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Speculations on the City and the Evolution of Consciousness

The city is not simply a location in space, but also a vehicle in time that can itself accelerate the evolution of consciousness. Like molecules packed into the membrane of a cell, the minds that are packed into a city take on a new life that is energized by the city's intensification of space and time.

The first cities of ancient Sumer were ceremonial centres organized around the sacred precinct of the temple. Sumerian mythology stated that these cities were founded and lived in by the gods. One of the earliest texts we have in Sumerian mythology is the story of how the goddess Inanna transferred the arts of civilization (the *me's*) from the god Enki's favoured city of Eridu to her own beloved Erech. The text is a fundamental expression of the ancient Arithmetic Mentality, as it displays the numinosity of the list and delights in repeating, in strophe after strophe, the enumeration of these *me's* that were loaded on and unloaded from Inanna's riverine barge.

This ancient Sumerian poem, *How Inanna Transferred the Arts of Civilization from Eridu to Erech* (Kramer, 1963, p. 116) enables us to see how both literature and mathematics participate in a historically dependent mentality in which a world-view is structured by a particular dynamical mode of perception and narration, be it Arithmetic (or Ancient), Geometrical (or Classical), Algebraic (or Medieval), Galilean Dynamical (or Renaissance/Modern), or Chaos Dynamical (or Contemporary).

Within the sacred precinct, a steward, an *Ensi*, ruled over the ceremonial city for the absentee landlord of the god. Over the years, as the gods receded in the daily experience of humans, the day-to-day reality of human rulership became much more visible. We can see this social evolution of mystique into politique as a three-stage process in which the ceremonial centre grows into the imperial city.

- 1. The gods rule** (stage of the *Ensi*)
- 2. I rule for the gods** (stage of shepherd-king)
- 3. I rule!** (stage of the emperor)

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Ancient cities around the world seem to begin as ceremonial centres, and then, through trade and warfare, grow into imperial centres. The early Sumerian cities and the Meso-American cities, San Lorenzo Tenochtitlan and Teotihuacan, are examples of the first type. Babylon, Persepolis, Peking and Rome are examples of the second type. From Babylon to Peking to Rome, imperial cities were the general rule for planet Earth during the period of ancient, classical, and medieval civilizations. An empire would rise, extend its rule from court to provinces, until there would be a reversal and the outlying provinces would overrun the imperial city. The climax formation of this civilizational system of a periodic attractor oscillating back and forth between civilization and barbarism was seen in medieval societies like Ming China, pre-Columbian Meso-America, and the Islamic and Christian civilizations surrounding the Mediterranean basin.

In the cultural shift from an empire, based on conquest and tribute, to a polycentric world economy based on trade and finance with interest-generating loans, there arose a shift in perspective from the past to the future. Indebtedness has as its phase-space the future, so one naturally becomes interested in the time to come when one's ship will come in, one's loan will be paid off, and full payment will be made. The new kind of city that arose with this new world economy was the trading city, a Florence, Genoa and Venice at the beginning of the modern period, an Antwerp and Amsterdam in the middle, and a London and New York at the end.

With the expansion of trade and technology, artisans who found themselves in low esteem in aristocratic, feudal societies, found themselves growing in independence and influence as they became the artists and scientists of an expanding industrializing society. A city that grew to become a capital for this new culture of art and science was late-nineteenth-century Paris. Indeed, for the social critic Walter Benjamin, Paris was the capital of Civilization for the last third of the nineteenth century (Benjamin, 1974, pp. 170–84).

For the sake of heuristic playfulness, let us imagine that Paris 1851 to 1914 is a processual object, a phenomenology of culture bounded by a permeable membrane that is reflexive in time and reflective in space. The minds that live within this membrane begin to take on a collective mental behaviour that is peculiar to them, and as they interact within this ethos — or system of values — they begin to bring forth mental creations that seem to flourish within this particular domain of time and space. Like jazz musicians listening to one another's riffs before they take off on their own, Parisians are energizing other Parisians. Manet is listening to Mallarmé at the beginning of this period, and Kupka is listening to Poincaré at the end, but all through this period from 1851 to 1914, all these creative thinkers are listening to Paris. Railways are influencing both Monet and Zola, and as Haussmann's reconstruction of Paris destroyed medieval Paris in order to recreate a more conscious monument to a bourgeois vision of the past, Bergson in *Matière et Mémoire* and Proust in *Du Côté de Chez Swann* also excavated the past in an exploration of the nature of memory as constitutive of human identity. This focussing on matter and its saturation with invested meaning is, of course, not unique to Proust and Bergson, but is at the heart of the capitalistic fixing of value on gold in the new global Gold Standard Economy (Gallarotti, 1995). Interestingly enough, that most unrooted wanderer and airy-fairy poet, Rainer Maria Rilke, is also concerned at this time with *Dinglichkeit*, but then Rilke, too, was in Paris and was secretary to Rodin, and Proust was one of the first to read and become

enthusiastic about Rilke. Rilke was also quite influenced by Cézanne, so this new attention to the psychological nature of perception is something worth ‘looking at’. When one adds to our thoughts of Manet and Monet, a glance at the beginnings of photography with Marville and Atget, and then with cinema and the brothers Lumière, one begins to appreciate the manner in which city and media are beginning to play off one another.

All of that is not too far out, so let’s take it a step further to suggest that what is helping to form the membrane of time and space to give living structure to the evolutionary vehicle of Paris has also to do with an economy as well as a technology, and a war as well as an explosion of artistic and scientific creativity. So let us imagine a table of correspondences:

	Paris	New York	Los Angeles
War:	Franco-Prussian, World War I	World War II	Cold War
Economy:	Gold Standard	‘The Crash’	Nixon’s post-Breton Woods floating exchange rates — a form of Derrida’s ‘différance’
Technology:	Railway	Mass transit, Subway and ‘El’	Automobile
Media:	Painting, photography and cinema	Radio and movies	Movies and television
Temporal Mode:	The Past, Historical Monument	The Now, Skyscraper	The Future and Fantasy; freeways, theme parks
Dynamical Mentality:	Poincaré	Macy Conferences, Information Theory	Complex Dynamical Systems
Musical Mentality:	Satie	Gershwin, Miles Davis and ‘Birth of the Cool’	Music as acoustical architecture, informational economy
Archetypal Novel:	Proust, <i>A la Recherche . . .</i>	Dos Passos, <i>Manhattan Transfer</i>	Pynchon, <i>Crying of Lot 49</i>

To take it from the bottom: Satie, from the influence of his mystical Rosicrucian musings of 1891, eliminates temporal markings in his musical compositions and attempts to create a tonal extensiveness, and this is a musical prefiguring of Bergson’s 1896 analysis of time as ‘durée’. This dissolution of absolute mechanical clock time is echoed in Poincaré’s discovery that the solar system is not an orderly mechanical clock, but a chaotic system. Kupka sits in on Poincaré’s lectures, and in his paintings from 1911 on he begins to express fractal architectures, self-similarity, and collisions of laminar and chaotic flows (Kolinsky and Andel, 1998). In New York, street sounds in Gershwin and jazz in general begin to explore noise and ‘self-organization from noise’ right about the time that the scientists in the Macy conferences — Bateson, von

Neumann, and von Forster — as well as Shannon across the Hudson in Bell Telephone Labs in New Jersey — are all beginning to study self-organization from noise in cybernetics and information theory. In Los Angeles, the theme park as fake city uses movie music as emotional crowd controls in Disneyland, with speakers in the monorail, the bushes, the lavatories and restaurants.¹ Musak in elevators and factories becomes an experiment with subliminal systems of social control, and pop music expands globally to become a new kind of collective architecture and currency of exchange in the informational economy in which the pop star becomes a new kind of post-industrial tycoon.

In other words, what the moiré pattern of war, economy, media, artistic and scientific invention allows us to see is that minds are not discrete entities but are embedded within an ecology of consciousness, and what the intellectual city like Paris brought forth in its artistic and scientific creations was the evolution of a new kind of noetic polity of synchronous emergence — one that has now been passed over in new forms of synchronous emergence in more global forms of cyberspace. Paris, as an urban artefact, certainly expressed an escape from nature, but its celebration of the glory of the past with its heroic monuments disguised this shift with a certain conservatism. But with the Eiffel Tower there was a reaching up to break free of nature that inspired New York's efforts to escape the ground of nature in the skyscrapers of the Flatiron Building, the Empire State Building and Rockefeller Center. King Kong falling to his death from the Empire State Building expressed an almost archetypal death of the old nature in the new state of culture.

In Los Angeles, New York's polarization between tenement and penthouse is overcome in the flattened suburban megalopolis of the new postwar universal middle class. Here credit as an imaginary currency becomes the new ground of the economy, and fantasy becomes the new system of identity. The whole culture is literally indebted to the future, so the imagination of the future becomes the new fictional ground that supports value and identity. The great soldiers and scientists of Paris, and the great millionaires of New York, become replaced by the celebrity, a creature of pure image and illusion. In this new State of Entertainment, advertising replaces political philosophy and entertainment replaces education, so a presidential campaign becomes a consensual delusion and Reagan becomes the first Disney animatron president as celebrity, celebrity as president.

Three novels that embody the distinct kairos of their chosen cities are Proust's *A la Recherche du Temps Perdu* for Paris, John Dos Passos' *Manhattan Transfer* for New York, and Thomas Pynchon's *Crying of Lot 49* for Los Angeles. With Proust,

[1] On more than one occasion, younger scholars have accused me of using the ideas of Baudrillard without due citation. My approach to writing on contemporary culture was certainly influenced by Marshall McLuhan, whom I encountered both at MIT and the University of Toronto, but my writings on Los Angeles come twenty years before I read Baudrillard. In 1967, I wrote 'Los Angeles: Reflections at the Edge of History', which was published in *The Antioch Review* in 1968; it became the first chapter of my book, *At the Edge of History* in 1971. Because this book was nominated for The National Book Award, it was translated into popular editions in French and Italian, where both Baudrillard and Eco could easily encounter it. I went on to write on Disneyland and fake history in the introduction to the 1988 reissue of this book and in my subsequent work, *The American Replacement of Nature* (New York: Doubleday, Currency Books, 1991). I now delight in Baudrillard's outrageously French — and his own arrogantly footnoteless — style, but my approach comes from having grown up in Los Angeles and having been a teenager with a car at the time of the opening of Disneyland.

perception, memory, and the nature of time are part of a concern that is part of a vast Parisian thought-complex, one shared by Bergson, and the new media of photography and film. With Dos Passos, the writer performs self-consciously modernist fiction in the narrative techniques of collage and quick cuts of simultaneity that focus on the phase-space of the 'now' and prefigure the narrative techniques that have taken over television story-telling, from *Hill Street Blues* to *ER*. With Pynchon, the chaotic informational overload of the megalopolis generates a new landscape of fantasy-identity, conspiracy theories, and paranoid reintegration. Paranoia as a mad system of informational integration is a shadow-formation that paradoxically throws light upon the shift from post-industrial to informational society; it is a caricature of the cultural transition from the world metropolis to the planetary noetic polity in which the territorial nation-state dissolves in visions of globalist associations.

Both nineteenth-century Paris and twentieth-century New York are examples of the city evolving from the materialist and capitalistic city into the informational noetic polity, one in which an overlapping moiré of economic centre, artistic centre, and intellectual centre creates a pattern in which no single institution is imperialistically in control, thus an emergent state comes forth in which consciousness moves to a level above the traditional formations of an urban civilization. Since even this contemporary manifestation of urban form now seems to be simply a node in the planetary informational lattice of the World Wide Web, it is hard to prophesy just where this contemporary noetic polity is taking us in cultural evolution.

My guess is that the etherealization of architecture through atomic nanotechnologies that will enable one to turn buildings on and off like electric lights will make cities like New York nostalgic artefacts, and, just like Haussmann's Paris, historical camouflage to their true but more invisible structure. Los Angeles, in contrast to New York, is a single-industry city, that industry being entertainment — movies, television, and theme parks. Disneyland and Las Vegas are basically theme park suburbs of L.A. From my perspective, L.A. is isomorphic to the Vatican, and is the Vatican of our new State of Entertainment in which politicians, sports figures, movie stars, and celebrities are all the potentates of the new wilfully deluded polity. Cambridge, Mass. is also a single-industry city, and that is what makes it more boring than New York and why creative artists who earn their keep as professors at Harvard, MIT, Tufts, or Boston soon get bored with their unimaginative academic colleagues and move to New York as soon as their income allows them to break loose from tenured servitude to the monocrop noetic polity of the university.

New York is not a single-industry city, and that is what makes it so much more interesting than commercial Zurich, or even contemporary Paris for that matter. Contemporary Paris has more of a conformist and collective manner to its intellectual style of life, but New York is so vast that one can live and write here and never have to run into or conform to the styles of Susan Sontag or Norman Mailer. New York is a kind of mitochondrium of Archaean evolution that has moved into some gigantic Gaian planetary cell for the next stage in evolution. The moiré pattern that emerges from the overlap of Wall Street, the United Nations, music and performing arts, publishing, and universities makes it now as interesting as Paris must have been in the time of Proust, Bergson and Poincaré.

In the interval between World Wars I and II, the global economy contracted and restructured itself as the capital of the world economy shifted from London to New

York. This restructuring is called the Great Depression,² and in his efforts to save American capitalism, F.D.R. was not fully successful until he put America on a war-time economy. This extension of credit to the manufacturers was continued through the extension of the war into the Cold War, with its stimulation of the new aerospace industries. This new post-industrial economy was created by massive intrusion of Big Government into the private sector, but almost by accident, in the case of the G. I. Bill, the United States Government stumbled upon the idea of extending credit to the consumers and not just the factory producers, and these new forms of support for higher education and the purchase of homes shaped the new world of the suburbs in the Baby Boom. When the National Defense Act put the construction of the Interstate Highway system also on the federal tab, the wedding of suburban tracts to highways created the new culture of the automobile and the shopping mall. With a continuing extension of credit and indebtedness to consumers, credit cards, television, movies and theme park images of history all interacted to bring forth a whole new post-industrial society.

In his essay 'The Planetization of Mankind' in 1945, Teilhard de Chardin noticed that:

Every new war, embarked upon by the nations for the purpose of detaching themselves from one another, merely results in their being bound and mingled together in a more inextricable knot. The more we seek to thrust each other away, the more do we interpenetrate (Teilhard de Chardin, 1945, p. 130).

And so after World War II, Detroit automotive factories end up in Japan and Japanese Zen Buddhist monasteries end up in California.

In the countercultural movements of 1968, these Yin and Yang forces collided in America and Western Europe and brought both France and the United States to the edge of civil wars. In industrial society, the displaced agricultural labourers were gathered into factories, looked at one another and recognized themselves as the new working class. In the informational society of the age of television, the young were collectivized in suburbs and public universities, looked around and recognized themselves in the generation gap as the new counterculture. In the War in Vietnam, the United States sought to extend the colonial policies of the French and contain Chinese expansion by controlling Japan's economic dependency on Malaysian and Indonesian oil and resources, and thus the USA expressed the Yang force in a straightforward manner. But the informational proletariat of the young in the US and Western Europe exploded in a new expression of identity, interiority, and mystification of a romantic past in the commune and hippie costume. 'Folk' music was electronically retrieved through the figures of Joan Baez and Bob Dylan, and the Depression of Woody Guthrie became a pastoral artefact in the affluent consumer culture of the sixties.

This first wave of the counterculture of the post-industrial society of the 1960s expressed a revolutionary and Dionysian consciousness in a mystical shift from the territorial nation-state to the 'extraterrestrial' noetic polity, and this found public

[2] Braudel's perception of this shift is brilliant. 'Can one suggest that a highly convenient rule might operate in this context, to wit, that any city which is becoming or has become the centre of a world- economy, is the first place in which the seismic movements of the system show themselves, and subsequently the first to be truly cured of them? If so, it would shed a new light on Black Thursday in Wall Street in 1929, which I am inclined to see as marking the beginning of New York's leadership of the world' (Braudel, 1984, p. 272).

artistic expression in drugs, global pop music, and many works of popular science fiction concerned with fears of extraterrestrial invasion.

The second wave of the counterculture that came out of Silicon Valley in California in the 1980s expressed a more Apollonian consciousness of re-embodiment in new informational corporations and new forms of Artificial Intelligence. Here we saw a shift from the consciousness of an autonomous self within a biological evolutionary body to more distributive lattices of multidimensional mind in which new media constellated new forms of the extensive phase-space of consciousness through personal computers, the Internet, and the World Wide Web. Thus, in the exchange of opposites that is characteristic of conflict as well as diploid sexual reproduction, the exteriority of the Yang force crosses with the interiority of the Yin force in a form of planetary cellular mitosis that seems about to give birth to a new kind of life in which natural and artificial are more intimately bound together in 'Artificial Life' and electronic organisms.

In this emergence of the novel state of cultural evolution, the old condition is used as a nostalgic camouflage-content for the structure. Notice that the ideology of capitalism in the United States is filled with the imagery of family values, Evangelical Protestantism, and rugged individualism: all of which are opposite to the cultural drift of the economic processes Republicans energize. In much the same way, Paris in the nineteenth century began by focusing on matter and the past in the photography of Atget, the perspectival monumentality of Haussmann, and the excavations of memory in Bergson and Proust, but ended up in a new non-objective state of consciousness in Poincaré and Kupka, and, of course, in the a-perspectival Cubism of Braque and Picasso. Twentieth century New York started out as an escape from the past into a Modernist Now, but ended up as a hierarchical and highly concretized city as artefact of the corporate past. Postwar Los Angeles started out as the vast extensive and flattened city of the new universal middle class, but ended up as an informational lattice in which nodes such as Las Vegas, Silicon Valley, and Santa Fe became like urban metastases. Our new planetary noetic polity does not seem to be a city fixed to a physical location, so the giantism of Los Angeles now serves as a content-camouflage to its rather monistic uniformity in a consciousness that is locked on to the State of Entertainment, much as New York in the fifties and sixties was locked onto the corporatism of its aluminum and glass skyscrapers around Rockefeller Center.

Before the outbreak of World War I, psychoanalysis, quantum mechanics, cubism, and special relativity began to express an intellectual shift away from the pious certainties of the materialist bourgeois world view. In 1972, a new planetary culture began to express itself in contradistinction to the internationalism that had been dominant in the era of World War II and the Cold War. James Lovelock published his first paper on the Gaia Theory that expressed a new way of looking at planetary dynamics and Jay Forester and the Meadows at MIT published their first efforts at understanding the relationship between the global economy and the global ecology in *Limits to Growth*. New forms of mathematics, first in catastrophe theory and then in chaos dynamics, began to express the shift from linear systems of cause and effect to emergent states and complex dynamical systems. The politics of nation-states are still struggling to understand this cultural transformation in which the interiority of the Yin force expresses itself in the planetization of the esoteric in popular movements of mysticism and meditation, while the Yang force expresses itself in a global economy

of GATT and NAFTA. As the ozone hole and the Greenhouse Effect begin to transform global weather patterns, the relationship between the global economy and the global ecology is becoming more apparent, and also, quite apparently, not under the control of the globalist managers. We can call this shift from a collection of competing industrial nation-states to a planetary culture, the shift from a global economy (Clinton *et al.*) to a planetary ecumené.

Like the ancient city-states of Sumer that were united by rivers, the new cities along the Pacific Rim seem to be part of an emergent structure that is neither simply a culture nor an economy, but something like the molecular soup that prefigured the evolution of cells. The infectious case of Los Angeles certainly seems to be a model for these new global cities of the Pacific Rim, 'the new Mediterranean'. With more than 80 languages in its public schools, L.A. is no longer simply an 'American' city. It is First World and Third World at the same time, but having grown up there as a teenager, I prefer to live as an old man in New York.

Perhaps we are experiencing a shift from a world economy of competing and polluting industrial nation-states to a global ecology of noetic polities in which consciousness will become a symbiotic architecture of organisms and machines, one in which pollution is mined as a natural resource in a cultured bacterial technology, and a complex ecology of 'living machines' and electronic organisms (Todd and Todd, 1994). Certainly, to track and describe this new emergent state, we shall need the narratives of complex dynamical systems. Perhaps here science fact and science fiction are coming together to open our imaginations to the future and the possibilities of multidimensional modes of consciousness that can be both mystical and mathematical.

References

- Benjamin, Walter (1974), 'Paris, die Hauptstadt des XIX Jahrhunderts', *Illuminationen: Ausgewählte Schriften* (Suhrkamp: Frankfurt am Main).
- Braudel, Fernand (1984), *Civilization and Capitalism, Fifteenth–Eighteenth Century, Volume III, The Perspective of the World* (London: Fontana, Harper Collins).
- Gallarotti, Giulio M. (1995), *The Anatomy of an International Monetary Regime: the Classical Gold Standard 1880–1914* (New York: Oxford University Press).
- Kolinsky, Dorothy and Andel, Jaroslav (ed. 1998), *Frantisek Kupka: Die Abstrakten Farben des Universums*, (Verlag Gerd Hatje: Ostfildern bei Stuttgart).
- Kramer, Samuel Noah (1963), *The Sumerians: Their History, Culture, and Character* (University of Chicago Press: Chicago and London).
- Teilhard de Chardin, Pierre (1964), *The Future of Man* (New York: Harper & Row).
- Todd, Nancy Jack and Todd, John (1994), *From Eco-Cities to Living Machines: Principles of Ecological Design* (Berkeley, CA: North Atlantic Books).

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