

Jean Robert

Place in the space age

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Place in the space age

By

Jean Robert

Author's presentation

We were lying
 deep in the macchia, by the time
 you crept at us last.
 But we could nor darken over to you,
 light compulsion
 reigned.¹

To my ear, the title, "place in the space age", has the same ominous ring as this excerpt from a poem by Paul Celan. We groped for obscurity, but we were struck by light. A light that does not admit its contrary would be unbearable. The very idea of day without a night, of a sun without moon and stars, of light without shadow, makes me shiver and painfully reminds me of the vulnerability of my inwards: such must be the light of the dissecting room. But I feel that the Lichtzwang, the light compulsion of which Celan speaks is still more frightful. Against it, the dragon of the Book of Revelation is a naive metaphor for an unspeakable horror. The dragon hit the stars with its tail and turned them off. I feel that, to understand Celan's intuition, the apocalyptic image must be exactly reversed. The poet speaks of the extinction, not of light, but of darkness. As if the carrier of a merciless, global light would now threaten to erase all zones of shadow, all shades that protect tender, local existence.

I wrote this essay in the conviction that space has become the carrier of a conceptual light that exposes the hidden and the not yet, equalizes the interior and the exterior, and penetrates every nook of my home and my heart. It ends with a question: Where shall my friends and I find the courage to make our places in the age of space?

I have to confess that I have been a believer in a strange natural religion that doesn't worship Ge, Ra, Helios, Tonatiuh or Ouranos, the earth, the sun or the sky, or any of the elements, but space itself, as if it were the primordial element. The brand of believers in the religion that seeks ex-stasis -literally: a stand outside of any concrete inside - in space are called architects, or at least were they called so in my days. They designed houses as if seen from a distant shore; they built them as enclosures for universal

¹Hamburger, Michael, ed. and transl., Paul Celan. Poems, New York: Persea, 1980, p. 235. German original on p. 234: Wir lagen / schon tief in der Macchia, als du / endlich herankrochst./ Doch konnten wir nicht / hinüberdunkeln zu dir, / es herrschte Lichtzwang.

beings that would maintain particulars at bay; they eliminated as vain ornaments all what was not as universal as space itself. They did not satisfy the desires of concrete persons, but the needs of human beings, as one of them, Le Corbusier said, "the same everywhere and in all times." They first reduced persons to the role of clients, the subjects of needs, and thought that this *reductio ad absurdum* exhibited Man's true primary relation to the world. Like the paintings of Mondrian, the architects' pet painter, their designs eventually captured, beyond all accidents and singularities, the ideietic plastic powers of pure space. This caused them, again in Le Corbusier's words, "so intense an emotion that it could be called unspeakable," a state that, for him, was one of the roads to happiness. Can one say more clearly that, for this and other oracles and their Pythons, being muted by space was a religious experience?

Some of the space-struck guardians of the masters' teachings became in their turn my masters². I was initiated in the sixties, at the "Sektion Eins" of Zurich's Federal Polytechnical Institute, the ETH. To tell you how the initiation process began, let me report on one of the first exercises. Provided with plans of a building by one of the Great Masters (beside the superstars F.L. Wright and Le Corbusier, these included Mies van der Rohe, Alvar Aalto, Walter Gropius, Max Breuer, Gerrit Rietveld and a handful more, down to the more local Max Bill), future initiates had to construct a hardwood reverse model of it. A reverse model is the three-dimensional equivalent of a photographic negative, an object in which the void appears as full and the full as void. This exercise and others of the kind had been devised in one of the highlands of Modern Architecture, the *Bauhaus*. All such exercises were meant to teach neophytes that space, and only space, was the substance that they had to learn to knead. Later, much later, meditating on that dissolution of matter and materialization of nothingness helped me understand why some architects of that tradition could not only feel at ease in American balloon-frame architecture, but even praise its material vacuity in their books!³ Obviously, it is the closest thing to pure, immaterial space that the history of architecture can offer. However, I was not long to be intrigued by another recurrent question that no master could ever answer: why do certain clients of the architects develop such a genuine and profound hate for the space they had purchased, sometimes at rocketing monetary costs?⁴

²Tom Wolfe, a non-architect but a talented ironist has made fun about these defenders of the sacred oracles and their claim to infallibility, calling their guardians or "Pythons" *the compound*, so I will try to spare offended susceptibilities. Wolfe, Tom, *From Bauhaus to our House*, New York: Farrar, Straus, Giroux, 1982.

³Tschumi, Bernard, *Architecture and Disjunction*, Cambridge MA: The MIT Press, 1997.

⁴A particularly sad example is the depression and near bankruptcy suffered by Edith Farnsworth's, Mies van der Rohe's first American client, after she moved in into her piece of pure space. Alice T. Friedman, "Domestic Differences: Edith Farnsworth, Mies van der Rohe, and the Gendered Body", in Christopher Reed, *Not at Home. The Suppression of Domesticity in Modern Art and Architecture*, London: Thames and Hudson, 1996, pp. 179-192.

As a common man, I was repeatedly confronted with situations that questioned my teachers' space worship and made me see again matter as full, and void as empty. I spent part of the years 1963 and 1964 in Amsterdam, as a draftsman in an architectural firm. Something remarkable, sad but strangely joyful happened. There were almost no cars in the city in those years, a "backwardness" for which Mayor van Hall felt ashamed in front of his European colleagues. He and the municipal council behind him (he had been a hero of the Dutch Resistance) wanted to catch up with Essen, Frankfurt or Milan: build roads to irrigate the city with vehicular traffic, a sign of economic development. This impending threat gave Amsterdam an atmosphere of delicate vulnerability, a quality that it was about to lose forever. I have not ceased to meditate about that awareness of an imminent loss, of something unique that would soon be gone forever, which pervaded the city during the hot summer of 1964. My colleague Hajo van Wering took me for nostalgic walks after work. One evening, he would lead me under a bridge from where we could catch a glimpse of the encounter of quiet pedestrian life with water, stone and sky that must have inspired Ruisdael. The next day, he had me climb on a church steeple to see how deftly the bell player hit the keys and hear how the crystalline music fell on a city still free from the racket of motorized traffic. It is Hajo who told me about the name by which very old families still refer among each other to their beloved city, Mokum, a corruption of the Hebrew word makkom, meaning a place where God has spoken His word, or a refuge for threatened folks.

In a joyful atmosphere of precarity, young people began to make things happen in the streets. One group called themselves provo and wanted to provoke the municipal authorities into avowing their antipedestrian bias. To demonstrate the uselessness of cars, they put free public bicycles in all street corners and were arrested for this. Another group compared Amsterdam with an apple and asked people to gather at its center. Several centers came into being through the ensuing gatherings. Alas, that popular resistance was crushed by Progress' war against people's commons, and Amsterdam ceased to be a makkom for pedestrians. I felt as if I were becoming schizophrenic. While I was initiated as a believer to the ecstatic powers of space, I was also increasingly seduced by the delight of streets, by smelly, shadowy, vibrant and, as I had just discovered, vulnerable street life. Full it was, but not of the hardwood fullness of the reverse model. And what should I think of car traffic, after what I had lived through? Was it not the unavoidable corruption of "unspeakable space?" New questions assailed me: What is there in architecture that destroys streets? What is there in space that destroys places?

I finished my initiation and became one of them: an architect. Most of the places I had to make unspeakable can still be visited in the Swiss-French city of Neuchâtel, and the street that fell victim to my art is called Rue des Épancheurs: a mono-functional bank now stands where there had been the

diversity of unspoken relations of mutual support among close neighbors. But I had given myself a limit. If I had not solved my riddle in two or three years, I would do something, perhaps take a trip.

I landed in Mexico in 1972. I rediscovered matter in the form of Mexican adobe, the unburnt, sundried brick of clay and straw. I was especially delighted to discover that, in the best adobe, the "straw" comes as donkey droppings. Lo, I first took adobes for primitive bricks! Self-made they were, but also more repair-intensive than the ones burnt in an oven until they turn red; unwieldy and heavier than hollow cement blocks, cheaper but less durable. It took me long to free myself from the reverse model. On one occasion, I dematerialized them into something - a space? - unspeakable for my neighbors' solid common sense. Well, I made an architect's house out of them. Su casa, mi casa.

It took me some time to grasp that these frail, irregular elements of most Mexican village houses wanted to engender a kind of place of which no one had talked to me at the ETH in Zurich. When I touch the walls of my house I still feel the oozing of their lament, but now, I try to listen. I came to realize that it was a violence, almost a rape, to use adobe to generate space.

The whimpering adobes made me sensitive to the abuse of the word "politics", "city-" and even "community-building" when these activities transfer the merciless light of global space into people's places. I spent some time in libraries with my questions in mind and soon discovered that the belief in space is not only the myth of architects and city-planners. It has become the endemic superstition of the most modern, rational persons, one of the sueños de la razón that generate monsters of which Goya spoke.

I welcome this unique opportunity to come to terms with an old but rarely bespoken dilemma and to do it publicly. Perhaps it may help pose a new question: what happens to politics when and where space is prevalent?

The historicity of a modern certainty

Space is a historical critter. "One hundred years after Newton, space was taken for an a priori, while, one hundred years before him, nobody had known it". If these words of the German physicist and philosopher Carl Friedrich von Weizsäcker⁵ are true, Kant was wrong: space is not a universal a priori. It is not something evident that was present everywhere from the beginning. Euclid did geometry without knowing space.⁶

⁵Quoted in Kvasz, Ladislav, "Was bedeutet es, ein geometrisches Bild zu verstehen?", in Dagmar Reichert, ed., Räumliches Denken, Zürich: Hochschulverlag AG an der ETH, 1996, p. 95.

⁶Euclidean geometry is about the properties of figures traced on a surface, not about that surface or any other constructed space. Since Euclid did not know space, it is an anachronism to speak of Euclidean "space". Space is "retro-projected" into Euclid's geometry by stating, first that, in this geometry, the shapes of figures remain constant under motion and, second,

Weizsäcker's claim is startling. Here is a professional physicist who tries to convince us that a little more than a century before the birth of modern physics, a certain event took place and that event is nothing less than the birth of space! Expressed in a less dramatic and more technical fashion, he argues that space is a historical construct; he defends the thesis of the historicity of space.

However surprising it might sound, space, strictly speaking a perfectly homogeneous nothing, is a historical construction. As all historical constructs, it had a beginning and it might soon reach its end. These, at least, are the ideas that I propose to explore in this essay. But my arguments in favor of the historicity of space will also lead me to ask three lancing questions about the space-dominated society we have lived and still for a great part live in:

- 1) I want to understand how the notion of homogeneous space became a crucial element to develop modern management as it is taken for granted in technological society.
- 2) I will ask how the belief in "space" as an a priori of all perceptions has affected the much older notion of "place." A citizen's "home" meant the place beyond the threshold of which the commons started. Home stood to commons in a qualitative relationship that vanished when the threshold was reduced to a mere boundary that separates two domains of the very same "space."
- 3) Further, I want to recognize in which way the formal, abstract a priori of space affected the ethical and political perception of places as the outcome of reciprocal recognition and mutual devotion; as the atmosphere people create when they dwell together in a spirit of hospitality.

These questions are generally met with stubborn resistance by most people who have spent more time sitting in schools, in traffic jams or behind computers than talking to their neighbors. They have learned to think of space as the ultimate enclosure. For them, existence is a routine in planned spaces and freedom is an unlimited expansion of these spheres. In 2001, when a computer freak says "space," he might well mean the multilayered container of hypertext in electronic nowhere. But for most alphabetized commoners, space still means background space,⁷ the universal background of all particular

that any "space" in which the shapes and functions of objects remain constant under motion is "Euclidean". For an example of this use of the term "Euclidean space", see Heelan, Patrick, Space-Perception and the Philosophy of Science, Berkeley: University of California Press, 1983, especially p. 41.

⁷Schild-Bunim, Miriam, Space in Medieval Painting and the Forerunners of Perspective, New York, 1940. Modern background space - the mental machinery behind every painted scene - was absent from antique and medieval paintings. Even the Pompeyi painters, who knew various sophisticated techniques to evoke depth and farness, ignored it. These techniques thus are not antecedents of perspective. The words "absent" and "ignore" should not suggest that premodern painters did not know something that was discovered later. They rather adhered to their world in a radically different manner than modern men do. To this, Veyne, Paul, "The Roman Empire", in Philippe Ariès and Georges Duby, History of Private Life, vol. 1, states that no man could glare at the naked background behind the scenes that he was inhabiting, for there was no background.

Bochner, Salomon, "Space", in Dictionary of the History of Ideas, New York: Charles Scribener's Sons, 1973, v.5, pp. 294-306. Analyzes several ancient words for "place", "divinely protected place", "openness", "cleared land", "void",

existents, separate from them and yet ever-present in and behind them, somehow like the blank page behind the letters. What they call space has become so much part of the mental machinery that informs their perceptions that they lack the necessary distance to question it.

A historical critter...that might come to an end

As I already suggested, the realization that space is historical implies that it had a beginning and therefore might now approach its demise. This idea would hardly have upset people a generation ago. It would just have seemed ludicrous to those who had labored at high school math and abstruse to those who commuted between home and work. By the twentieth century, the reality of Cartesian, three-dimensional space within which all movement happens had become a "given." This made it impossible to recognize space as an epochal critter.

However, at the dawn of the twenty-first century, the innocent certainties about everything's enclosure, or, as Foucault would say, renferment in space, is no longer as absolute as it was at the time of Sputnik. Since then, the status of space as a natural given has started to become questionable. Doubts have arisen from two sides. On the one hand, the transition from instrumental to informational techniques, from the management of people to the management of populations has weakened the intuitive certainties supporting "modernity." On the other hand, historians have assembled much evidence for the thesis that abstract, a priori space only became part of popular wisdom long after Newton's time. This two-pronged threat to the belief that space is the natural box that contains all that exists can either invite me to a new liberty or strengthen a new tyranny. It can free you from the naive dream that space can be made inhabitable - that is, that women and men can found their dwelling in planned space - and make it easier to stress the perversity of any nostalgia for a comforting cage. But it can also make me crash into a virtual "space" in which the far and the close, the center and the periphery, the self and the other, collapse into a wired erehwon in real time.

The "something" still called "space" has no tactile qualities, no orientation, no smell, no taste, no memories. It is immune to the colors or shadows, the rhythms and sounds of anything immersed in it, while it strips both things and persons that it encloses of their aura. Yet, I attempt to persuade you that this no-thing is a social construct that characterizes a period of history - modernity - a period that I propose to dub the space age. The space age is the epoch in which the Cartesian coordinates of mathematics and physics have become the ultimate beyond of all reality. It is the period of history in

"freedom of movement", "absence of limits - and hence of form" and concludes that classical premodern languages have an abundance of terms to designate "placeness" and "breaking away from a place", but none for what we call space.

which schools and highways have induced most people to reduce the world's inexhaustible perceptual richness to a system of measurements of relative distances.⁸

Let's summarize: space that Kant took for an a priori of perception, is a relatively recent mental construct. That means that there is a "before" and an "after" its invention. The invention of space is perhaps one of the great watersheds of history: modern men cannot recover the perceptual modes of the men who lived before that invention, nor could these possibly understand the vision of the generations who came after. How deeply strange our space age is to the premodern mentality is manifest in the visceral rejection of its enclosures by people recently engulfed by it. For instance, a Mexican peasant's confidence that any object that has touched the soil is free to be taken as a commons, often survives long after he has become a mason in the capital; hence the so frowned upon custom of many urban migrants to let whatever they no longer need fall to the ground to be picked up by others. Finally, for the modern mind, universal background space is the non-transcendent beyond of all reality.

Disciplined agnosticism and asceticism

To pursue this inquiry into a modern certainty, I had to practice a discipline that I name space agnosticism. By this term, I mean an ascetical effort to disentangle myself from the aggregate of notions and perceptions foisted by the enclosure of all realities into the homogeneous space of science and management. In a world of highways, airports, educational precincts and penitentiary wards, this enclosure is technogenic - either generated or enforced by technology. It is why the practice of agnosticism among the certainties of the space age calls for an asceticism with its technologies. While I cannot abstain from being involved with motorized wheels that numb my feet, with wires that cancel distance, with TV that looks everywhere from nowhere, I still can cultivate a skeptical attitude and resist becoming their slave.

I am by far not the only doubter, but it has become necessary to distinguish doubters from one another. Indeed, space skeptics are of two kinds. On the one side, the irreflexive net-surfers, science fiction addicts, New Age mystics and system managers wired to virtual reality have abjured the space age without even being aware of it. On the other side, those whose skeptical view on space is rooted in historical study have been my guides.

Patrick Heelan, a philosopher and a physicist is one of them. According to him, the still dominant concept of the twentieth century, space, is a product of technological mediation and visual education.⁹

⁸Poincaré, Henri, La science et l'hypothèse, Paris, 1968, pp. 77-94. At the dawn of the 20th Century, this mathematician and physicist expressed his conviction that the "Euclidean" (or better: Cartesian) space of classical mathematics and physics is not identical with the "spaces" of our perceptions. Cartesian space is a highly artificial construct.

He argues that great painters like van Gogh and Cézanne have understood that nobody naturally sees in the space of linear perspective, but rather in a strange geometry that "curves" all straight lines and is perhaps non-Euclidean.¹⁰ Heelan also explains why space agnostics are so few: educated modern man fiercely resists the revelation of the arbitrariness of his certainties.

The philosopher of science Yehuda Elkana claims that every form of thought is space specific, e.g. that it is determined by the kind of "box" within which it was generated.¹¹ He examines how different spaces - the lab, the emergency ward, a museum, a cinematographic studio - generate characteristic forms of knowledge and he understands that these spaces all stem from the same "universal and context-free institutional assumptions," which, for him, ought to be the main theme of research into the illusory obviousness of space. However, Elkana seems unaware of the fact that any space planned for a modern professional institution, be it medicine, education, government or social service is radically heterogeneous to any place created by the very act of inhabiting it. For instance, he is insensitive to the radical difference between a monk's cell and a lab. The first is a place engendered by daily gestures fitting a community rule, while the second is a technogenic space needing professional control. In contrast to most modern precincts, the monastic cell, the guild chapel and the little red school house are eminent examples of places that owe their existence and atmosphere to the stance and relation of persons.

Space agnosticism takes still another form with Ladislav Kvasz.¹² For this mathematician, physicist and epistemologist, space is inseparable from the concept of projective equivalence. Imagine that, sitting at your table at night, you observe a cup and its shadow under your lamp's light. As you near your eye to the source of light, the shapes of the cup and of its shadow tend to overlap. If you could see them from the exact point occupied by the lamp, their overlapping would be perfect: the cup and its shadow would then be projectively equivalent. In general, two figures are said to be projectively equivalent if there is any point from which they can be seen to overlap. This point is called the center of

⁹Heelan, Patrick, A., Space Perception and the Philosophy of Science, Berkeley: University of California Press, 1983. The visual space is not Euclidean. It is rather "hyperbolic" or "Lobachevskyan". But, what is Euclidean space if Euclid knew no space but figures?

¹⁰Contrary to what happens in Euclidean geometry, motion (and changes of size) in non-Euclidean space affects the shape of figures. According to Heelan, the visual space is such. See Heelan, Space-Perceptions..., op. cit., pp. 41, 57-77, 98-128, 281-319.

¹¹He is the chief editor of Science in Context, and has dedicated a whole issue of this journal to this idea: 1991, Vol. 4.1, "The Place of Knowledge. The Special Setting and Its Relation to the Production of Knowledge". See also Sennett, Richard, Flesh and Stone, New York: W.W. Norton & Co, 1994, and "Something in the city. The spectre of uselessness and the search for a place in the world", in Times Literary Supplement, 22, September 1995, pp. 13 - 15. Modern institutional spaces delete the flesh of experience. They are not inhabitable places.

¹²Kvasz, Ladislav, "Was bedeutet es, ein geometrisches Bild zu verstehen?", in Dagmar Reichert, ed., Räumliches Denken, Zürich: Hochschulverlag AG an der ETH, 1996, p. 95-123.

the projection. Its construction, Kvasz argues, always defines a special subjectivity. For instance, if one of these figures is a real object and the other a drawing on a surface, the center is the eye of a Renaissance painter practicing linear perspective. From this subjective vantage point, Renaissance painters constructed an ideal space in which they computed point by point the projection of real objects and then pretended that what they had drawn was what their eye had really seen. This is how linear perspective could become the paradigm of the visual representation of reality and even of objective observation for centuries. It inaugurated a thought style for which only what could be compressed into a constructed space was real. According to Kvasz, all further applications of the principle of projective equivalence are examples of the diversity of mental boxes in which space can enclose reality. He comments on Gérard Desargues's projective geometry, Lobatchevsky's non-Euclidean geometry and then the way Beltrami, Cayley and Klein successively verified it in projectively equivalent Euclidean surfaces. For Kvasz, every one of these conceptual feats bears the seal of an epochal form of subjectivity.

The Dutch philosopher Jan Hendrik van den Berg, creator of a radical form of phenomenology that he calls "metabletics,"¹³ the doctrine of changes, is interested in the form of subjectivity that, he suspects, accompanies every kind of space. Since the same specific subjectivity informs an epoch's construction of space (if there is one!), the style of its architecture and the kind of illness that people suffer (sic), broad connections can be traced between these apparently separate realms. So, van den Berg sees a correlation between the demise, starting in the eighteenth century, of the inside-outside relationship that was typical of the Baroque style in architecture, the emergence of non-Euclidean geometries,¹⁴ and, at (about) the same time, the first clinical description of a neurosis under the name, "the English malady."

Catherine Pickstock, a theologian, approaches the modern obsession with space from a completely different side. She interprets it as equivalent to the sophistry that Socrates denounced in the *Phaedrus*.¹⁵ While they were walking along the river Ilissus, outside of Athens, young *Phaedrus* pretended to entertain Socrates with a discourse on love that he had learned by memory from a scroll. Socrates teased him into confessing his sham and had him read instead of feigning to converse. Then

¹³van den Berg, Jan Hendrik, *Metabletica of de leer der veranderingen*, Nijkerk, Netherland: Callenbach, 1974 (1956).

¹⁴The date of the first publication on non-Euclidean geometry is 1829. It was a work in Russian by Nikolay Ivanovich Lobachevsky, followed in 1837 by a work in French ("Géométrie imaginaire") and, in 1840, by a book in German (*Geometrische Untersuchungen zur Theorie der Parallellinien*). Lobatchvsky was rector of the university of Kazan. His ideas were rooted in his opposition to Kant, who maintained that such ideas as space and time are *a priori*. For Lobachevsky, space was an *a posteriori* concept. He thought that he could evidence it by demonstrating that different axioms can generate different spaces.

¹⁵Pickstock, Catherine, *After Writing. On the Liturgical Consummation of Philosophy*, Oxford: Blackwell, 1998.

Socrates improvised two discourses, one that mocked the Sophists who reduced speech to an equivalent of written language and another, genuinely spoken, that celebrated the logos as an ana-logy of love. Contrary to the first, the oral discourse of Socrates established a concrete relation with Phaedrus and also with a well in which they bathed their feet, the nymph that inhabited that well and the season's perfumes.

In 1574, in the introduction to his Logike, Peter Ramus¹⁶ wrote that his "lytle booke" was to be more profitable to the reader than all the years spent studying Plato. What he proposed was a calculus of reality in which all topics were divided in successive and ordered stages, beginning with the most general and progressing towards the more particular. These stages were mental boxes that immobilized objects in their definitions and excluded the comprehension of knowledge "as an event which arrives."¹⁷ According to Pickstock, Ramus's calculus of reality is the subjection of logic to spatial thinking. Space, she points out, has become a pseudo-eternity which, unlike genuine eternity, is fully comprehensive to the human gaze, and yet supposedly secure from the ravages of time. Without genuine transcendence, space must be absolute. This absolute is also the result of an attempt to bypass human temporality and subjectivity, and yet, it generates its own phony time and subjectivity. "Sophistic spatialization" propagates the illusion of an unmediated apprehension of facts and has, as such, become normative in science and, above all, in its vulgarizations. The mechanical manipulations made possible in Cartesian space provide modern man with an all too seductive facility. If he takes this facility for "the real," he is led to imagine that the ease and predictability of operations within that artificial sphere exhibit his true, primary relationship to the world.

Every one of these space agnostics focuses on a certain aspect of the historicity of space. Space, for Heelan, is a product of visual education and technology. Once constituted, according to Elkana, it confines people into mental crates whose remarkable differences mask the fact that no matter how diverse the rules governing their construction, they are boxes that box them in. This form of enclosure leads to the spatialization of thought: according to Kvasz nothing that remains unenclosed is considered real. Since space includes the self, the distinction between interiority and the exterior collapses. In the analysis of van den Berg, through this collapse, a new form of subjectivity comes into being, a subjectivity that knows no interiority, that is "soulless." Finally, Pickstock claims that space functions as a pseudo-eternity: to people uprooted from soil and place, it provides the phony insurance that something will remain when everything else has passed away. Seen by these authors, the invention of

¹⁶Ramus, Peter, Logike, Leeds: The Scholar Press, 1966 (1574).

¹⁷Pickstock, Catherine, After Writing..., op. cit., p. 51.

space seems to be concomitant with the birth of the modern sense of the self and its relation to the other. But they say little about the steps of this invention.

An idea and its protoideas

The origin of modern scientific concepts often loses itself in a magma of non scientific ideas that some philosophers of science call protoideas. The task of tracing phylogenetic lines of the concepts back to their sundry protoideas is often an exercise in inspired guesswork. For example, Ludwik Fleck sees a protoidea of the Wassermann reaction (a blood test invented in 1906 to diagnose syphilis in the lab) in the premodern belief that the "carnal scourge" was a corruption of the blood.¹⁸ I confess that I have sometimes dreamt of searching history for protoideas of space and I present here some of my guesses. In the best case, every one of my findings summarizes a specific aspect of the improbable assemblage that was to become space.

Focusing on special things looking forward, the body protected or hidden, as in a cave or a bush, might be the hunter's prototypical posture. Selecting a field of vision in which something special is expected to surge reenacts, in a way, the hunter's directed gaze.¹⁹ When this act is performed by a person sitting in a chair in front of a page, as I am in this moment, it is sometimes called "research."

Comparable to the protection of the body's rear part, but laden with its original symbols, is the act of looking through a window.²⁰ Another protoidea of space might be the capacity to describe a territory without acknowledging any contiguity between a "there" and the describer's "here." In other words, map making must entail an essential aspect of the space idea. While pondering this, remember that Roman and medieval "cartographers" did not draw maps in the modern sense, but itineraries.²¹

¹⁸Fleck, Ludwik, The Genesis and Development of a scientific Fact, Chicago: University of Chicago Press, 1979 [1935].

¹⁹Wartofsky, Max, "Sight, Symbol and Society: Towards a History of Visual Perception", in Annual Proceedings of the Center for Philosophic Exchange (SUNY) 3(1981):23-38.

"One may argue that seeing things in front one is hardly a cultural or historical phenomenon, since binocular vision throughout the vertebrate kingdom is in the main forward-looking. That is true. But the visual posture which is culturally and historically derived from this biological constraint is the unnatural one of watching from a fixed position. [...] The determination of a scene as a frame visual plane becomes a dominant object of visual activity only with the historical introduction of pictorial and theatrical representation in a certain form. Moreover, I would suggest that the introduction of drawing and painting on a surface, i.e. a two dimensional representation, is a radical means of transforming human vision into the pictorialized mode. For what becomes the object of vision is then what appears as if on a picture plane: the world comes to be seen as picture-like; and the variation of pictorial styles then acquires a general purchase on the shaping of visual perception." (p. 34)

²⁰Horn, Hans-Jürgen, "Rescipientes per fenestras, propiscientes per cancellos. Zur Typologie des Fensters in der Antike", in Jahrbuch für Antike und Christentum 10, 1967, pp. 30-60.

²¹An itinerary or itinerarium is a description of the relevant features of the road between here and there with indications of the time it takes a walker to go from one to the following.

Itineraria have no "depths", they do not attempt to represent a territory. The best known Roman itineraria were the itineraria Antonini and the itinerarium Alexandri. The Peutinger table is a 13th Century copy of a lost Roman map. ogar 'Weltkarten' waren für die Römer Wegeverzeichnisse. Keine originale römische 'Weltkarte' wurde erhalten. Es

Itineraries speak of successive steps on lines of contiguities and not of the surface of territories represented as seen from above.

Among the Antique protoideas of space, the horizon deserves a special mention. Though it designates an individual's subjective view of the limits of her field of vision, it has its origin in the local and communitary perception of the "world's limits." These limits defined, inside, a homogeneous realm of familiarity, the domain of a "we," while whatever lay beyond or outside them was in a way or another considered taboo. Koschorke²² has shown how the subjective notion of a limit of the visual field that moves at the walker's pace resulted from the progressive disembedding of people from their native boundaries. According to L. and R. Kriss-Rettenbeck and I. Illich,²³ it was a call to the experience of "spatial heterogeneity" a lived contingency in God's hand that launched the great medieval pilgrimage movement... and contributed to make the subjective experience of limits, walking with the walker, everybody's experience.

For some space agnostics, the invention of linear perspective is the true birth of space. According to Koschorke, perspectivist space was engendered at the end of the fourteenth century by the introduction of the horizon into the womb of Renaissance painting in Northern Italy.²⁴ The pictorial "horizon", however, was no longer the crest of the mountains or the bottom of the heavenly vault but the abstract line of the points at which the viewer's eye would meet his feet, were he to reach them, an impossible feat. In other words, the horizon was now the mathematical construction of the infinite on a finite surface.

In the twelfth century, words on parchment had started to be separated by clear intervals, an innovation that made silent reading possible. The new hiatus over which the eye had to jump from word to word is perhaps another protoidea of space. Isn't it thinkable that the hollowing of the density of the written page by these regular gaps opened the way to the idea that the letters are mentally detachable from their material support that now looms between them? In other words, did this technical innovation lead to the later idea that the text and the page are separable?²⁵ In fact, it did not take scribes very long

existiert aber eine Kopie aus dem 13. Jh. von einer solchen 'Weltkarte' nl. die Peutingersche Tafel. The first Christian itineraries such the Itinerarium Burdigalense and the Itinerarium Hierosolymitanum gave pilgrims indications over the successive stages of the roads to the Holy Land. See Grosjean, Georges und Kinauer, Rudolf, Kartenkunst und Kartentechnik vom Altertum bis zum Barok, Bern, Stuttgart: Verlag Hallwag, 1970

²²Named after the Greek verb horizeo, I separate, I divide, recalling the crest of the mountains that separates the small world of our valley from the others, the horizon was originally a world limit. Koschorke, Albrecht, Die Geschichte des Horizonts. Grenze und Grenzüberschreitung in literarischen Landschaftsbildern, Munich: Suhrkamp, 1990.

²³Kriss-Rettenbeck, Lenz and Ruth, and Illich, Ivan, "Homo viator - Ideen und Wirklichkeit", in Lenz Kriss-Rettenbeck and Gerda Möhler, eds., Wallfahrt kennt keine Grenzen, Munich, Zurich: @, 1984, p. 10-22.

²⁴Koschorke, Albrecht, Die Geschichte des Horizonts..., op. cit., see also Panofsky, Edwin, Renaissance and Renascences in Western Art, Stockhol: Almqvist and Wiskel, 1960.

²⁵Illich, Ivan, In the Vineyards of the Text, Chicago, University of Chicago Press, 1993.

to detach the now separated words from the rugose and smelly skins that had been their supports for millennia and to transfer them to the more sterile surface of paper pages.

However, it took long for the space idea to seep into popular language. Until the time of Shakespeare, "space" was still emphatically a lapse of time. It indicated a reprieve or one more opportunity. It also designated expanse: the openness of ground, sea or sky, or the room still left for you in a crowded place. People lived in a world that God had created by separating Heaven from Earth and Day from Night without needing a box to hold them.

It seems that "space" could not become a universal container until the concentric transparent planetary spheres of Antiquity dissolved into elliptical orbits, routes along which planets moved around the sun and the sun itself became just one more star in a dimensional universe. Space could not become predominant before the harmonic cosmos dissolved into the world system. But then, it took just a few generations for this drab abstract critter to be taken for granted, embellished by poetry and exalted as an attribute of God. Space had become the crate of the world, the supreme enclosure.

The ultimate enclosure and the propagation of scarcity

When I think of enclosure, what comes to mind is the enclosure of pastures that turned commons into private space. Or I think of the specialized spaces where children the sick and the mad are put to be among themselves. However, all too often, people forget that the replacement of self-governed commons by managed space provides the ultimate rationale for this fundamental aspect of modernity. The enclosure of being itself within space is at issue for us: the historical event in which space came to be conceived as an *a priori*.

The enclosure movement has alternatively been dubbed a war against subsistence,²⁶ the tragedy of the commons,²⁷ the demise of people's moral economy,²⁸ or the social construction of scarcity.²⁹ All these definition also apply to the enclosure of all enclosures: space. Space impoverishes local realities up to the point of perceptual starvation; it expropriates people from their common sensual apprehension of the world; it severs the economy (*oikonomia* = the ruling of a house) from all concrete *oikos* (house); it contributes to the propagation of scarcity as the prevalent modern experience. Yet, the fact that space is

²⁶Muchembled, Robert, *Culture Populaire et Culture des Élités dans la France Moderne, XVe - XVIIe siècles*, Paris, 1978.

²⁷Polanyi, Karl, *The Great Transformation*, New York: Rinehart, 1957 [1944].

Hardin, Garrett, Baden John, ed., *Managing the Commons*, San Francisco: Freeman, 1977.

²⁸Thompson, E.P., *The Making of the English Working Class*, New York: Pantheon Books, 1964.

²⁹Dumouchel, Paul, "L'ambiguïté de la rareté", in Paul Dumouchel and Jean-Pierre Dupuy, *L'enfer des choses*, Paris: Seuil, 1979.

the acquired perceptual deficiency syndrome at the root of the experience of scarcity³⁰ has still not been publicly recognized.

An important historiographical truth has been overlooked thus far: the invention of space is the other side of a yet untold history. While historians celebrate the successive achievements that made the modern mastery of space (and the control of people by that mastery) possible, another story, one of successive losses, must also be told. Sometimes, when I try to tell this story, I have the impression that a priori space is an endemic disease. It is a strange malady, because those who are infected by it in turn affect reality, render it shallow, cause it to dwindle and fade, make it uninhabitable for themselves and for others. Above all, I get the impression that things and people lose their relatedness to each other and fall apart.

Inquiries into the obvious

I have started out on an inquiry into something that most of my contemporaries consider much too obvious to be questioned. It has led me to follow the reasoning of half a dozen thinkers especially skeptical of the given, "natural" character generally attributed to space. In doing so, I have untangled some of the steps by which this mental artifact came into existence. Yet, does the acknowledgement of its historicity drive it back into inexistence? In other words, is space agnosticism the belief in the non-existence of space? No, space cannot be wished away any more than scarcity can. Airports, highways, hospitals, educational enclosures, supermarkets, jails, city halls, the radical monopoly of vehicles on urban streets, up to suburban residential areas and their well mown lawns are all outcomes of space management. Planned spaces are scarce by definition. Space, virtually the ultimate field of deployment of the market forces has become "projectively equivalent" with the economy and the viewpoint from which they are seen to overlap is scarcity, the iron law of modernity.

Erewhile, we have looked at several of the possible historical ingredients of the space concept and called them protoideas. I invite you now to a diametrically different exercise. The space concept has reorganized aspects³¹ of a perception that, in other times and places had been configured in radically

³⁰That scarcity is the symptomatic modern experience has been argued by: Dumouchel, Paul, "L'ambigüité de la rareté", op. cit. and Achterhuis, Hans, Het rijk van de schaarste. Van Thomas Hobbes tot Michel Foucault, Baarn (Netherland): Ambo, 1988.

Nonetheless, none of these authors has seen that the history of scarcity runs parallel, or better, "anastomically", to the history of space.

³¹Fuchs, Thomas, Die Mechanisierung des Herzens. Harvey und Descartes - Der vitale und der mechanische Aspekt des Kreislaufs, Frankfurt a/M: Suhrkamp, 1992. Contrary to Kuhnian paradigms and Fleckian thought styles, aspects can be seen as being in or of the things themselves. The multiplicity of possible - and even contemporaneously perceived - aspects is an expression of the perceptual and conceptual inexhaustibility of reality. However, to fully adopt the Fuchsian, "Chinese" view of simultaneous aspects would lead us to a non-linear exposition resembling Ts'ui Pên's endlessly

different manners. This new organization is so specifically western and modern that I am almost ready to argue that it is a nutshell for all that is western and modern. I see it as a radically unique way of fragmenting, configuring and monopolizing experiences which in other times had been part of the human condition that is of an essentially localized existence.

Is there a way to name these localized experiences which does not subject them to the monopoly of spatial thinking? And if so, does the chosen name stand for something that can claim some ancestry of space? Or on the contrary, would such a claim be illegitimate because it would cloak the western specificity of the space concept? Faced by this conundrum, I have decided to give this experience the name, places.

Fully aware of the many dictionary meanings of place, I also know that German Ort, Platz or Fleck, French lieu, endroit or localité, Spanish lugar, sitio, ámbito all have their own, characteristic fields of meaning and that no two overlap. Consequently I understand that, by using the English word place as I do, I coin a technical term.

The use of an old, meaningful word to designate something which stands in contrast to a new certainty is almost unavoidable in researches into the birth of the obvious, especially when these are undertaken on the basis of historical distancing. An example is the adoption of gender, a term that until two or three decades ago had a meaning in grammar and only there. Then, gender started to be used to name a reality that was so much taken for granted that it had needed no name: the fact that there are women and men. Gender has thus been used to stress a historical perception of this fact that is radically different from modern sex. Sex, universal and contagious, is a secondary characteristic, noticeable as protuberances in the jeans or under the blouse, affecting standard human beings. Gender, vernacular and local, different in every valley, is an interplay of feminine and masculine domains, of masculine and feminine activities that engender unique styles of living. Is, perhaps, place to space what gender is to sex?

Recovering a sense for place

Remember that I wanted to tell a still untold story. Or to retrace the history of the losses that accompanied the conceptual conquest of space. This history is made of stories about vanished places. Yet could it be, or its too farfetched to hope, that the telling of the story can also lead to a certain recovery of the lost sense for place?

Imagine that you step back in history in the manner of a crawfish and see the ingrained certainties of modernity wane at your sides. When the certainty of a priori space becomes hazy, what are you going to see? To answer "places!" is just to name. What is there, under the name?

Liberty of movement and openness are certainly going to be there, but also orientation and limits, without which there is no orientation. The essence of these experiences is perhaps the frequency of complementary pairs of opposites: open and closed, far and near, free and bound, visible and hidden, now and not yet. Many of these pairs mirror the human body's asymmetries: right and left, fore and back, up and down. Or relate my body to the world: the center of the world under my feet, and the horizon. Others are material: the firmness of the soil versus the thinness of the air.

Still others become manifest in motion. Mechanical locomotion in space unleashes a succession of fleeting images in a never-ending dream, like the "landscapes" through a train window. But walking from place to place unveils the substantial depths of the visible world, brings things into my body's presence "in the revelation of their materiality."³² The walker's movements bring existents which were at best potentially there (in thought or in memory) into the realm of his perceptions. It is by my movements that objects facing me reveal their hidden face and become seizable and that things presently behind the horizon will unveil themselves. Conversely, nature seizes me in her motions. The world is an experience of mutual seizure, Bachelard wrote, and this mutual seizure of two vis-à-vis is another aspect of being in places.

What I see is complementary with what I can, Merleau-Ponty added.³³ What I see cannot be disembedded from what I can reach, seize, taste, smell, hear; no ideal image can be abstracted from these powers and their challenges by nature's moves. It is only by a kind of ellipsis that one can say that the senses "overlap" in a joint action, for they were never severed in the first place. In this joint perception or synaesthesia, things are present before any hypothetical reduction of their perception to separate "sensorial data": eyes eavesdrop, words enlighten, feet see and the nose touches the bodies' aura. Synaesthesia is another aspect of the perception of places.

Histories of places

I could now multiply the stories of places, each of which illustrating a certain aspect of what it means, to be in a place: asymmetrical complementarities, mutual seizure, synaesthesia. Some would be meaningful for you but I fear that others would be so remote from your experience that, instead of

³²Bachelard, Gaston, Water and Dreams. An Essay on the Imagination of Matter, Dallas: Dallas Institute of the Humanities and Culture, 1983 (1956), p. 6.

³³Merleau-Ponty, Maurice, The Primacy of Perception, @: Northwestern University Press, 1964, pp. 162 ff.

evoking possible places, they would just sound weird. I confess that, for years, I have searched the works of such authors as Mircea Eliade, Georges Dumézil or Joseph Rykwert for stories about the founding of places in ancient times. I believed that the effect of estrangement of these intimations from lost worlds would be to stress, in comparison, the strangeness of modernity. See, for instance, this account of a founding ritual around 1500 B.C. as recorded by the Rig-Veda, India's oldest book of religious precepts: "He who wanted to found a place had first to start a fire with embers taken from a peasant's hearth. This fire - the fire of the earth, of the peasant or of the householder - had to be round."³⁴

Then, the Rig-Veda goes on, the founder stepped eastward. When he stopped, with stones he marked a square on the soil: the hearth for a second fire. The round and the square fires are in a relationship that conjures up the one existing between the earth and the sky. If the first fire is round, it is not because the earth is a globe, but because the line of the horizon is approximately a circle in the middle of which one stands: the visible earth is a circle. The same in all directions, a circle cannot orient. A cross in a circle expresses the union of earth and heaven. Then the founder steps backwards as a crawfish until the middle of the distance between the two fires, counting his steps. He then faces the South and makes again as many steps as he has made backwards. There, he establishes a third fire, smaller than the first two and which, the Rig-Veda precises, "must be formless."

This story reflects the way how immigrants from the Iranian plateau in what is now India engendered dwelling places more than three millennia and a half ago... or at least how Georges Dumézil understood it in the twentieth century A.D. I have loved this story and, above all, the way Dumézil told it, showing how the three proto-Hindu fires foreshadowed the three main castes of Hindu society, and, beyond, the division of the prototypical (and hypothetical!) Indo-European society into three basic orders: the priests, the warriors and the cultivators. However, trying to tell it at the first Oakland round table made me wake up from these historical reveries: I came to realize that it was as strange, there, as an okapi in Jack London Square. Interesting story if well told, but about as familiar as the living chimera (part giraffe, part zebra, part donkey) would be there.

More than a millennium later, the Greek and Roman versions of foundation rites were like dromedaries. Still too bizarre to really surprise, as the sight of a camel in Harrison Street would induce passersbys to think that a circus is arriving in town.

The Greeks called the primordial figure of a cross in a circle *temenos*, the Romans called it *templum*. It was the original orienting device resulting from an act of foundation. In Rome, the *haruspex* contemplated the *templum* of the future city in the sky, somatized it and expectorated it on the soil,

³⁴Dumézil, Georges, *La Religion Romaine Archaique*, Paris, 1966, p. 308.

where it became the visible sign (also called *templum*) of the union of heaven and earth (a *hierophany*) that instituted an inhabited place.³⁵ A place was limited in extension but opened to the cosmos, it touched the heavens like a tree with its branches and had roots in the underworld: it was a *topocosm*.

But displaced okapis and dromedaries are meant to be seen in zoos and menageries, not in an Oakland neighborhood. The danger of illustrating the characters of places with such remote examples is that they might induce the listener into antiquarian nostalgia or, worse, into the belief that ancient rituals can be revived under modern myths. Any attempt to reenact place founding rites in space is like establishing a reservation for the last Ohlones behind the Mayor's house. Nonetheless, doesn't the following story ring a distant bell? It is about the Greek gods Hestia and Hermes, the gods of dwelling and of hospitality.

In its polarity, the couple Hestia-Hermes³⁶ expressed the tension which is proper to the pre-spatial asymmetrical complementarity. This needed a center, a fixed point from which directions and orientations could be defined. But it was also the locus of motion, and that implied the possibility of transitions, of passage from any point to any other. Hestia and Hermes were the gods of the domestic domain. They were also the symbols of the gestures of women and men and of their interplay. One could only be understood through the other. For instance, it is only in relation to Hestia that all the different aspects of Hermes's activity became coherent. Hermes made mobile, Hestia centered. Hestia's place was the hearth, whose deeply rooted stone was a symbol of constancy. Hermes's place was near the door that he protected from his companions the thieves. Hermes's characteristics and activities are the asymmetrical complements of what Hestia is and does.

But, no more okapis or dromedaries. The places that interest us here are the ones that can be saved from the monopoly of spatial truths. The ones that can be established in inconspicuous niches and protected from the contagion of space. Humble, without folkloristic appeal, they have nevertheless most of the characteristics that places have and space does not have.

So let us dedicate this essay to Jerry's table. Let it be a place. From such a place, three or four can question the radical monopoly of space that transforms people into packages to be transported, citizens into clients to be served, neighbors into numbers.

³⁵Rykwert, Joseph, *The Idea of a Town. The Anthropology of Urban Form in Rome, Italy and the Ancient World*, Princeton: Princeton University Press, 1976.

³⁶Vernant, Jean-Pierre, "Hestia - Hermès. Sur l'expression religieuse de l'espace et du mouvement chez les Grecs:", in Jean-Pierre Vernant, *Mythe et pensée chez les Grecs. Étude de psychologie historique*, 2 vol., Paris, 1974, pp. 155 - 201.