Chapter 16

Dealing with the Future: General Considerations and the Case of “Mobility”

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To tell is not to foretell.

Prospective is not prediction.

Big data and computers, so-called artificial intelligence, have made our predictive capacities higher than ever. Health expectancy, chance of marriage and divorce or even fortune: Everything is computable. Is it really interesting?¹

Prediction means to simulate the development of a system out of currently available knowledge, under the hypothesis that no new element or conceptual break will happen between the prediction and its realization. To predict the future is clearly possible, and it is the best way to overlook the *new*, to deprive yourself of the «real» future, i.e., an *open* one, and not a mere repetition of the past.

However, this openness is not granted. It is a hard work to open a future “framed” by our distrust of uncertainties and insecurity, by so many inclinations stemmed from cultural as well as material heritage. This is how I see and practice prospective: not to determine the future but on the contrary to «under-determine» it, as philosophers say, or as engineers or physicians would put it, to enhance its degrees of freedom. The problem of the future is not a lack of knowledge. It is rather that the future is determined by powerful mechanisms of all kinds, including mental ones, in which we are caught. For instance, it is «written» that the global warming will pass the dangerous threshold of 2 or 3 degrees.

¹It is certainly useful, for weather forecast, insurance, risk prevention, and preparation of various events, at least the ones you are able to envisage, hence to predict. For the rest, it would rather heighten the risk of missing it all.

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The aim of prospective is not only to make that sort of prediction, or to contest it, but to offer new perspectives. To reopen the game.

How does it work concretely? The prospective exercise has two faces. First, a critical study of current paradigms in a specific domain. A prospective criticism consists in identifying the (or a) dominant paradigm in this domain and to evaluate its degree of obsolescence: Are its concepts and denominations system still adequate? To which extent does its unfitness hinder our capacity to appreciate the emerging realities and to welcome the nascent?

The other face of the prospective exercise is the detection and the formulation of emerging paradigms in the given domain. The prospective formulation is a creative act as well as an awareness of something that is already there, implicitly or confusingly. Its expression is an effective way to help trigger the emergence of a paradigm. To name a new paradigm soundly, in a clear, understandable and yet uncommon (even enigmatic) fashion is a condition of its fertility and thus determines the strength of the *prospective proposition*.

This twofold exercise, both critical and «pro-positive», demanding expertise and creative conceptualization, characterizes the *conceptive prospective* thus named to oppose the predictive one. It can be seen as a Design activity that does not target new products but new conceptual fields. It calls for various knowledge, but in order to nurture a work on concepts and languages. This work, which nears literature, art or philosophy, can regenerate the unknown, and «re-open» the future, as we have said earlier. The role of the prospective is neither to distress nor to reassure, it is to stimulate and sustain the creativity proper to innovators, strategists, all those who love the future!

Time to highlight this theoretical approach through a concrete domain.

It will be «Mobility», for the following reasons.

The first one is that I know it well enough. I spent a long career in one of the major urban transport companies (RATP, multimodal public transport system of greater Paris, France). I had various activities, in production as well as in the management of major projects. I worked as a researcher, and was in charge of the prospective and innovation department. I had the opportunity, over a long period (35 years), and from many angles, to witness the great changes of the urban transport domain, to try to understand them and to anticipate their evolutions.

Second reason: the study of mobility can be fruitful for other domains as it offers a good illustration of a conceptive prospective approach.

It is not exaggerated to say that the standard transport paradigm has entered a phase of obsolescence. «Transport» is the (multiple) answer to *this* question: «How to go the fastest possible (and in the best conditions of security, cost, quality, comfort) from point A to point B?» The emerging paradigm that has started to overcome it (or to complete it) is that of the «Mobile Life». It is a conceptual rupture that deeply affects our habits and ways of living, economic actors and business models, services, tools, and infrastructures. The iconic tool of this passage to the mobile life is no doubt the smartphone. It is noticeable that this device is now what we call a *mobile*. Therefore, automobile, airplane, and train have become the symbols of the «ancient mobility» (*transport*)—which does not mean that they are

going to disappear (after all the horses are still here!). In fact, these three classic modes, beacons of the twentieth century, will do better than survive; they will undergo a profound mutation. The car will see a brighter future! However the car of the future (particularly in the horizon of its autonomy) will not be «the car» in the sense we are giving it today, inasmuch as a smartphone is not at all a «telephone» (a tool whose definition is to allow speaking from a distance), although one can use it to telephone on occasion. The smartphone is a tool of the mobile life. Of the mobile Internet; of mobile trade, education, health, leisure, and even of mobile love. The car of the future will no longer fit in the category of the *vehicle* (a means to go from A to B) but to the categories of, somehow odd to our ears, «mobile place» and «mobile body».

Although the smartphone stands out as the superstar of the mobile era, it has, especially in the prevailing urban context, two unexpected but significant companions: the bike and the shoes!

The bike, pleasant, convivial, excellent for the health and for the environment, qualified as a mode both *soft* and *active*, has become within a decade, a real urban «must». No modern city can do without biking tracks, services of Velib type (short rental self-service bicycle), stations, electrical bikes. But beyond the «velocipede», a compound word made of the latin *velox* (rapid) and the *biped*, it is the walking human body (the biped) that is making a major comeback in the new and next mobility. The body, equipped, «augmented», not only with shoes and high-tech outfits, will be the subject of stunning innovations to come. The «oldest transport mode ever» is likely to be the most promising one for the future.

Walking is back, under different forms! The new technological objects are expanding: gyropodes, urban stilts, electrical monocycles, and various peculiar urban gliding engines. Walking is also giving us a low-tech example of one of the most fertile innovation process today: hybridization. One of the cutest inventions of this type is the «Pedibus» (or Walking Bus) that can take the kids to school, exactly in the same manner as a bus (fixed route, stops, schedule, driver) except that there is no «bus» (vehicle)! The Pedibus is a software without hardware, a fantastic «crossing» between walking and bus.

This kind of conceptual hybridization has expanded in the world of transport. Hence the classic conceptions of «public» versus «individual» transport gradually subsides, making room for a new paradigm, unusual yet already in practice: the «PIT». I have proposed this contradictory expression («Public Individual Transport») for some times now, in order to focus on the emergence of an innovation field the richness of which is indubitable today. Its exceptional development (BlaBlaCar, Zipcar, Velib, Uber, Drivy, and many others) has dismantled the solid partitions between the public/common/individual/private which our public policies (namely about «modal shift») have stranded on for decades.

Several other hybridizations have surfaced at the beginning of the twenty-first century, for example, that of Bus and Metro (the famous Brazilian born BRT—*Bus Rapid Transit*) or that of Tram and Train (in Germany). The most outstanding however are and will be the crossings of the «physics» and the «digital». The world of Video games are already giving disconcerting examples, with for instance

the Nintendo Wii consoles (how to play “real” Tennis in your living room?), and various ones based on the Kinect of Microsoft and other movement capture tools. The most striking example of hybridization in transport is the awkwardly named 3D Printer: a form of *material* mobility with no physical motion! These are yet a few preconfigurations of the future mobility hybrids.

Finally, the third conceptual prospective interest in the mobility field is that its future is still more widely open than what we have just acknowledged. One should not believe that the future of mobility, as our prospective approach has drawn, means a generalized restless agitation, a perpetual jactitation, exhausting, less and less efficient. We only begin to understand that the «real» mobility is not only a matter of miles and miles per hour, but also of connectedness and «reliance» (French word to say creation of links, discoveries, encounters, opportunities and serendipity). It is a matter of physical, mental and social health, and also of pleasure and leisure. We begin to understand that the «true» mobility is a mode of expression (such as your personal walk style), a very rich multisensorial experience embracing esthetic and poetic dimensions.

Finally, we begin to see that the notions and experiences of *mobile* and *immobile* are not opposed, nor even entirely distinctive. After all, when we are «sitting quietly doing nothing» (typical zen meditation quote) we swing along with our good planet in its movement on itself and in the universe, at an unbelievable speed.

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