occur, the stages they go through. This will provide clues to finding partners in the collective task of rebuilding.

## **1. Oeconomy: Back to the Beginning**

In building a new system of thought, vocabulary is essential. Vocabulary is the key to thought. I mentioned earlier the persistent confusion between economic globalization and globalization-as-interdependence. Now what about the word “economy” itself? As I explained earlier, it consists etymologically of two Greek words: *oikos*, which means household, or a home that is shared, and *nomos*, which means law. Strictly speaking, economy refers to the rules of household management. However, as Mikhaïl Gorbachev explained in his famous United Nations speech in 1988, the home we share is now the planet itself. The word’s original meaning can be found in terms like “home economics” or the “domestic economy.” It is interesting to note that the adjective “economical,” which refers to the scarcity of natural resources that has always conditioned our society, now refers to the exact opposite. An “economist” is someone who is constantly trying to create new needs, eliciting the needs that will fuel the growth that the system needs to avoid collapse. It is enough to consider the way in which discourse about consumption has over time adopted an increasingly strident tone. Journalists, with straight faces, write things like: “Fortunately, the morale of American consumers remains high and they

continue to borrow,” “sales have stimulated growth,” and so on. So much for puritan frugality. Long live waste!

What are we to do when the current use of a word is so far removed from its original meaning? And when it is precisely that original meaning that matters today, as we have to completely rethink how to manage our planetary household and organize production, exchange, and consumption?

There are two possibilities: either we must strive to give “economy” back its original meaning, or create a new term. In the case of “governance,” though it is often understood in light of the very restrictive sense given to it by international institutions, I thought that the rehabilitation of the old French word “*gouvernance*” was worthwhile. It was important to strive to endow the word with a meaning that was rich, comprehensive, and new.<sup>1</sup> But in the case of “economy,” the battle seemed lost in advance. I thus decided to speak of “oeconomy,” as a way of referring to the art of organizing material and immaterial exchange between humans, between societies, and between humanity and the biosphere. This is the word I will use from here on. I will speak of “economy” only when discussing current economic thought. This will spare me from having to put scare quotes around “economy” each time I use it. In choosing to speak of oeconomy, rather than of “a responsible, plural, and united economy,” I drew on the word’s etymology. It seemed to invoke the very issues that we must address at present. Somewhat naively, I imagined that I was alone in taking this initiative. These kinds of delusions are as common as they are commonly denied, for our ideas can never be anything but the more or less conscious expression of collective trends. Aurore Lalucq’s online research has proved that to use the word “oeconomy” is simply a return to the beginnings, since in the eighteenth century this word was preferred to that of “economy.” I also discovered how many people, at the same time

---

<sup>1</sup> Pierre Calame, *La démocratie en miettes* (introduction), *op. cit.*

as me, have become interested in the word and the ways in which, in the period before the French Revolution, it was used to address oeconomic questions. I relied in particular on Christophe Salvat's working paper from 2005.<sup>2</sup>

In 1615, Antoine de Montchrestien (1575-1621) wrote a treatise on political oeconomy for Marie de Medicis and the young King of France Louis XIII, in order to teach them how to make policy choices. Oeconomy, at the time, meant the art of managing people and things. Antoine de Montchrestien speaks of the “public menagerie,” from which both the terms “household management” and the modern idea of “management” are derived. Oeconomy was thus the art of thinking about relations between things and between people. In 1687, Pierre Poiret published in Amsterdam a work entitled: *Divine Oeconomy, or the Universal and Proven System of the Works and Purposes of God towards Men*. Oeconomy, in this case, was inseparable from systems and the management of systems.

The book by the famous botanist Carl von Linneus (1707-1778) entitled *Principles of Oeconomy*, which was published in 1752, is even more precise. It speaks of principles of oeconomy based on natural sciences and physics. According to him, it is the “art of preparing natural things for our own use, the art of making use of all Nature’s goods.” The “laws of oeconomy” to which he alludes are not what we usually understand by that term. Rather, they are inseparable from the laws of physics: “Thus, knowledge of natural things and of the action of elements on bodies, and of the means to direct this action towards certain ends, are the two axles on which oeconomy turns.” This is why his analysis of oeconomy is based on the nature of the elements to be considered: metals, minerals, vegetables, and animals.

---

<sup>2</sup> Greqam, Working Paper 200550, “*OEconomies* – les articles oeéconomies et leurs désignants dans l’*Encyclopédie*,” Christian Salvat, CNRS/Greqam, November 2005.

Like Pierre Poiret's book, the idea of divine providence permeates these reflections.

*Oeconomus* is nothing other than the art by which humans use what God has given them. He writes: "It would be reasonable to say that God not only gave us, in the vegetable kingdom, the best of all that we could possibly imagine in the way of food, clothing, and shelter, but that he also wanted it to please our senses. He spread across the earth a carpet of flowers and he made man so that he might enjoy the innocent pleasures that their infinitely variables scents and tastes can offer. Thus to "run the household" [*ménager*] of nature is to know how to make use of it: "A wise oeconomist knows how to make use of these circumstances and to see to it that no one earns more than he." Then he offers many examples of the capacity that people have to make use of resources that are unique to the particular context of each country. It is, however, with the French *Encyclopédie* (c.1754-1755) that the terminological shift occurs. In his discourse on political oeconomy, Jean-Jacques Rousseau uses both terms. He explains: "The word oeconomy comes from *oikos*, house, and *nomos*, law. It originally means nothing more than the wise and legitimate government of the household for the common well-being of all the family. The meaning of this term was subsequently extended to the government of the large family that is the state. To distinguish between these two meanings, the latter is called general or political economy, and the former domestic or particular economy."

Thanks to this quick overview of eighteenth-century thought, we can see that the art of management is inspired by three ideas that are particularly relevant to us today: governance, the management of relationships, and the art of making a balanced use of natural resources. This idea of a wise government of men and of things, which is rooted in the patriarchal values of an agrarian economy, will be progressively replaced by what Aristotle called "chrematistics."<sup>3</sup>

---

<sup>3</sup> Marie-José Mondzain, "Chrématisation et économie," included under the larger article "Oikonomia." *Dictionnaire Le Robert*, Seuil, 2003. Available online.

Aristotle distinguished between two economic frameworks: “One that is closely tied to nature and which endeavors to stock, manage, and make a profit of the products that are necessary to life (the economy), and an unlimited one, which seeks only enrichment (chrematistics) and requires ethical oversight because it substitutes goods for money.” With the idea of “stockholder’s value,” which late twentieth-century economists hold dear, we have retreated from oeconomy back to chrematistics. The time has undoubtedly come to reverse course.

## 2. The Art of Bifurcation

The bio-socio-technical system that constitutes all societies is characterized both by interdependence and inertia. While inertia can be found in the social system as a whole, its most common victims are systems of thought and institutional arrangements. Our society changes every day. In the technical domain, it changes perhaps too quickly—so quickly that our ability to regulate it inevitably lags behind. But social evolution to a great extent obeys the heavy, structural logic of its actors, and thus follows a course that has been largely determined in advance. I have given many examples of this inertia: the application of older ways of thinking to a society that has profoundly changed, the self-referential character of doctrines and actors, the imbalance between information and expertise, the incapacity of monitors to see anything other than what they are looking for—not to mention the inertia of urban structures, the dead weight of past investments, the power of interests bound to the *status quo*, and so on.

It is thus less important to understand how our society develops according to a predetermined course, than to understand how it might bifurcate—that is, how it might change directions. Hence the importance of considering history. Like rockets, societies have a primary motor, which propel them along their predetermined course, and secondary motors, which may,

at times, propel them in a different direction. It is essential to consider these deviators when the need to change course becomes apparent. These include ideas—often marginal ones—that, over time, will come to guide thought as well as practice. The European Commission uses the term “mainstreaming” to describe the ways in which once far-fetched ideas become commonplace, and the ways in which a deviant practice becomes the norm.

Major social institutions belong to a society’s primary motors. They innovate, but within predetermined constraints. In my own experience, I have been able, first as a top civil servant, then, more surreptitiously, as a corporate executive (when I was secretary general of the French steel industry major Usinor), to observe up close the sociological particularities of major government organizations and large corporations. Though they are of course concerned with their own well-being, they are also, far more often than is realized, dedicated to the public good. Most innovate from time to time, but only within the constraints allowed by the system. This also applies to initiatives taken to promote corporate social responsibility: they have good ideas, but their impact is insignificant as long as they take the system as a whole for granted. Their training makes economic and political leaders good at toying with ideas, but bad at creating. To create is to expose oneself to ridicule and to risk marginalization by one’s peers. Social institutions are, in the end, “destiny’s willing tools”: they innovate within the constraints of the system’s rules, without having the urge, the courage, the imagination, or the inclination to change.

A society is like a large ocean-liner: through inertia, it can chug on for a long time in the same direction; it has, however, a difficult time making turns. An ocean-liner’s power lies in its mass, rather than in the speed with which it reacts to change. To reproach it for being this way would be pointless. The purpose of great social institutions is to ensure society’s self-

reproduction and perpetuity. They are its fletching; they guarantee its stability. But the very thing that usually gives its strength becomes a weakness when drastic change is needed.

In companies, as with scientific research, radical innovation rarely comes from the inside. The “inside” is usually too structured and too organized. Its division of labor is too complex and its explicit or implicit rules of the game are too elaborate to permit radical change. This is so true that large companies, which have unrivaled capacities to innovate, to employ new technical means to create new products, and to seize hold of new opportunities as long as they are consonant with the company’s ultimate purpose, are acutely aware, when they need to envision more radical innovations, that they must turn to external innovators or create virtual micro-companies within their fold. They know that the radical innovations upon which their survival may depend in the long run will most likely be born on the outside and that they must be on the lookout.

The example of the computer industry and the internet (which I have already mentioned on several occasions) provide a perfect illustration. To manage, to innovate on the margin, to make optimal use of one’s resources, on the one hand, and to innovate radically, on the other, correspond to different kind of personalities and structures. The same is true of ideas and doctrines. Changing course implies exploratory initiatives on the margins of codified knowledge. The new economic models in the computer industry did not come from IBM, but from Microsoft; not from Hewlett-Packard, but from Dell; not from government bureaucracies, but from the Web Consortium; and not from academia, but from Google.

### **3. A Strategy for Change: Actors, Levels, and Stages**

What would a strategy for systematic change look like? How can we get from economy to oeconomy? The fact that change inevitably takes time is a consequence of the system's inertia. But why is it difficult to conceptualize and to direct this change?

It is difficult because a large number of conditions must be first identified, then achieved. I have organized them into three groups: actors, stages, and levels. To accomplish a shift from economy to oeconomy, these three groups must exist simultaneously.

### ***Actors***

There are four categories of actor: innovators, theorists, generalizers, and regulators.

#### ***Innovators***

The innovator's first task is not to "rethink the economy," but to develop new practices. Often, these are simply reactions to situations which have become unacceptable. Promoters of organic farming, inventors of social currencies or microcredit, activists for a cohesive economy, ethical investments, or fair trade, and defenders of freeware (as well as many others who have already been mentioned) are already inventing tomorrow's world. For them, change is the child of protest and hope. Rarely are they able to provoke systemic change on their own, either because they are too isolated or because the innovations they propose are not comprehensive enough. They risk finding themselves on the margins of the system (this is true of several of the examples given) or of simply forming, with others, a protest movement (as with anti-

globalization activists). They do not provide a comprehensive or credible alternative to the current system.

We must be as modest as nature itself, which always proceeds by trial and error: innovation, as everyone knows, leads to many false good ideas, and to many paths that turn out to be dead-ends. We know, for instance, that currency must be reinvented. There are many paths in that direction, but it is difficult to know which to take.

### *Theorists*

By theorists, I mean creators of new doctrines, rather than professors of dogma. Their job is to arrange disparate facts into a coherent system. In periods of change, they deconstruct the conventional wisdom, explain how it contradicts reality, and reorient thought in general, introducing new concepts and goals. In the realm of governance, I have been personally involved in the work of theorizing—i.e., in the elaboration of concepts drawn from reality rather than books. Daily engagement with reality reveals the dead-ends to which the current doctrines lead, through the meticulous comparison of situations, the identification of new structural trends, and the formulation of general principles. The shift from an old to a new doctrine occurs through a process of inversion, in the mathematical sense of the term. A previously marginal idea becomes central, while concepts that were once essential are relegated to the background. Take the example of institutional arrangements. Without being absent from classical economics, it played no more than a marginal role. What really mattered were companies. Yet this concept, as I have demonstrated, is central to the future, as it proves that stable configurations are those that group together multiple actors. Other examples of previously marginal concepts that must now become

central include territories, value chains, the equilibrium between humanity and the biosphere, development itineraries, and the non-fungible character of time.

To create new doctrines, theorists need innovators who experiment with new paths.

Muhammad Yunus, the founder of the Grameen Bank of Bangladesh, is typical of those who fall into both categories: “microcredit” certainly existed before him, but he was able to conceptualize it, allowing it to take off.

### *Generalizers*

Generalizers are actors who are able to change the level at which innovation occurs. They can be major actors, like large companies or government agencies, who adopt and disseminate an innovation. The global summit organized by the World Bank on microcredit, for instance, brought the experience of the Grameen Bank to an international audience and gave it international legitimacy.

Generalizers can also be professional, academic, or activist networks, as well as political or media leaders and online communities. In these cases, the keywords are information, dissemination and the legitimization of new ideas.

When an oil company concludes that the future belongs to renewable energies, when a major investment bank decides that it must integrate corporate social and environmental responsibility into its long-term strategies, when a supermarket chain decides to emphasize organic or fair trade goods, and when a city decides to review all of the cafeteria contracts of its schools, its retirement homes, and its hospitals to favor sustainable farming and local products, they are all playing important roles in changing perceptions and in shifting the level at which innovation occurs.

### *Regulators*

Regulators are primarily public institutions. They have neither the aspiration nor the vocation to be the primary motors of change, but their role is determinant and irreplaceable. It is they who have the power and the responsibility to create the new juridical and administrative framework necessary to make innovations general and permanent. Without them, the most relevant ideas pertaining to currency, the international regulation of oeconomy, and institutional arrangements are nothing.

### *Levels*

Innovation and theoretical reflection occurs at several different levels. Often, innovators appeal to the behavior and motivations of individuals: consumers, in the case of fair trade; citizens, when they are encouraged to act in ways that promote sustainable development; savers or investors, in the case of responsible investment; company heads, when they are asked to consider the social and environmental consequences of their decisions.

It is at the local level that many of the practical alternatives emerge. They favor cooperation over competition, or organize new systems of exchange through parallel currencies. The national level remains a major space for transformative strategies, even if the internationalization of interdependence and the globalization of production and exchange divest it of some of its prior preeminence. I do not believe in a return to the past model of national economic spaces that are more or less closed in on themselves. Even so, nation states are well-positioned to propose alternatives to neoliberal models of management. The state remains the regulating level *par excellence*, it has the legitimacy needed to create new juridical categories, to

formulate new rules, to promote the traceability of production processes across chains, to initiate, to tolerate, and to promote alternative currencies, and to support new forms of public-private sector cooperation.

The regional level will become increasingly important, as regions are in sync with globalization-as-interdependence: the future global governance will likely be based on a network of some twenty different world regions.<sup>4</sup> The organization at the level of the European Union of a market for trading emission rights is a first step towards the establishment of a market for negotiable quotas for natural resources.

The euro is becoming an alternative to the dollar's monopoly. In a statement from October 2007, the European Council announced its intention to regulate globalization. And it cannot be ruled out that Europe will one day attempt to define its own model of sustainable development. The energy-climate package adopted by the Union in 2008 is a first step in this direction. As for China, which must be taken into consideration if only because of its size and population, and India, which is as much a world region as a country, they know they cannot avoid the model of a "harmonious society," to use Prime Minister Wen Jiaobao's favorite term—that is, a society seeking harmony between the coast and the hinterland, cities and rural areas, economy and society, humanity and the biosphere.

The global level is, finally, our new domestic space, and thus oeconomy's natural domain. Giving equal importance to the development of world trade and environmental protection; establishing at a global level a market for greenhouse gas emission rights; defining a new world financial and monetary order; applying international law to major companies; creating a global fiscal system; establishing multi-actor management of international regulations (as has

---

<sup>4</sup> Pierre Calame, ed., *Pour une gouvernance mondiale efficace, légitime et démocratique*, Éd. Charles Léopold Mayer, 2003.

began to occur with the internet); launching a “global Marshall Plan” for poor countries; identifying and managing the goods that humanity shares: all these initiatives and ideas reject the dominance of the market and of profits derived from property, be they material or intellectual, and they all imply global decision-making and regulating production and exchange on a global scale.

From the transformation of individual behavior to new systems of global governance, these initiatives, innovations, and ideas are all equally necessary. A strategy for change and, more precisely, a new conceptual and organizational system must encompass these five levels and integrate them into a coherent whole.

To counteract the way of thinking that currently dominates, it is essential to identify oeconomy’s integrating principles. The power of the market concept, to which the theories of a professor of moral philosophy named Adam Smith owe their success, lies in its simplicity—its capacity to explain economic relations occurring at the level of a village as much as those occurring on a planetary scale. Similarly, oeconomy’s core principles must also be able to adapt to an infinite variety of situations and of levels. The search for integrating principles is one of the most challenging specifications oeconomy faces. They consist both of concepts and of operational principles.

In the eighteenth century, the “invisible hand of the market” presupposed the existence and preponderance of a money economy. Similarly, double-entry bookkeeping, invented in medieval Lombardy and fine-tuned by the Venetian Luca Pacioli in 1494, contributed to the development of international companies, making multiple economic activities and consolidated balance sheets possible. As we set out to analyze material flows and to manage relations between

different levels of exchange, we must strive to achieve a similar degree of simplicity and integration.

### *Stages*

In imagining the stages of a transformative strategy, we should seek inspiration from the only institutions that have accumulated wide experience in this domain: large companies. For them, the risk that they might at any moment be outpaced by their competitors is synonymous with decline, dispossession, dismantling, or death. Based on the experience of large companies, I identify four major stages in the development of a strategy: awareness of a crisis; the formulation of a shared vision; the search for “partners in change”; and taking the first steps.

#### *Becoming Aware of a Crisis*

Change is always painful. In economics, Cassandras are legion. Their voices, which between 1960 and 1970 were at first isolated and timid (in response to environmental decline, the gap between the rich and poor, natural resource depletion, the spiritual poverty of a *Homo economicus* reduced to the functions of production and consumption, the dangers of an increasingly unregulated global economic and financial system), grew, towards the end of the twentieth century, increasingly loud. They were broadcast by the media. The earth as *Time*'s 1988 “man of the year,” the Brundtland Report, the Earth Summit, the growth of the anti-globalization movement, the impending catastrophe of global warming, the signs that the era of cheap energy is coming to an end, the spread of natural catastrophes: these trends are now firmly lodged in our minds, discussed at the dinner table or at work, and have permanently entered political rhetoric. Have we become conscious enough of these crises to renounce the known in

favor of the unknown or to cast doubt on our own certainties? In wealthy and aging countries, nothing is less sure. We pretend to believe that a little more energy efficiency, a bit of science and technology, a little more environmental and social consciousness, a slight extension of our working lives, and a little less enthusiasm for our cars are all that it will take to steer the unbridled economics of “more, always more” to calmer pastures. Yet experience teaches us that any systemic change requires a shared awareness that change is absolutely necessary.<sup>5</sup>

I do not despair that such a change could occur in coming years—provided that at the same time a clear vision of the future emerges. Between 2005 and 2008, awareness of climate change progressed considerably. In early 2008, the president of the European Commission, José Manuel Barroso persuaded member states to adopt an energy-climate change package that would have been unthinkable a few years ago.

The growing power of China and India will reshuffle the deck, since competition for energy and raw materials have intensified. This became apparent in 2007-2008 with simultaneous spikes in the price of oil and of many raw materials. We are, moreover, headed towards a general monetary and financial crisis without being able to tell where it will end. The domino effect triggered by the American subprime crisis in 2007 was different from previous financial crises (e.g., the foreign debt crises of developing countries such as Mexico, Russia, and Thailand, the bursting of the internet bubble, etc.) in that it began at the heart of the financial system, rather than its periphery. In any event, it proves how fragile the system is.<sup>6</sup>

---

<sup>5</sup> Note from December 2008: The reactions to the economic and financial crisis that intensified in the fall of 2008 are significant. While the crisis reveals that an era is ending, most of the remedies being considered (i.e., stimulating consumption and investment) have only one goal, that of returning to model based on growth.

<sup>6</sup> Note from December 2008: A generalized crisis occurred faster than expected. There is reason to fear that appeared before other alternatives could be discussed seriously, creating a risk that unsuitable remedies will be adopted.

### *Formulating a Vision*

A common vision is indispensable for mobilizing commitment. The purpose of this book is to define it in broad strokes. Several elements have already been discussed. By what method can such a vision be defined? Several steps must be taken. First, we must get out of the blind alley in which we find in ourselves, in which economy is considered both a science (“how things work”) and a norm (“what must be done”). It is neither. It is an outdated ideology, out of sync with society’s needs.

Secondly, we must define our goals. Oeconomy has no other goals than those that society assigns it: the organization of production and exchange with a view to creating a responsible, pluralistic, and united society. While the scope of oeconomy’s action is specific, its goals are not.

We must, thirdly, consider the technical, institutional, and juridical means for achieving these goals. Product traceability is nowadays possible: technological advances, notably computers and the internet, have opened up radically new prospects in that field. It is also possible to analyze trade flows within a particular territory, or to distinguish, for a particular good or service, between human labor and the quantity of materials used to produce it. Various types of distance work are also technically possible. And so on.

But is it not naïve, some may ask, to imagine a comprehensive alternative to the current economy, an oeconomy that rubs companies, states, academia, and the finance system the wrong way? Is it not foolish to believe that these actors—perhaps with a touch of grace—will support such an alternative? Does one not everyday see resistance to even the most modest changes as soon as they threaten entrenched interests? Of course. But is there any other solution? Political and social conflicts can be useful both for increasing awareness and for implementing change. They are, on the other hand, incapable of producing a vision of the future. They oversimplify

things, and have neither the time nor the inclination for systematic thought. Moreover, often, at the international level, force leads nowhere. Take the example of sharing and managing natural resources: we simply must learn how to that. State sovereignty over these resources will never become complete again. It is better to acknowledge this up front and to get down to the business of making proposals, embarking on negotiations that can only be long and laborious with China, India, Africa, Russia, and Brazil, identifying unavoidable transitions, and seeking win-win solutions.

### *Finding Partners in Change*

Finding allies is the third stage of a strategy for change. Who will they be, and who must they be if oeconomy is to be achieved? Who has the legitimacy, the ability, and the will to undertake transformations of this magnitude? Institutions and established organizations have, by virtue of their origins, vested interests in the status quo. Citizens alone possess this legitimacy. You might wonder: “Citizens?” When we are dealing with questions so complex that they even befuddle the experts?” Yes—the citizens. And this for two different reasons.

First, we are all oeconomic actors, whether as workers, consumers, savers, or beneficiaries of public services. And many of us suffer from a kind of schizophrenia, arising from the contradictions between what we believe and what we do.

Secondly, as citizens have grown increasingly informed, they have lost their inferiority complexes in relation to experts. They want to take control of their own lives. This is evident in the case of science.<sup>7</sup> Citizens are becoming involved. More and more of them are realizing that they if they cannot grasp scientific debates and relinquish their right to weigh in on the outcomes

---

<sup>7</sup> A detailed account of these changes can be found in Richard Sclove, *Choix technologiques, choix de société*, Éditions Charles Léopold Mayer/Descartes et Compagnie, 2004.

of scientific research, democracy itself will be bled white. They understand the risks arising from the development of science and technology and are no longer so inclined to see them simply as the “collateral damage” of progress. They no longer want to entrust to “experts” the right to assess these risks in their place. They have renounced the illusion of expert neutrality and consensus, preferring debates in which the different sides confront one another.

This comparison between science and market economics is not arbitrary. Both played an essential role in building the modern world.<sup>8</sup> It is precisely because they transformed the world that they must now be reoriented. The same citizens who have called science into question are tired of the economic experts on television, the radio, or newspapers. They sense that this conventional wisdom, which must be repeatedly readjusted to match reality and fashion, fails to address the fundamental issues and provides no long-term direction. Citizens alone can blaze new trails.

### *Taking the First Steps*

Transition is the major challenge of systemic change. To imagine two different systems is not that hard; to figure out how you get from one to the other is far more challenging. In the realm of oeconomy, a few first steps have already been taken. I have described several already. The danger now is that, because we do not yet have a comprehensive vision, they will remain marginal and feed the illusion that we can dispense with radical change. But if they are integrated into a global perspective, they will appear as the first steps towards change and will serve as proof that change is possible. They must be bundled together, so that we can see the connections between different elements, such as: reforming the way economics is taught in high school and at university; creating a corpus of international law for large companies; modifying

---

<sup>8</sup> See [www.alliance21.org](http://www.alliance21.org).

the way in which financial middle-men are paid; creating a carbon currency; labeling products with their “material and energy” composition; modifying intellectual property law; establishing territorial economic accounting; taxing the consumption of non-renewable resources instead of taxing work; modifying the rules for nominating and compensating the heads of large companies; encouraging whistle blowing; writing the principle of responsibility into constitutions; evaluating the ecological debts of the word’s regions; defining international rules for sharing and managing natural resources, establishing and publishing measures of well-being; and founding a new international monetary order.

This list, which has a deliberately catch-all feel to it, is designed to illustrate the sheer diversity of discrete actions, each of which is within our grasp. Simply combining and coordinating them would represent a great step towards oeconomy.

*Translated from French by Michael C. Behrent.*