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Soleri, the City of Remote Future

The Contradictions of the American Metropolis

Writing about Los Angeles, Reyner Banham explained that: "... the city will never be understood by those who cannot move fluently through its diffuse urban texture, cannot go with the flow of its unprecedented life. So, like earlier generations of English intellectuals who taught themselves Italian in order to read Dante in the original, I learned to drive in order to read Los Angeles in the

original"¹². Only identifying what has made urban development possible in a place, car use in the case of the American city is it possible to understand its structure.

A discussion of Paolo Soleri and Arcosanti has to start from the experience of travel. Travel not only as the spatial perception of a succession of places – Newark, Phoenix, Cordes Junction, where Arcosanti was built, Las Vegas –, but also as a mental approach that feeds on one's readings and inspiration derived from various media, as well as the encounters with Soleri himself, and with the fundamental idea that drawings should not remain the exclusive representational means of the architectural idea and that a new iconography of sprawl can be built and architecture can be described in an original and persuasive way by photography.

"In Las Vegas, everything takes place as if the absence of any sense of belonging to the environment entailed a hypertrophied sensitivity to details. There is no possibility of visual escape into perceptual horizons of indeterminateness (left-right, forward-back, near-far), but, instead, only the pregnancy of enlarged, exaggerated and highlighted forms. Behind each lit-up sign no space is hollowed out, no incipient world."²

The dynamics and shape of Las Vegas have remained unchanged since 1972, when Robert Venturi, Denise Scott-Brown and Steve Izenour described them in their book-manifesto, *Learning from Las Vegas*, that narrated the city as seen from the car and dealt not with sophisticated and refined architecture (how could they? That kind of architecture does not exist in Las Vegas) but with the significance of the signs and objects placed along its boulevards and its Strip.

¹ Reyner BANHAM, *Los Angeles: The Architecture of Four Ecologies* (London and Harmondsworth, 1971; reprint, Berkeley, 2001); (It. trans.: *Los Angeles. L'architettura di quattro ecologie*, Costa & Nolan, Genoa 1983, p. 4)

² Bruce BEGOUT, *Zeropolis: L'Experience de Las Vegas*, Allia, 2001; (It. trans.: *Zeropoli. Las Vegas, città del nulla*, Bollati Boringhieri, Turin 2002, p. 19)

Built in the Mojave Desert in Nevada, Las Vegas represents the excesses of the American Dream and is the evidence of the failure of the exasperated consumerism it epitomizes even more than Los Angeles.

Conceived as the result of a clear political plan – creating a center of entertainment as a diversion from the nuclear experiments that were being carried out during the '50s but only became public a decade later – Las Vegas, a.k.a. Sin City, glows at night with the neon signs of its casinos, extra luxury hotels, Chapels of the Bells and motels. During the day, when the signs on the Strip luring the customers from the street into the casinos are turned off, it shows a structure made of fake scenes like those of a film set. Its commercial strip is made of visual attractors artfully camouflaged to convey an illusion that many places – Paris, Venice, New York and Cairo – are all condensed in one like the fragments of a homogeneous urban fabric, an amusement park that looks like a city. Martin Scorsese's *Casino* (1996) is a very effective representation of the violent metropolitan reality of Las Vegas. Robert De Niro, as the movie's main character, takes us in its hidden meanders, showing the life of casinos and Mafia criminals exactly as they were at the time when Robert and Denise Venturi wrote their *Learning from Las Vegas*, the cult book of many generations of architects, a city where the luxury of entertainment and the destitution of the homeless people nestled in the interstices at the edges of the Strip live side by side.

"Las Vegas epitomizes utopia – writes Bruce Bégout – in its double essential form: it represents the fulfilment of individual desire by the rationalisation of social relations and, at the same time, is the city where any desire can be satisfied and where space is strictly regulated so that such fulfilment is never disturbed or interrupted"³. Thus, the sprawl is not only a pattern of metropolitan urban development but also a way of life. No functional hierarchies exist in the sprawl as it feeds on and is regulated by standardization. This is manifest in the Phoenix suburbs near Cosanti, the first village built by Soleri, where in the '50s there was only the desert and now Mexican-style villas stretch out as far as the eye can see, fenced by walls that hide their interiors, regulated by a dense grid of perpendicular streets. In this sense, the sprawl may be considered as a strictly regulated settlement model where the housing and industrial/retail functions are neatly separated by physical enclosures. The contradictory element contrasting with the horizontality of this urban fabric is the downtown, conceived as a vertical structure – although the Phoenix downtown has a limited number of skyscrapers compared to the downtowns of Chicago, Boston or New York.

In America, "The sprawl is going to happen. You've got 100 million new people (since the US topped 200 million in 1967), they've got to go somewhere, and most don't want to live in the city. End of story"⁴. According to a survey made in 2004 by the National Association of Realtors, only 13% of the American people want to live in urban areas, while 51% want to live in the suburbs, and 35% in rural areas: there is a need of going to live in the areas that used to be rural but now belong to the metropolitan or suburban dimension of the city.

Understanding America's contradictions is far from easy, especially since its landscape is dotted with prefabricated/mobile homes that certainly have no relation whatsoever with Richard Buckminster Fuller. Made in balloon-frame and clad in plasterboard, they are all alike, placed in rows like the items of a catalogue, and occupy space in a totally anonymous way. Not surprisingly, the migration towards the West and Arizona, where free space is still abundant, is on the rise especially from California, spurred by the lower cost of the areas available for track- houses development. This phenomenon dates back to the 1940s and owes its strength to the possibility it implies of frequently changing one's place of residence by choosing a nomadic life similar to that of the early pioneers.

The houses, either of aluminium or wood, are carried on trucks to their final destination, where they are scattered around without any kind of planning logic and occupy a minimal portion of a very large area. They end up forming new transitory and temporary cities at the edges of the main expressways where one needs the car even to go buy groceries or reach the nearest Lifestyle center.

"Owners of these faux public places are accountable to no one and are able to impose their personal code of conduct on visitors and shoppers alike ... Lifestyle centers are simply the latest incarnation of shopping malls cleverly masquerading as public town centers or public

³ Bruce BEGOUT, *Zeropolis: L'Experience de Las Vegas*, cit., p. 42

⁴ Brad KNICKERBOCKER, Daniel B. WOOD, *How America grows: A tale of two cities*, in "The Christian Science Monitor", Oct. 3, 2006.

main streets ... The truth is that these centers are solely created to attract national chain stores and restaurants"⁵.

Of a different nature but specular to the sprawl landscape are the gated communities created by private developers as building speculation plans. A unitary design, articulated in blocks of multi-family houses, defines ghetto-districts for upper-middle class residents with accesses controlled by vigilantes for security reasons and a strictly self-regulated daily life. Again, the best description of this environment is found in a movie, Peter Weir's *The Truman Show* (1998), that portrays the syrupy and ever-smiling life of a peaceful and quiet urban gated community.

The fear instilled by society and its diversity generates exasperated forms of control, for example video-surveillance used to watch the citizens' behaviour both in and out of the gated communities. The origins of this defensive attitude towards society are far from recent and can already be detected in some of the buildings designed by Frank Lloyd Wright in the Chicago residential district of Oak Park at the beginning of the 20th century. Here, architecture defines an environment that is visually and physically protected – by parapets and walls – from the outer world, showing how democratic America already had this inclination one century ago. Being devoid of public spaces, the fundamental core of life, the sprawl shows its failure, as it fails to be a city: its seeming freedom embracing all kinds of settlement patterns is the result of the relation between politics and land management.

Arcology: an Alternative City Model

A discussion of arcology, or the union of architecture and ecology, requires a more exhaustive explanation of its meaning that can only be provided by its inventor, Paolo Soleri.

"Arcology. A city in the image of man, hence three-dimensional – writes Soleri – complex, miniaturized. Arcology is architecture as materialization of the human environment, and ecology as the physical, biological and psychological balance between a place's specific conditions and its being part of a whole. So complex in perspective, so healthy in its structure, so subtle and flexible in its infrastructure, and with such a drive to miniaturize that it substantially redefines the local ecology at a human scale, arcology is a mechanism made necessary by the process of interiorization of the world and the concept of mass energy (the matter becomes spirit)"⁶.

Miniaturization, or the physical reduction of the parts composing the city, leads to a city where functional stratification produces concentration instead of sprawl and is in this sense alternative to the city created by the market. This is what happens in Arcosanti, the project partially built between 1971 and 1990 and still under construction.

An arcology is an independent system, self-supporting in the sense that it contains all the functions required by urban life: housing, recreational centers, agricultural and educational facilities. Farming was one of the means of sustenance of human communities in the pre-industrial age, in accordance with an idea of frugal life that fulfilled nothing but basic and essential needs, as is confirmed by Soleri's words: "... since his earliest origins, man has built or reorganised the ecologies ... he has transformed the continents by using agriculture on a cosmic scale"⁷.

Since the beginning, Cosanti's and Arcosanti's economies have relied on, beside farming, craft production. The ceramic and bronze bells designed by the Italian architect and produced with the techniques Vincenzo Solimene had taught him in Vietri, provides the financial support that has made the construction and operation of Arcosanti possible.

The strenuous effort of reformulating the city's economy is to be seen as part of a global context where other economies, directly promoted by producers (farmers or small-scale entrepreneurs), are proposed as an alternative to the multinational corporate market. In this sense, the city conceived by Soleri seems quite close to the experience of the "no global" social forums that formulate economical systems alternative to consumerism and relying on a different model of society.

⁵ George CRANDALL, *Lifestyle centers camper region's growth management strategy*, in "Newsletter AIA Oregon", Fall 2005.

⁶ Antonietta Iolanda LIMA, *Soleri. Architettura come ecologia umana*, Jaca Book, Milan 2000, especially the chapter *Per capire Soleri bisogna intendersi sulle parole*, pp. 64-72; (*Architecture as Human Ecology*, The Monacelli Press, 2003).

⁷ Paolo SOLERI, *Io e l'arcologia*, in "Parametro", n. 25-26, 1974, p. 12.

What Soleri has realised in the desert is a fragment of city that looks like a village whose life is influenced by its present dimension. Arcosanti is conceived for 5,000 residents on a 25 acres land, with 4,060 more acres of free land: a tiny entity compared to the American reality and the urban perception of American citizens.

The construction of Arcosanti is made possible by the fundamental contribution of the hippies, who oppose the American model and support a world of peace, love and freedom where all cultural, ethnical or religious differences have disappeared, and of whoever is in favour of an alternative model of society.

The means to achieve arcology is for Soleri the urban laboratory where the construction of the city, with the direct and combined effort of residents, architects and students, is the result of a greater participation of society.

Soleri's democratic community is based on human relations, it is a sort of "Soleritown" where the architect is at the same time guru, prophet, client and creator; a prophet surrounded by the Solerians, his few loyal followers committed to propagating his thought.

Open spaces, accessible to both residents and guests, define a city that lives and feeds on the SUN as the primary element of its existence, where life flows in a spatial and temporal dimension different from that of the consumerist city. The space-time relation is fundamental for the development of daily activities: in Arcosanti days are very long – early in the morning people begin their farming activities and at dusk the city closes into itself. The buildings are structured by functions that change during the day following sunlight. In Arcosanti, Soleri has experimented with different building types, for example the patio houses clinging to the back of the Foundry apse, with the patio acting as the core of functional distribution; or the block of the East Crescent boxlike dwellings revolving around the outdoor amphitheatre, with the patio regulating the access to each unit in an ideal dialogue with the houses previously built in the '70s.

"In Arcosanti, life follows environmental paths of ever growing complexity; these paths cross spaces that are carefully structured on the individual scale. As the relational complexity grows, the path system and the individual space contract up to the cell level"⁸.

Cars are banished from Soleri's city and the paths define a LeCorbusierian *promenade architecturale* that lets the residents appreciate the beauty, and ruggedness, of the desert, and live a spatial and temporal experience, whether they are in or out of the buildings, in every moment of the day. The city is an archeological/arcological find of itself that combines present and past as though it had been part of the landscape even before its foundation.

Soleri's intransigence, his total refuse to compromise with the market and its laws, has influenced the project's development – living in Arcosanti is a commitment to changing society in the spirit of a new environmental conscience. At the same time, the architecture built in Arcosanti reveals in its very existence the aporia of Soleri's project: parapets and roofs betray the lack of knowledge of the original idea. The widespread anarchy of the Arcosantians, both in their lifestyle and in the way they build the city, indicates that the Arcosanti's fate depends on its founder: what will become of Arcosanti? Will the Solerians be able to achieve its project?

Paradoxically, life in Arcosanti follows a behavioural pattern that mirrors that of the sprawl as in both cases the actions of the individuals are influenced by their settlement pattern. The only cultural differences between the two models, sprawl and arcology, are given by the lower percentage of land consumption proposed by Soleri compared to that of the consumerist city (only 2% of occupied land compared to 60% absorbed by car infrastructure such as roads, car parks, etc.) and by the higher energy saving ensured by passive solar systems (greenhouses, natural ventilation systems, vegetation, water). The lifestyle of a single-family house resident in a Phoenix suburb has the same ideological impact as that of the Arcosantian farmer living isolated in the middle of the desert. Arcosanti is perceived as a spiritual and utopian community free of materialism, although no one, much less in the US, would be ready to renounce materialism for the sake of the future of human kind. That is why no American metropolis has adopted Soleri's urban laboratory as a model for a new city or district thus giving no credit to an idea of city alternative to that produced by the market. There is no way of knowing whether Soleri's theories would have been easier to promote and apply in another geo-political context, for example Europe: certainly America, the birthplace of consumerism, is

⁸ Paolo SOLERI, *Io e l'arcologia*, cit., p. 15.

not a country where social behaviours forged two centuries ago can be altered by the sole force of ideas.

This should define a new – and more ecological – approach to land management. Could Soleri's proposal become a model of city? Could it, over the course of time, change the way the social consequences of architecture are perceived, leading architecture to detach itself from the logic of the market and leave behind the generic city *à la* Koolhaas that instead exploits, and pays homage to, the market?

A Kind of Independent Eclecticism

In 1946 Paolo Soleri wrote to Frank Lloyd Wright asking to attend the Taliesin West school Wright had founded in Scottsdale, a Phoenix suburb. Taliesin West was a school of architecture and life where students were required to follow the Wrightian dogma to the letter. Every young architect, from Neutra to Schindler, from Soleri to Moser, had to obey the rules: Soleri, who had an already well-defined personality, found it difficult to live in an environment that was so rigid and disinclined to dialectical exchange. His differences with the American master grew more and more manifest as is particularly evident in his reflection about Broadacre City, the project that encapsulated Wright's proposal for an horizontally developed city-land relying necessarily on the contact with nature and on standardised mechanical production (car, telegraph and telephone). Prophetically, Wright described it as: " ... a city so greatly different from the ancient city or from any city of today that we will probably fail to recognize its coming as a city at all"⁹. Wright subscribed to the theory that saw the development of the metropolis only possible with the implementation of the American dream: one citizen = one car. Car use, the principal tenet of the theory of *The Living City* (1958), was the spark that ignited Soleri's opposition to a model that he considered unsatisfying since the beginning as it promoted land consumption and consequently disrupted man's relation with nature.

During and after his experience in Taliesin, Soleri developed his first residential designs, the "Arizonian Houses", that took advantage of the extreme desert climate. He sunk the living areas in the ground and covered them with glass domes, constantly varying his designs and modifying the domes' curvature, changing the grade level in order to find the right balance between sunken and above the ground sections, always in relation with the sun. In January 1950 Soleri went back to Italy to tour the country with his wife Colly. It was an important trip as it gave Soleri the opportunity to build a ceramics factory for Vincenzo Solimene. With this design he found his own style as an architect and at the same time "discovered" Italian architecture, an element that he used as a guide to reflect on the work produced at the time by Le Corbusier and to establish a stimulating relation with his work without ever "quoting" from the French-Swiss master. For Soleri, the Chandigarh project, that in 1951 was under development, was a touchstone in the construction of Arcosanti. The construction of the new Punjab capital – after the works he had designed in the '30s – gave Le Corbusier the opportunity to create the city he had described in *Vers une architecture* and in his journal "L'Esprit Nouveau".

"Like Michelangelo in his late age – writes the British historian William J.R. Curtis – Le Corbusier lived his final years in an increasingly private and mystical poetic world"¹⁰: Chandigarh contains some of the principles crystallized in his *Five Points of a New Architecture* (1926), as well as the use of pure forms like pyramids, cones, parallelepipeds bathed in light that in the solid-void and light-shade contrast take on a markedly expressionist character.

It is the relation with the context surrounding the project that elicits some considerations about the monumentality of the built space.

Le Corbusier's plan for Chandigarh used a proportional relation between built volumes and context that varied according to the settlement types, following a dimension that, while appearing out of scale, is necessary for the city to be perceived as such. The same has happened in Arcosanti, where Soleri has emphasized monumentality as a measure to prevent the city from disappearing in the scaleless expanse of the American desert.

⁹ Frank Lloyd WRIGHT, *The Living City*, Horizon Press, New York 1958 (quoted in Bruno ZEVI, *Introduzione*, in Frank Lloyd WRIGHT, *La città vivente*, Einaudi, Turin 1991, p. XXI)

¹⁰ William J.R. CURTIS, *Modern Architecture since 1900*, Phaidon, London 1982,1987,1996, (It. trans. William J.R. CURTIS, *L'architettura moderna dal 1900*, Phaidon, London 2006, p. 417)

Both Le Corbusier and Soleri reconsider the relation between settlement and context, space and time, space and light, by applying forms and types that, while extremely different as resulting from different interpretations of the Mediterranean architectural culture, propose at the same time a new interpretation of native culture.

The city has its own physical dimension and Soleri, who is closer to the Italian building and architectural tradition, finds in the apsidal and dome-like forms the archetypes for the creation of monumental structures.

In Arcosanti, the Coliseum and the Basilica of Maxentius, and particularly the architectural and the figurative languages of the Italian Renaissance, are more than mere quotations: the North and South Vaults that open onto the landscape evoke Bramante's exedra in the Vatican Gardens, while the apsidal form of the Ceramic Apse and the Foundry creates a visual analogy between the architecture in the desert and the concave structure that Piero della Francesca painted behind his Madonna in the *Pala di Brera*. The use of these forms projects a sense of protection from the desert but, at the same time, facilitates the passage from interior to exterior as it creates a continuum where architecture becomes one with the earth.

The assonance between Arcosanti and Chandigarh also emerges in other relations: for example the far from secondary symbolic and cosmogonic relations expressed by the architectural elements oriented towards the constellations and the universe; and the relation of the materials, with exposed concrete that is painted, with craft techniques, the same colour as the earth. In fact, Arcosanti, and before that Cosanti, are for Soleri workshops where the procedures of ceramic production acquired from Solimene are applied to concrete, left rough and covered with smudges that look like ornaments; they are like life-size models for the architect to verify his ideas for a sort of "Renaissance" city projected in a future where man will build his habitat in harmony with nature.

The architecture created by Soleri relies on forms and types that have permeated the entire history of architecture, from the classic age to the Renaissance, from Wright to Le Corbusier. Though far from the spotlight, Soleri has developed an independent eclecticism that defines a collection of buildings perceived as a coherent whole.

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