ARCHITECTURE AND CONSCIOUSNESS - GOD IN REVERSE

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INTRODUCTION

To exist and to be conscious of one’s existence is the greatest gift of the universe and/or highly improbable. That we have evolved to create consciousness on earth pre-supposes the evolution of consciousness elsewhere in the universe. If one accepts that after the “big bang” consciousness began an evolutionary process of forming (the model being Earth), within conditions that both made it possible and through which survival was enhanced, then it follows that as the universe expands, consciousness is expanding also. This paper attempts to link architecture and consciousness, as part of this expansion, to form a future vision for cities.

Definitions of consciousness are many and varied depending on your philosophical position:

1. The state or condition of being conscious.
2. A sense of one’s personal or collective identity, including the attitudes, beliefs, and sensitivities held by or considered characteristic of an individual or group: Love of freedom runs deep in the national consciousness.
3. a. Special awareness or sensitivity: class consciousness; race consciousness.
   b. Alertness to or concern for a particular issue or situation: a movement aimed at raising the general public’s consciousness of social injustice.
4. In psychoanalysis, the conscious.
I am interested in a positioning of consciousness within notions of what urban architecture is actually becoming, bearing in mind that architecture has for so long dealt with issues well beyond shelter and safety. “Collective consciousness”, which implies a scale beyond the individual, is an idea which also swims within the many philosophical dilemmas associated with consciousness, and must be included. This paper seeks to place collective consciousness within the discourse surrounding Internet communications and current global manifestations, such as the Arab Spring and the Occupy Movement.

The communication revolution has given rise to new ways of thinking about our human consciousness. If you apply this digital model for storing and disseminating information as a metaphor for the mechanisms of consciousness, then the idea of a connected consciousness across the universe, notwithstanding issues to do with time and space, seems plausible. Currently, data storage buildings and banks for companies like Google dot the globe and pre-empt a situation where this might be the task for all architecture. I like the idea that architecture is becoming an extension of our consciousness. Conscious architecture could combine data storage with types of data responsiveness. Without knowing what form this will ultimately take, the combination of these performance issues implies the possibility for city architecture to cancel itself out, in terms of symbolic value, to become invisible or at least physically indeterminate.

This consciousness expansion created by architecture, becoming itself conscious, could eventually develop a “machine” of consciousness equal to or parallel to the power we now ascribe to a higher being or God. Rather than God making the universe however, I propose that the universe will ultimately create God.

**Hence the phrase, “God in reverse”, is born**

This God will arise as a result of manifestations of infectious architecture possessing the ability to hold consciousness and collective memory both digitally and physically. Coupled with living conscious beings, architecture will transform from “a calcification of consciousness”, or exoskeleton, to become a promiscuous extension for all consciousness. According to this way of thinking, architecture forms an expression of thought rather than an expression of control over “nature”, as in Modernism. Once we think of architecture and its engine “capital”, its structured other, as a formless process, architecture’s ability to react to functional pressures becomes more agile.

“Open the door HAL.” “I’m sorry Dave, I can’t do that”, still reverberates through time, along with Stanley Kubric and Isaac Asimov’s prediction of conscious computers, well before the Internet was in place. Problems exist in terms of the discourse surrounding programmed behaviours, which can simulate consciousness and intelligence relatively easily. At issue is the way in which humans perceive the world, in terms of symbolic meaning. According to Richard Schlagel: “Computers are programmed with fixed definitional algorithmic functions, which simply do not amount to the emergence of the same symbolic reflections necessary for true thought or consciousness to arise”. Alternatively David Chalmers, within his paper “A Computational Foundation for the study of Cognition”, states that: “Computers perform computations and the right kind of computations are sufficient for the possession of a conscious mind”. Within this huge debate, and as a lubricant to my argument in relation to architecture, Susan Blackmore draws me to the “Theory of Memetics” and its
relationship to objects. Memes are fragments of information, which we distort slightly with every action of mentally storing them.

So, via Blackmore’s theory, it follows that if consciousness expresses this subjectivity of translation, then the machine must also, in order to gain consciousness. In doing so, the machine acquires its own intellect and “memetic drive”, to use her words. Therefore, as computers accumulate and deal with their own “mistakes”, a form of real consciousness emerges. This suggests that computers, which deal with memes rather than numbers, are a pathway to consciousness. Memetics forms a toehold for the creation of a repository of consciousness. Couple this with the physical memory contained in fragments of material or architectural ruins and the capacity for material to store memory or subject emerges. Buildings innately hold these meme-like subjective forms. For thousands of years built form has received the marks, stains and deformations of memory. From pre-historic petroglyphs, to early texts carved in stone, to murals and timber carvings, from fingernail scratches to bodily fluids, our buildings are made and burnt and buried and exhumed to tell their stories. Running our fingers across these marks, like blind men, we can mumble the names and feelings of fallen strangers, like some humanoid vinyl-recording machine. One only has to stand at the Western Wailing Wall in Jerusalem, to appreciate the resonant ability of material to link with thought.

We stand mute in front of a boy’s suitcase in the Liebskind-designed Jewish Museum in Berlin and read the text about his murder in the Holocaust. The suitcase architecture is telling us far more than we can stand. Together within new technologies of display in Liebskind’s building, the suitcase forms a powerful extension to the meaning of architecture. Liebskind distorts our senses with spaces of isolation and instability, taking us back to hear the voices. But imagine today’s suitcase uncovered in the future, holding a laptop computer, iPhone and other fragments of technological memory, waiting to have their software deciphered and plugged into the memory banks of a new consciousness enhancing architecture.

Can the formation of a conscious architecture be expressed both physically and immaterially? If so, where are the early examples of this phenomenon?

The Kowloon walled city in Hong Kong, demolished in 1993, was a great example of what a city can become without regulation and resources. Disadvantaged socio-economic groups created this three-dimensional street, prejudicing easy connectedness and access over private space and making communications and social construction within the walled city strong. The Kowloon city model was a shared responsibility in real physical terms. There was no city council, only a collective consciousness. Public space wove through the labyrinth connecting all spaces directly with the TV aerial-covered roof replete with food gardens. The agglomeration of buildings functioned like a crude analogue brain or organism. The structure spoke to an innate desire within city architecture to understand its inhabitants. The human species is wired to create such structures, as are termites with their nests. Such social activity and constructions arise from our shared DNA, itself proof of collective consciousness.

Another brain-like architectural formation, which can also be called a global city, can be found in our interconnected air transport system. If one looks at all airports and planes as one building linked by metal tubes in the sky, then another Kowloon emerges. However, airport architecture has seemingly unlimited funds and a great programmatic drive. Its social construction is complicated and politically vulnerable.
Warfare can be analyzed as an example of a potentially conscious architecture also. As a form, war can generate instantaneous transformation and porosity via catastrophe. Cities are re-planned and politically re-wrought in the crucible of political conflict. This is fast architecture acting like a giant eraser, but still a function of communication technologies and armies. This is the other city, which desires to sleep – to be unconscious – to be annihilated the antithesis of the conscious architecture thesis.

High-rise cities are the creation of Modernism and its technologies. Hence, their computer systems are also rooted in Modernism’s DNA. The work of Pentti Haikonen sees current computing as inadequate, subject to its rule-making foundation in Modernism. “The brain is definitely not a computer. Thinking is not an execution of programmed strings of commands. The brain is not a numerical calculator either. We do not think in numbers.” Haikonen proposes: “...a special cognitive architecture to reproduce the processes of perception, inner images, inner speech, pain, pleasure, emotions and the cognitive functions behind these. This bottom-up architecture would produce higher level functions by the power of the elementary processing units, the artificial neurons, without algorithms or programs”. 10

A conscious architecture can build on the existing memory of cities which form a fertile bed for transformation. All existing architecture needs to remain and be cleverly adapted. This echoes a similar discipline to the one expressed by climate scientists for “no more coal to be mined”. In other words, we need to define the city as a “perpetual state of becoming”11 rather than a utopian ideal. Modernism forms a good substrate of physical memory on which and through which to build our new conscious cities.

“Destroy nothing, and rethink all”, Robert Smithson, the great Land Art artist, put it most succinctly in 1971 when referring to time based changes in his work, especially the partially buried buildings such as “Partially buried Woolshed” 1970. Smithson further elaborates:

“Unlike Buckminster Fuller, I’m interested in collaborating with entropy. Some day I could like to compile all different entropies. All the classifications would lose their grids...After all, wreckage is often more interesting than structure. At least, not as depressing as Dymaxion domes. Utopian saviours we can do without”12

Fundamental to the rethinking of all cities as conscious will be the realisation that one public ground plane is simply not enough to accommodate the healthy social construction of the street, especially within cities like Beijing and Shanghai, which each have twenty million people.13 Stephen Holl’s project in Beijing “Linked Hybrid” is a clear indicator of this future territory. However, the linkages need to be far more complex. Like the flow of electricity in the brain, so too must the connective tissue of cities become three-dimensional. Cities are primarily held together by their social construction, the glue being language and culture, demanding one-on-one physical interaction in order to thrive. In order for city architecture to become conscious, public space must infect all aspects of architectural program in three dimensions. Ideally, all high-rise housing corridors will eventually behave like streets, and new elevated ground planes will dissipate pressure of entry to a variety of levels and programs. Form doesn’t follow function - it simply follows the demands of social and cultural construction. The final shapes of architecture are never reached and hence are irrelevant as external
forms. Their interiors are the spaces of meaningful architecture as with Constant’s “Unitary Urbanism”.

It appears that our consciousness is demanding these changes, especially in the “post ideology age” in which we live. The Occupy Movement and even the Arab Spring can perhaps be cited as early examples of this phenomenon. Each revolutionary discourse is directed and led by the collective communication systems of Facebook, Twitter, and even Instagram. Each movement has a collective head or collective consciousness driving its desire for change. Each asks of architecture that it help sustain this movement. The current disconnected architecture within cities is not porous enough in terms of its internal connections to enable the physical movement necessary to sustain peaceful revolutionary actions. This is also due to a lack of amenities such as toilets, ambiguous places of communal congress within all commercial and private structures, as well as free public connections to electricity and the Internet. A level of connected consciousness is not a replacement for democracy or other political structures – it is a forum through which such ideas can be manifest and can be trialed.

**The new city will grow like a coral reef**

If we are stupid, so is nature. Erosion is hardly intelligent, nor is gravity. How they operate together, however, is extraordinary. I believe that consciousness is gravity’s other: they both act as glue. The idea that Nature (read everything) is “beautiful” (sublime) is also no longer helpful. It is a construct that is only several hundred years old and also a device of outdated religions. Cities are types of landscapes or eco-systems in themselves, born of perspectival positioning, as aberrant as the rivers and mountains formed under pressure by our colliding continents. Architecture redefined as an organism becomes the new ground or foundation of culture and its attendant consciousness.

By valuing the formations of contingency above the formation of order, architecture as we know it can disappear. In my paper “Coral Typology” I have set out the possible rules for such an age:

Coral reefs form the edge condition of certain continents, exhibiting exquisite fragility and complexity of life. They are a metaphor for the complex equation of transformation within all natural systems. Within this thesis, Coral is used to explain, predict and form an armature for the changing nature of cities in the 21st Century. Fundamental to this argument is the belief that a system of complex and continuing “organic” transformation of existing structure
(buildings), within cities, is more desirable than seeking the cleared site or the modernist “tabula rasa”22.

Urban development is perpetually in a state of becoming23, forming the architecture of accumulation within the age of contingency24, despite Modernism’s attempts to create permanent order. Hence it follows that the city is like a coral reef and as such needs re-classification, into a system of equal complexity to that of our complex environment with all its current dilemmas. Coral Typology is as much an experiment as it is a true typological study of the architecture of transformation. (see diagrams below)

![Figure 3 Coral Reef Lab, 2013, Goodwin, R., Coral Typology, in press](image)

![Figure 4 Coral Reef Typology, 2013, Goodwin, R., Coral Typology, in press](image)
Figure 5 Coral Reef Typology, 2013, Richard Goodwin

Figure 6 Coral Reef Typology, 2013, Richard Goodwin
I call this new architecture the architecture of invagination. In my book, “Porosity the Architecture of Invagination”, I introduce this idea under the title “Architecture is Elsewhere”. Porosity theory accepts that types of public space exist within private space. I named these “chiastic” spaces. Through research over six years, these spaces led to an understanding of how “porous”, in terms of access and delay, each city building was at a particular time. I created an indexed system to score each building. When this information is modeled in the computer and subjected to pressure it expands these spaces beyond the building envelope to express graphically “What a Building Desires”. Across large areas of city we can diagnose connections and zones of possible connection between buildings. As an aid to urban planning, this information can lead to the composition of urban planning instruments within particular zones, allowing for commercialization and new public space.

In this form of endless embrace between buildings, old and new, the city starts to heal itself of self-interested buildings to form a more cohesive single building, like Constant’s Unitary Urbanism. So what does this say about the city in terms of consciousness? To start with we have to ask how consciousness relates to the physical world. Descartes proposed that consciousness resides within an immaterial domain he called res cogitans (the realm of thought), in contrast to the domain of material things which he called res extensa (the realm of extension). Alternatives to this notion formed Monism (introduced in the 18th century by Christian von Wolff in his work Logic (1728)), which held that there was only one realm of being in which consciousness and matter co-exist. This very co-existence might find the philosophical answers to a technological revolution, which becomes an organic extension of human consciousness. However, I don’t wish to elaborate on the complexity of this philosophical debate, nor do I wish to be seen as “mystical” as followers of Descartes would claim. That is the task of philosophers. I am an artist/architect – playing seriously. The term Monism was to designate types of philosophical thought in which the attempt was made to eliminate the dichotomy of body and mind and explain all phenomena by one unifying principle, or as manifestations of a single substance.

The Western art lens provides historical meaning and content in a process of re-contextualization of all artworks within the “white cube”. This knowledge enables an artwork to transcend its material existence, becoming in some ways conscious of that fact. The seminal work of Joseph Beuys and his use of the materials of fat and felt serve as but one example of this thinking. Animal fat as his symbol of endless re-generation sits within many museum glass terrines, a mute and drying testament to the ability of the gallery lens to help it to transcend materiality within our consciousness. It is the power of these signifiers, enriched with layers of narrative and shamanism that infect the viewer’s consciousness. In some ways this fits with Monism.
Across the universe, God in reverse combines consciousness and matter to eliminate the idea of architecture as a solution or answer but rather as a permanent state of becoming. What will this look like? It doesn’t matter. It will look like nothing or as messy as any eroding mountain range or a continuous organism.

Conclusion

So, in conclusion and in line with this abstract of an idea, God does not exist yet, but she is on her way to being created. This birth is best summarized with an illustration: an egg, for our particular “consciousness conditions” on earth, has a nucleus containing Classicism, the Enlightenment, many Religions, and many cultures. Within the body of the egg are mitochondria, the cell’s energy source. Within our system these mitochondria are our artists, architects and philosophers. The sperm contains the complex DNA of the typical Indian slum circa 2014. The fertilization is a reconfiguration of these three major forces:

1. A continuous and linked organic architecture (Constant’s Unitary Urbanism)
2. The immaterial other (the Internet transformed by computation beyond numbers – a memetic drive)
3. The understanding of an architecture, which prejudices social construction and culture, over form (the Indian slum)

The new life form is the “organism of contingency” (Coral Typology of Architecture) and the genesis of “an architecture of consciousness” ultimately wired to create God.

ENDNOTES

1 The American Heritage® Dictionary of the English Language, Fourth Edition Copyright ©2000 by Houghton Mifflin Company. Updated in 2009. Published by Houghton Mifflin Company. All rights reserved.


3 The Arab Spring refers to a series of anti-government uprisings in various countries in North Africa and the Middle East, beginning in Tunisia in December 2010.

4 The Occupy Movement is an international protest movement against social and economic inequality, whose main tool – of protest – is the occupation of public space. The first example of this being “Occupy Wall Street”.

5 God (noun) (in Christianity and other monotheistic religions) the creator and ruler of the universe and source of all moral authority; the supreme being. Oxford Dictionary, Oxford University Press, 2013.

6 Nature (noun) [mass noun] the phenomena of the physical world collectively, including plants, animals, the landscape, and other features and products of the earth, as opposed to humans or human creations. Oxford Dictionary, Oxford University Press, 2013. The idea of Nature in Western Philosophy is a developing one which has its roots in Aristotle (Physics: I – IV 384–322 BC) through Francis Bacon (The Advancement of Learning 1605), Thomas Hobbes (Leviathan 1651), and on to Descartes, Immanuel Kant, Nietzsche, Richard Rorty et al.
9 Susan Blackmore, “Consciousness in Meme Machines” Journal of Consciousness Studies, 10, (2003), 4-5.
15 The Occupy Movement is an international protest movement against social and economic inequality, whose main tool – of protest – is the occupation of public space. The first example of this being “Occupy Wall Street”.
16 The Arab Spring refers to a series of anti-government uprisings in various countries in North Africa and the Middle East, beginning in Tunisia in December 2010.
18 Other, (adjective & pronoun) used to refer to a person or thing that is different or distinct from one already mentioned or known about. Oxford Dictionary, Oxford University Press, 2013.
20 Jeremy Till, Architecture Depends, (Cambridge, Massachusetts: The MIT Press, 2009) 1, 3-62; Chapter 1, Contingency.
21 Richard Goodwin, Coral Typology, in press.
24 Jeremy Till, Architecture Depends, (Cambridge, Massachusetts: The MIT Press, 2009) 1, 3-62; Chapter 1, Contingency.


30 For example; the Joseph Beuys artwork, Vitrine, 1949 – 1966.

31 Classicism, (*noun*) the following of ancient Greek or Roman principles and style in art and literature, generally associated with harmony, restraint, and adherence to recognized standards of form and craftsmanship, especially from the Renaissance to the 18th century. Oxford Dictionary, Oxford University Press, 2013.

32 *The Enlightenment*: a European intellectual movement of the late 17th and 18th centuries emphasizing reason and individualism rather than tradition. It was heavily influenced by 17th-century philosophers such as Descartes, Locke, and Newton, and its prominent figures included Kant, Goethe, Voltaire, Rousseau, and Adam Smith. Oxford Dictionary, Oxford University Press, 2013.


34 Jeremy Till, *Architecture Depends*, (Cambridge Massachusetts: The MIT Press, 2009), 1, 3-62; Chapter 1, Contingency.

35 Richard Goodwin,, *Coral Typology*, in press

**BIBLIOGRAPHY**


Sloterdijk, P., Terror From The Air, Los Angeles, CA, Semiotext(e), 2007.


Vidler, A., Homes for Cyborgs: Domestic Prosthesis from Salvador Dali to Diller and Scifidio, Ottagono, 1990
