A Cautious Promethea? A Few Steps Toward a Philosophy of Design (with Special Attention to Peter Sloterdijk)

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I was still trying to measure the expansion of the word "design" when, during the launching party for the *Networks of Design* meeting, we were invited to visit an exhibition called "Re-imagining Cornwall"! I was already aware that corporations had to be reengineered, natural ecosystems reclaimed, that cities had to be remodelled and wastelands redeveloped, that neighbourhoods had to be beautified, political platforms scritpted as well as interiors redecorated and journal layout restyled. I was on the right track then: if entire provinces could be redesigned, there was no longer any limit to the term

When I was young, the word design (imported in French from English) meant no more than what we now call in French "relooking" (a good English word that, unfortunately, does not exist in English…), that is, giving a new and better "look" or shape to something –a chair, a knife, a car, a package, a lamp, an interior— which would have remained too clumsy, too severe or too bared if it had been left only to its function. "Design", in this old and limited meaning, was a way to redress the efficient but somewhat boring capacities of engineers and commercial staff by adding to the stuff a veneer of form, some superficial feature that could make a difference in taste and fashion. Even if it could be greatly admired, it was always taken as one branch of an alternative: look *not only* at the function, *but also* at the design. And this dichotomy was true, even when the best design was one that, in good modernist fashion, approximated function as closely as possible (as it did in "functionalism"). "Design" was always taken in this "not only… but also" balance as if there were really two very different ways of grasping an object: one through its intrinsic materiality, the other through its more aesthetic or "symbolic" aspects.

I know this is a very poor rendering of what you now want to mean by "design" (and I am well aware that the French use of the word is much more restricted that the Scandinavian or the English), but I want to use it as a base line to fathom the extraordinary career of the term: from a surface feature in the hand of a not so serious profession that was added to other much more important features entreated to more serious professionals (from engineering, from marketing, from science, from accounting), it has continuously spread to mean more and more the very substance of production. Not only that, but it now extends from details of daily objects to cities, to landscapes, to nations, to cultures, to bodies, to genes, and, as I will argue, to nature itself in great need of being re-designed. Everything happens as if the meaning of the word had grown in comprehension and in extension: first, it has eaten up more and more elements of what a thing is (today everyone with an I-phone knows that it would be absurd to try to distinguish what has been simply designed and what has been planned, calculated, arrayed, arranged, packed, packaged, defined, projected, tinkered, written down in code, arrayed, arranged, disposed etc. – "to design", from now on, could equally mean all those verbs) and, second, it is applicable to bigger and bigger assemblages of productions very far from the limited list of ordinary or luxury goods. (I hope the many historians of the notion among you will not contradict me too much).

The reason I am interested in this spread of the term design in comprehension as well as in extension, is not because I know anything about design and even less about its history (I am definitely not a specialist of the question, as will be made painfully clear in this lecture), but because I take this expansion as a fascinating tell tale of a change of mood in the ways in which we have come to deal with objects and action more generally. If it is true, as I have claimed, that we have never been modern, and if its true, as a consequence, that "matters of fact" have now clearly become "matters of concern", there is some logic in observing that a typically modernist divide between materiality on the one hand and design on the other is slowly being dissolved. The more objects turn into things, or matters of facts into matters of concern, the more they are seen through and through as objects of design.

If it is true that the present historical situation is defined by a complete disconnect between two alternative great narratives, one of emancipation, detachment, modernization, progress and mastery, and another one, completely different, of attachment, precaution, entanglement, dependence and care, the little word "design" could offer a very good touch stone to detect where we are heading and how well modernism (and also postmodernism) has been faring. To put it more provocatively, I would argue that design is one of the terms that has replaced the word "revolution"! To say that everything has to be designed and redesigned (including nature), we imply something of the sort: "thus, it will not be revolutionized, it will no longer be modernized". The very expansion of the word design is thus for me a little tracer that could prove at which depth we have stopped believing that we have been modern. In other words, the more we think of ourselves as designers, the less we think of ourselves as modernizers. This is at least the admittedly philosophical or anthropological position I have chosen to

address this audience (not without some trepidations, since I have no other credentials to speak to you –and in addition no powerpoint to show anything visually tonight…).

Five advantages of the concept of "design"

The reasons why I dare articulating this odd argument is based (very flimsily I agree) on the various undertones of the word "design" itself. It is because of the weaknesses of this vague concept that I believe we can take it as such a clear symptom of a sea change in our collective definition of action. Reviewing five successive connotations of the concept of design will make up the first section of this lecture (the second one being taken by an introduction to Peter Sloterdijk's philosophy of design, before ending with a briefer conclusion on how to *draw* things together).

First, design as a concept implies some humility that seems rather absent from the word "construction" or "building". Because of its historical root (in the design of daily objects that was supposed to be added to their "real" and sturdy materiality, practicality and functions), there is always some *modesty* in claiming to design something anew. In design there is nothing foundational. To say that you plan to design something, does not carry, it seems to me, the same risk of hubris. No doubt that if you had introduced Prometheus to some other hero of the past as a "designer", he would have been quite pissed off. Thus, the expansion of the word "design" is a an indication (a weak one to be sure) of what could be called a post Promethean theory of action just at the moment (this is the really interesting feature), when every single thing, every detail of our daily existence, from the way we produce food, to the way we travel, build cars or houses, draw clothes, etc is to be, well, redesigned because of the new urgency provided by the various ecological crisis. So, just at the moment where the dimensions of the tasks to be fulfilled are fantastically increased, it is when a non- or a post- Promethean's sense of what it is to act is taking over public consciousness.

Second, and may be more importantly, design implies an attention to *details* that is completely lacking in the heroic Promethean hubristic dream of action. "Go forward, break radically with the past and the consequences will take care of themselves!" This was the old way to build, to construct, to destroy, to radically overhaul. "*Après moi le déluge!*" But that has never been the way to design. A mad attention to details has always been attached to the very definition of the skills. And skill is actually a term that is also attached to design much like the word arts and craft. In addition to modesty, there is something about skilfulness, craftsmanship and obsessive attention to details that is one of the connotations of the word design. The reason why this is so new is because you could not connect those features with the revolutionary and modernizing urge of the recent past: on the contrary, attention to details, care, craft and skill, was just what seemed reactionary, what would have slowed down the swift path of progress. The expansion of the concept of design thus indicates a deep shift in our emotional make up: just at the time when the scale of what has to be remade becomes infinitely larger (no political revolutionary ever had in mind, in addition to the capitalist modes of production, to redesign the earth climate), is also the time

when what is to "make" something is being so deeply modified that it is not "made" or "fabricated" any more, but precisely "designed", carefully and, if I can use the term, precautionarily designed. It is as if we had to imagine Prometheus stealing fire in a cautious way! As if we had to combine the engineering tradition with the precautionary principle! Is it not clear, at this historical juncture, how two absolutely foreign sets of passions (foreign for the modernist ethos, that is) have to be recombined and reconciled?

The third connotation of the word design that seems to me so significant is that there is never any question when analyzing the design of some artefact that it is about something else than *meaning* —symbolic, commercial, or otherwise. In other words, design lend itself to interpretation: it is made to be interpreted in the language of signs. In design, there is always, as the French says, *un dessein*, or in Italian, *designo.* To be sure, in its weakest form, design was adding only superficial meaning to what was brute matter and efficiency, but when it spread to more and more inner levels of the objects, it carried with it a new attention to meaning Wherever you think of something as designed, you bring all the tools, skills and crafts of interpretation with you. It is thus of great import to witness the depth at which our daily surroundings, our most common artefacts are said to be designed. It means they are less and less conceivable as modernist objects and more and more conceivable as "things", that is, to use my language as complex assemblies of contradictory issues (I remind you that this is the etymological meaning of the word "thing" in English –as well as in other European languages).* The more things are taken has having been well or badly designed, the less they appear as matters of fact and the more they are highlighted as so many matters of concern or so any issues.

To be sure, this transformation of objects into signs was greatly accelerated by the spread of computers. It is obvious that digitalization has done a lot to expand semiotics to the core of objectivity: when almost every feature of the digitalized artefacts are "written down" in codes and software, it is no wonder that hermeneutics get deeper and deeper into the very definition of materiality. If Galileo's book of nature has been written in mathematical terms, thus expanding prodigiously the empire of interpretation and exegesis, it is even truer now when more and more elements of our surroundings are literally and not metaphorically written down in mathematical (or at least in computer) terms. If the old dichotomy between function and form could be vaguely maintained for a hammer, a locomotive or a chair, it would be ridiculous if applied on a mobile phone: where would you make the line pass between form and function? It is writings all the way down! But this is not only true of computerized artefacts and gadgets, it is also true of the good old materiality: what are nano- or bio-technologies if not another expansion of design to another level? Those who can make individual atoms write the letters "IBM" or who are able to implant copyright tags into DNA or to devise nano cars which "race" on four wheels, would certainly consider themselves as

* Latour, B., *From Realpolitik to Dingpolitik. How to Make Things Public. An Introduction.*, in *Making Things Public. Atmospheres of Democracy*, B. Latour and P. Weibel, Editors. 2005, MIT Press: Cambridge, Mass. p. 1-31.

designers. Here again, matter is absorbed into meaning (or rather as contested meaning) in a more and more intimate fashion.

The fourth advantage I see in the word "design" (in addition to its modesty, its attention to detail and the semiotic skills it always draws with it), is that it never starts from scratch: to design is always to *redesign*. There is always something that exists first as a given, as an issue, as a problem and then another task which is to turn it into something more lively, more commercial, more usable, more user's friendly, more acceptable, more sustainable, and so on depending on the various constraints to which it has to answer. In other words, there is always something *remedial* in design. This is the good side of the "not only… but also" feature I criticized above. A weakness to be sure (there is always the temptation of seeing design as an afterthought, as a secondary task, as a less serious one than those of engineering, commerce and science) but an immense advantage when compared with the idea of creation. To design is never to create *ex nihilo*. It is amusing to see, that when creationists in America use the word "intelligent design" as a rough substitute for "God the Creator", they don't realize the real abyss that exists between creating and designing. The most intelligent designer never start from a *tabula rasa*. God the designer is really a redesigner of something else that is already there —and this is even truer for His Son as well as for the Spirit, who both have to redeem what has been botched in the first place… If man is made (or should I said designed?) "at the image of God", then he too should learn that things are never created but rather carefully and modestly redesigned. It is in that sense that I take the spread of the word design as a clear substitute for revolution and modernization. Also because there is always something slightly superficial in design, something clearly and explicitly transitory, linked to fashion and thus to shift in fashions, something tied to tastes, something relative. Designing is the antidote to founding, colonizing, establishing, breaking with the past. An antidote to hubris and the search for absolute certainty, absolute beginning, radical departure.

Fifth, the last but decisive advantage of the concept of design, is that it necessarily involves some ethical dimension because of the obvious connection it has with the question of *good versus bad design*. In the modernist style, this was something matters of fact could not possibly possess. They were supposed to sit there, undisputable, and far away from any normative judgment. So much so that their whole job was to make possible the fact/value distinction. "We are there, that you like it or not". But it is easy to understand that when you say of something that it has been "designed", you are not only authorized but forced to ask if it has been well or badly designed. The spread of design to the inner definitions of things, carries with it, not only meaning and hermeneutics, but also morality. More exactly, is as if materiality and morality were finally to coalesce. This is of great import, because if you begin to redesign cities, landscapes, natural parks, societies, as well as genes, brains and chips, no designer will be allowed to hide behind the old protection of matters of fact and say: "I am just stating what exists", or "I am simply drawing the consequences of the laws of nature", or "I am simply reading the bottom line". By expanding design everywhere, designers take up the mantle of morality as well. I will come back to this in the conclusion: suffice

it to say now that this normative dimension that is intrinsic to design offers a good handle to extend the question of design to politics. If a politics of matters of facts and of objects has always seem far fetched; a politics of designed things and issues is somewhat more obvious. If things, or rather *Dinge*, are gatherings, as Heidegger used to define them, it is a short step from that to consider all things as the result of an activity of what is called in Scandinavia "collaborative design", but which is in fact the very definition of the politics of matters of concern (all designs are "collaborative" designs —even if all the "collaborators" are not all visible, welcomed or willing).

A small parenthesis on our two disciplines: when science and technology studies began, some forty years ago, to revisit the old materialist traditions, they too had deeply transformed objects into projects; they too had brought meaning into what was defined as mere "material constraints"; they too had disputed the form versus function argument; they too had transformed matters of fact into complex and contradictory assemblies of conflicting humans and non humans; they too had been demonstrating that "artefacts have politics" and that a parliament of things could be assembled. But because of the word "construction" (used especially in the infamous expression "social construction"), they too were divided by the modernist opposition between what was social, symbolic, subjective, lived and what was material, real, objective and factual. No matter how many efforts were made to escape the trap the modernist constitution had laid on the ways of empirical inquiries, STS studies has always lurched into it. (Would things have looked better had we talked of "social design" instead of "social construction"? I doubt it). The trap was impossible to escape. As long, that is, that we remained officially modern. But what is so interesting to me in the spread of the concept of design is that it has undergone the same amazing transformation as my own field. STS, that was until a few years back a small subfield of social (alas, alas, so social!) science, has now received the formidable support of a much larger movement. What was a slightly far fetched and a clearly scandalous claim, namely that there are no objects but only things, disputed assemblages, is now fast becoming common sense. Everything that was conceived earlier as hard objective undisputable material drives (remember the "irresistible path of progress" "the white heat of technology"?), has now melted in the air. Yes, everything that has been designed during the four or five former industrial revolutions, has to be redesigned —including Corwnall… It is the same material world, but now it has to be remade with a completely different notion of what it is to *make* something. What has gone is mastery —this odd idea of mastery that would not include the mystery of unintended consequences.

Of course, all of those five dimensions of design as well as the development of Science and Technology Studies, could be taken as a clear sign of postmodernism, as a quiet and lazy abandon of the tasks of Promethean modernism. Some diehard modernists think that way. The reason I don't believe this is the case is that, as I pointed out earlier, the spread of the word "design" doesn't come at a time when there is less but when there is more to do, infinitely more since it is the whole fabric of life that is now in the loop thanks to the ecological crisis. What no revolution ever contemplated, namely the remake of our collective life on earth, is

to be carried through with exactly the opposite of revolutionary and modernizing attitudes. This is what renders the spirit of the time so interesting. President Mao was right after all: the revolution has always to be revolutionized. What he will not have anticipated is that the new "revolutionary" energy should be taken from the set of attitudes that revolutionaries loathed most: modesty, care, precautions, skills, crafts, meanings, attention to details, careful conservations, redesign, artificiality, and ever shifting transitory fashions. We have to be radically careful, or carefully radical… What an odd time we live through.

"Dasein ist Design"

The best way to sum up the first part of this lecture, is by quoting a marvellous pun by Henk Oosterling a specialist of the work of Peter Sloterdijk, the great German thinker to whom I want to now turn in order to continue this little meditation on the philosophy of design: *"Dasein ist design"*. By taking seriously what Heidegger had only abstractedly meant by *Dasein*, Sloterdijk has managed to extirpate the Western philosophical tradition from the bifurcated way in which it had always dealt with materiality (always, that is, since the 17th century). This is what makes his philosophy so exciting for people like you who cannot indulge anymore into the idea that there is, on the one hand, material objective constraints and, on the other, symbolic, human subjective ones, and who are bombarded with offers to redesign everything from chairs to climates. (Actually, I really feel that the organizers of this conference should have invited Sloterdijk to give this keynote instead of me, but my desire to visit a Cornwall I had only "imagined" until now, made me hid this proposition until tonight!).*

The reason for this preference is that Sloterdijk has taken very early on and very literally the spread in comprehension and extension of the notion of design. So literally, in fact, that he has been made the Rektor, that is the Dean or Master, of a School in Karlsruhe the *Staatliche Hochschule für Gestaltung* (*Gestalt* being the word here for design) a very original art, craft, and philosophy institute (that is housed, by the way, in the same revamped factory as ZKM, the place where I have been fortunate enough to curate the two exhibitions of ICONOCLASH and MAKING THINGS PUBLIC).

When we say that "Dasein is *in* the world", we usually pass very quickly on the little preposition "in". Not Sloterdijk: in what, does he ask? Where? Are you in a room? In an air conditioned amphitheatre? And if so with what sort of air pumps and energy it is kept up? Are you outside? There is no outside: outside is another inside with another climate control, another thermostat, another air conditioning system. Are you in public? Public spaces are spaces too, for God's sake, they are not different in that respect from private spaces, just organized differently, with different architectures, different entry points, different surveillance systems, different soundscapes. To try to philosophize about what it is to be "thrown in the world" without defining more precisely, more literally (Sloterdijk is first of all a literalist in his use of metaphors) the sort of envelops in which humans are thrown, would be like trying to kick a cosmonaut in outer space without a spacesuit. There

* Available in English : Sloterdijk, P., *Foreword to the Theory of Spheres*, in *Cosmograms*, M. Ohanian and J.C. Royoux, Editors. 2005, Lukas and Sternberg: New York. p. 223-241.

are no more humans than there are naked cosmonauts. To define humans is to define the envelops, the life support systems, the *Umwelt* that make possible for them to breathe. Exactly what humanism has always missed. (This is why Habermas was so crossed at Sloterdijk and launched against him a very mean dispute: naked humans on the one hand, fully equipped humans on life support on the other: there was no way for those two German thinkers to agree with one another).

You begin to see, I hope, why he is your philosopher: in the same way as a space suit or a space station is entirely artificially and carefully designed, so are all the envelops (the spheres to use his term, "spherology" being the word he gives to his endeavour) that constitutes the fragile life supports of humans to be handled with infinite precaution from the womb (natural or artificial) in which they are grown (Sloterdijk defines philosophy as a kind of obstetrics!) all the way to where they survive and die. What is so important in the extended metaphors Sloterdijk pursues to the bitter end, is that they begin to do exactly what I was asking in the first part of this lecture: how to reconcile the two entirely different sets of emotions, passions and drives triggered by the two alternative Great Narratives of modernity: the one of emancipation (the official story) and the one of attachment (the hidden one). When you check up your space suit before getting out of the space shuttle, you are radically cautious and cautiously radical… you simultaneously are painfully aware of how precarious you are and yet completely ready to artificially engineer and design in obsessive details what is necessary to survive. Whereas modernist or anti-modernist philosophies of history are always considering only one narrative (progress or the failure of progress), Sloterdijk is the rare thinker that shows how the stories of emancipation and that of attachment are one single story provided you deeply modify what it is to be "in the world": the cosmonaut is emancipated from gravity *because* he or she never lives one fraction of a second outside his or her life supports. To be emancipated and to be attached are twice the same thing, provided you draw your attention to how artificial atmospheres are well or badly designed.

The key concept to reconcile those two sets of passions and to invent this strange role of a precautionary Prometheus, is that of *explicitation*. This is a consequence of the concept of envelop. Envelop is a term that will surely draw the attention of architects and designers: we are enveloped, entangled, surrounded; we are never outside without having recreated another more artificial, more fragile, more engineered envelop. We move from envelops to envelops, from folds to folds, never from one private sphere to the great Outside.

Modernism, in the hands of Sloterdijk is no longer a concept, but a place, a design, a style a very specific type of architecture to which the whole second volume of SPHÄREN is dedicated: that of Globes. A modernist is someone that lives under a vast dome, who sees things as if they were under a half Globe, the Globe of Science, the globe of Reason, the globe of Politics. The humanist, for him, is the one who reads a book under a lamp or who sits clothed in some sort of Roman toga on the stairs of a huge amphitheatre under the painted fresco of some immense dome… Except that in the modernist architecture, the life supports necessary for this Dome or this Globe to be sustainable has not been explicitated.

A modernist takes for granted that there will always be air, space, water, heat, for the development of his or her "global view". But there is nothing global in globalization. Global is always a lot of globalloneys, a lot of hot air. And even for blowing hot air you need a mechanism of some sort, a pump, a hairdryer —a designed hairdryer! What happened in the second half of the last century is that modernism disappeared in the exact measure where the life supports were made, one after another, more explicit. Ecological crisis, in such a view, are the slow and painful realization that there is no outside anymore, that none of the elements necessary to support life are taken for granted, and that even to live under a huge inflated Globe you need a powerful air conditioning system and powerful pumps to keep it inflated. Yes, modernist Globes have been deflated; modernism's fate has been somewhat the same as that of those dirigibles, like the Zeppelin or the Hindenburg…

So you see that what in history of design is called the "modernist style" should now be given a much more profound signification and a much longer life span: it is the very ways in which things presented themselves as matters of fact which is now visible as a style —and a style that is changing under our very eyes. The aesthetics of matters of fact, has always been precisely that: a historically situated aesthetics, a way to light objects, to frame them, to present them, to situate the gaze of the viewers, to design the interiors in which they are presented —and of course the politics with which they are (they were) so strongly associated.*

What I find so important in the notion of explicitation —folding envelops to envelops— is that it is a powerful way to retrieve science and technology by modifying entirely what is meant by a sustainable artificial life. It is really in that sense, that Sloterdijk is THE philosopher of design. If I have been right in defining earlier the five reasons why the notion of design was such a powerful substitute to the notion of making, building and constructing, it might allow us to understand that it is possible to *rematerialize* without importing with the notion of matter the whole modernist baggage of matters of fact. And this is exactly what Sloterdijk does: no contemporary philosopher is more interested in materiality, in engineering, in biotechnology, in design proper, in contemporary arts, in science more generally. But when he deals with materialities, it is not as if they were so many matters of fact that would inject at last an indisputable natural necessity into some social or symbolic questions. For him, adding materiality to a site, is making explicit another fragile envelop in which we are even more entangled: this is true of biotechnology as well as of space stations.

This is exactly the reason why Habermas could not accept the argument: for a good old modernist humanist, when someone like Sloterdijk begins to talk about life support, about the necessary conditions to "cultivate human beings", about the air-conditioning to have them breathe safely, this is a tantamount to a plea for an Orwellian world, for eugenism… What Habermas had entirely missed, however, is that when humanists accuse people to "treat humans like objects", there might be very unaware of *their* unfair treatment of objects. They cannot imagine that objects may be things, that matters of facts might be matters of concern, that the

* Latour, B., *What is the Style of Matters of Concern? Two Lectures on Empirical Philosophy*. Booklet of the Department of Philosophy Amsterdam, 2005 (accessible on the web at bruno-latour.fr xx).

whole language of science and engineering might be put to a completely different use than portraying them as the boring carriers of indisputable necessities that modernism has rendered popular. Sloterdijk does not treat humans matter of factually, but treats humans and non humans as "matters of grave and careful concerns". Humanists are concerned only about humans; the rest, for them, is mere materiality, or cold objectivity. But by treating their life supports as matters of concern, we pile concerns over concerns, we fold, we envelop, we embed humans into more and more elements that have been carefully explicitated, protected, conserved and maintained (immunology being, according to Sloterdijk, the great philosophy of biology).

This little shift in the definition of matter modifies everything: it allows practitioners to reuse all of the notions of materiality and artificiality, but freed from the restrictions the older style of modernist matters of fact had imposed on their use. In other words, we can have science and technology without naturalization. Not only has nature disappeared as the outside of human action (this has become common wisdom by now); not only has "natural" become a synonym of "carefully managed", "skilfully staged", "artificially maintained", "cleverly designed" (this is true especially of so called "natural" parks or "bio food"); but the very idea that bringing scientists' and engineers' knowledge to bear on a question will bring unquestionable laws of nature with it, is also becoming obsolete. Bringing scientists and engineers in, is quickly becoming another way to ask how can it be better redesigned? The bricolage and tinkering elements always associated with design has taken over nature: actually, it *is* nature, even in its Darwinian ways which are taken as a clever form of bricolage, of "intelligent design" again… albeit a blind one.

When Sloterdijk raised the question of how humans could be "designed" that is artificially nurtured, this of course could superficially look like the old phantasm of eugenic manipulations, but only in the same way as a train seem to go straight ahead just at the intersection that will lead it toward a completely different destination. Habermas had missed the switch, the bifurcation that is so important for us to locate: yes humans have to be artificially made and remade, but everything depends on what you mean by artificial and even deeper by what you mean by "making". We are back here to Prometheus and to the question of Creation. Are we able to be the God of intelligent design? This is the heart of the matter and why it so important to talk of design and not of construction or of fabrication: to design something, as I indicated earlier, allows us to raise not only the semiotic question of meaning but also the normative question of good and bad design. This is true of DNA manipulation, as well as of climate control, gadgets, fashion, cities or natural landscapes (a perfect case of design from beginning to end). Artificiality is our destiny, but it does not mean that we have to accept for ever the modernist definition of artefact as the invasion of matters of fact over the softer flesh of human frailty. Or, to put it even differently by alluding to another line of more fashionable thought, there is nothing necessary post human in enveloping, folding, veiling humans into their life supports. Humanists as well as post-humanists seem to have no other repertory to speak of science and technology than the modernist idiom of matters of fact.

The great importance of Sloterdijk's philosophy (and I think the major interest of a designer's way of looking at things), is that it offers another idiom, that of matters of concern, to reclaim matter, matters and materiality as what has to be carefully redesigned. This might be far from humanists' limited view of what humans are, but it is certainly just as remote from post human dreams of cyborgs. What is clear is that the collective definition of what artificial life supports are supposed to be becomes the key site of politically minded investigation as is already very saliant in the work of thinkers like Donna Haraway (feminism, in general, having done a lot to undermine the rather chauvinistic definition of objectivity and mastery). What if Prometheus had been a woman? Nothing much is left of the scenography of the modernist theory of action: no male hubris, no mastery, no appeal to outside, no dream of expatriation in an outside space which would not require any life support of any sort, no nature, no grand gesture of radical departure —and yet the necessity of redoing everything once again in a strange combination of conservation and innovation that is unprecedented in the short history of modernism. Will Prometheus ever be cautious enough to redesign the planet and meet his Promethea?

I hope I have not been too much off the mark by proposing (out, surely, of ignorance) those few steps toward a philosophy of design and by introducing Sloterdijk as its main contributor. I want to conclude by offering a challenge to the specialists assembled here. When I said earlier that there is something inherently normative in design because of the necessary follow up "is it well or badly designed?", I also mentioned that it was a good handle for bringing politics in. If the whole fabric of our earthly existence has to be redesigned in excruciating details, and if for each detail the question of good and bad has to be raised because each aspect has become a disputed matter of concern and can no longer be stabilized as an indisputable matter of fact, we are obviously entering a completely new political territory. As every one of you knows too well, it is a perverse character of all ecological questions to branch out in all sort of counterintuitive ways: it is probably of ecology that St Paul was talking when he said "I do the bad I don't want to do, and I don't do the good I would like to". Political ecology is bringing political difficulties to the square according to this marvellous rather Paulinian quote of de Gaulle: "If of the good only good would ensued, and if of bad only bad ensued, government would be rather simple: a village parson could do it".

The question I want to raise is now literally of design in the etymological sense of drawing or rather "drawing together": how can we draw together matters of concern so as to offer to political dispute an overview, or at least a view, of the difficulties in which we are going to be entangled every time we are going to have to modify the practical details of our material existence? We know that whenever we are prepared to change our fixtures from incandescent to low energy light bulbs, to pay our carbon expenses, to introduce wind farms, to reintroduce the wolf in the Alps, or to develop corn based fuel, immediately, some controversy will begin that will turn our best intentions into hell. And we are no longer able to stop the controversies by stating the undisputable facts of the matter: facts are disputed.

Fine, unintended consequences are now on everyone's mind, Promethea braces herself for the worse.

Now here is the challenge. In its long history, design practices has done a marvellous job at inventing the practical skills to draw objects, from architectural drawing, mechanic blueprints, scale models, prototyping etc. But what has always been missing from those marvellous drawings (designs in the literal sense), are the controversies and the many contradicting stake holders that they bears with it. In other words, *you* in design as well as *we* in science and technology studies may insist that objects are always assemblies, "gatherings" in Heidegger's meaning of the word, or things and *Dinge*, and yet, four hundred years after the invention of perspective drawing, three hundred years after projective geometry, fifty years after the development of CAD computer screens, we are still utterly unable to draw together, to simulate, to materialize, to approximate, to scale model, what is a thing. Objects, we know how to draw, to simulate, to materialize, to zoom in and out, to make them move in 3-D space, to have them sail through the computerized virtual *res extensa*, to mark them with a great number of data points, etc. and yet we all perfectly aware that the space in which those objects seem to move so effortlessly is the most utopian (or rather atopic) space, the least realistic circulation ever imagined; that it does not even fit the ways in which architects, engineers, designers draw and modify blueprints, nor the process through which they direct fabrication on the factory floor or manipulate scale models. To use some more German: we know how to draw *Gegenstand* and have no clue on what it is to draw *Ding*. I once asked one of the greatest historian of technology to send me what he considered as his best drawing of the marvellously complex history of mechanisms he has been writing about for so long. He sent me some doodle which I would not have dared showing to my first year students as a example of what a thing is. How could it be compared to the comfortable and effortless way in which objects float in the so called "Euclidian space" of a CAD design or the ways in which I could visit Falmouth in advance through the apparently smooth travel of Google Earth?

Is it not the case that, as long as we are not able to provide for things, that is for matters of concern, a visual, publicly inspectable space that is at least as rich, as easy to handle, as codified as what has been done, over four centuries for objects, that is for matters of fact, there is no way for design to ease modernism out of its historical dead end. I know this is a meeting on the history of design, but what would be the use of studying its history, if it were not to provide a scheme for its future? To imagine that a political ecology of the magnitude that is anticipated by all the experts could be carried out without new innovative tools to represent the conflicting natures of all the things to be designed, is to court disaster (I take here the verb "to represent" in the largest sense, including artistic, scientific and political representation techniques).

And if it is true, that the whole history of technical drawing and more generally scientific visualizations broadly conceived has been one of the main driving forces for the development of science and technology in its modernist version, it is probably not a bad guess that the same will be true of the development of science and technology, once freed from its modernist limitation. So here is the question I

raise to designers: where are the visualization tools that allow the contradictory and controversial nature of matters of concern to be represented? A common mistake (a very post-modernist one) is to believe that this goal is reached once the "linear", "objectified", "reified" modernist view will have been scattered in multiple view points and heterogeneous make shift assemblages. But breaking down the tyranny of the modernist point of view will lead nowhere since we have never been modern. What is needed are tools that capture, on the contrary, what has always been the hidden practice of modernist innovations: objects have always been projects; matters of fact have always been matters of concern. The tools we need should teach us just as much as the old aesthetics of matters of fact —and then much more. Critique, deconstruction and iconoclasm, once again, will not do the job. On the other hand, it is true that the last gadget Promethea needs is another CAD design. What she needs is a way to draw *things* together —gods, non humans and mortals included. Why would it be impossible? Why the powerful visual vocabulary that has been devised in the past by generations of artists, engineers, designers, philosophers, artisans and activists for matters of fact, could not be done (I hesitate to say restyled) for matters of concern? Not a bad challenge, it seems to me, for your society.