

## Theory of everything

A condensed version in connection with explicating Zaha Hadid (ZH).

It is needed to explicate translation as a *modus operandi*, amplifying semiological associations, such as of Barthes (1977) and Saussure (Gasparov, 20210).

This is needed to realise translations, or partial translations, or representations and evocations, of ZH.

An image is shown in:

[https://www.grantgovercomposer.com/scores/stained\\_glass\\_window](https://www.grantgovercomposer.com/scores/stained_glass_window).

It runs through everything, including all text and music to do with the current ZH research.

It is seen that everything is connected. This is accepted as a *zeitgeist* idea widely in society.

There are two broad forms of connections.

The first is obvious and of the normal world, consisting of the 4% visible and normally accepted invisible world (Carlos Frenk in Lintott and Aderin-Pocock, 2022).

This is the normal everyday reality of people, things, nature, space, the stars and so on, also the atomic and subatomic world, the world of molecules, viruses, bacteria, biomes, autonomic systems in the body, all normal science, biology and all the other ~ologies. This is a frequent concern in the current research. It is relevant, since the pathways of translation, even via a theory of everything in the normal domain, have connections and areas of interest that do not lie just on the surface of things. This provides a rich seam from which to draw and colourise translations.

The second is of the remaining 96% known content of the universe.

This is implied to be invisible.

There may be overlap with the invisible of the normally accepted 4% and there may be visible elements of the 96%, such as of lensing which helps point out where black holes (Villard, 2022; Penrose, Genzel and Ghez, 2020) and dark matter (Garner and Dunbar, 2021) are .

It is conjectured this 96% may help to explain dark matter, in the region of 24% and dark energy, in the region of 72%; estimates vary yet generally are in these regions.

This latter, dark energy, is conjectured by some to be the cause of the expansion of the universe. The unfolding of the theory of everything concurs with this expansion. Where

everything is connected, literally, the unfolding of all the connections in every scenario acts like mini big bangs going on constantly, with the universe readjusting constantly to each new connection and all the ramifications going all the way back to the first big bang (Holder, 2013). Everything is moving, dynamic and constantly evolving.

As an aside it is generally taken that the universe is headed for what engineers call the 'heat death of the universe', that is where energy dissipates via the entropy principle, from order to disorder; as part of life this can be, and constantly is, inculcated into music and other arts creation. This highlights a paradox where the universe in totality requires positivism, where musical and other arts type creativity require positivity, even if topics are political and sanguine, yet the overall course, if entropy plays out, leads to a great dissipation. Could there be a possibility of new creation now and then, as Fred Hoyle once posited in the 1960s, especially of hydrogen—since discredited. There are generally considered in big history to be milestone steps, such as the introduction of intelligence and consciousness, which is a debatable issue as regards AI, computers and robots.

Continuing the aside, it seems that intelligent humans, especially in AEC (architecture engineering and construction) in city conglomerations, a topic close to ZH's heart, there is a constant fight against entropy, a frequent revitalisation of enthalpy, creation of big history steps, constant small steps too, against the flow, the opposite of entropy, where effort is made to construct, organise and maintain urban situations, sometimes at the expense of nature (in its theoretical guise an inspiration for ZH), also in agriculture and gardening. There is a nexus of such points requiring a modern solution to such big and small steps. What role do the arts play in these questions and answers? It could be that where everything is related that vicariously ideas from the arts could bleed into and affect positively the political.

David Deutsch and Chiara Marletto (2015) have a constructor theory that stretches all the way back to the original big bang. It is here conjectured that there are more interconnections in this thesis theory of everything, which makes possible meaningful translation and finds amazing interconnections possible so that ZH can be translated in interesting ways.

Similar to the last point, is the excellent set of series that Georg Cantor (Dauben, 1983) used to try to explicate infinity: it is felt that the numbers as such are insufficient to elucidate infinity completely, that there are other connections between numbers of the different series, similar to the discrete objects in constructor theory needing extra connections for full depiction of what is going on; denotations and connotations of actual things and life, as music is to sound. Cantor's series will be part of a different more complete idea of reality than as just the duality, of reality, on the one hand, and numbers, on the other, enumerating pure concepts or things that happen in the universe allied to the sciences and human living.

It is further conjectured that with the multiplicity of connections there may be infinitesimal mass to each connective line, which when added up in a super—or as Roger Penrose expresses to indicate such largeness, 'super-duper' (ibid)—law of large numbers, that the total mass may amount to something significant, and may correlate with dark matter and or energy. This is in the realm of thought experiment or at best toy theory but it provides enough wonder to include weird sorts of interconnections aesthetically when evoking ZH, where weird for ZH was commonplace.

There may be contestable areas of overlap, such as of ‘plant intelligence’ (Trewavas, 2017) and sonification in connection with plants (Mileece Petre in Urbani, 2014; Robert Jarvis, 2020). This is another area of interconnection bordering on normal and unusual, visible and invisible. This may be a future burgeoning area of research at the borderline of possible music making in connection with nature, which may then merge with the already burgeoning research in AI and genetic organic randomised computer music making.

Randomisation, determinacy, indeterminacy, free will, intelligence, consciousness, one universe or more, the size of the universe, how it is constructed, topology (a definite interest of ZH affecting her constructs), fine tuning, so called Goldilocks syndromes and so on (Holder, 2013)—many more topics are addressed in the thesis and the theory, where the net result is positive and illustrative of a superb universe of incipient and immanent reality, beautiful and marvellous, ripe for making music about and translations within.

It is a personal conjecture that communication is possible at several levels of perception or reality, that is at normal speech level, atomic level and subatomic level, that is at a quantum level and possibly at an even lower level. In the normal realm there are the spectra that occur quite normally outside the areas of detection for humans, such as in the visible spectrum range with ultra violet and infrared and acoustically beyond the range of normal hearing, also with alpha, beta, gamma and x-ray radiation. The latter, to do with the quantum world, whilst there are researches on-going in this area, it is accepted as a starting point as pure conjecture since the plank length ( $1.6 \times 10^{-35}$  m) is generally considered to be the smallest unit of measurement, although current experiments at CERN in Switzerland/France in elemental particle research may end up with smaller units. This is unknown territory. Interesting discussion occur on *Quora* (2023a&b). What is hoped at CERN is to amplify the standard model, possibly finds evidence for supersymmetry, possibly find new exotic particles, embellish upon the Higgs boson, concretise upon neutrino finds with the Large Hadron Collider rebuilds going on during the covid pandemic (Garisto, 2022) and as an Iranian physicist commentator stated as a precursor to the televised revelation of the Higgs particle find in 2012, there may be a third option, grand design. It is felt in within the context of a theory of everything that there may be permutations and or combinations of all three. Whether the barrier of the Planck scale can be broken with hard evidence remains to be seen (Wand et al, 2008). As one commentator stated in the *Quora* debate (ibid) whilst the detectors are increasing in sophistication the smallest discrete unit of detection is the photon; anything smaller than the photon may not get detected at all, although fleeting exotic particles from increased luminosity collisions (ibid) may simply reside in a quantum phase soup. However again as one commentator put it scientists have not given up on singularities. As it were, old fashioned singularities may be very small indeed, although the singularities at the centre of a black hole could be quite large, roughly as large as a golf ball (Penrose, 1989; Rovelli, 2021).

From the purely speculative thought oriented theory the hard world of scientific evidence still has many answers to resolve. The two worlds interrelate, theory and practice.

From own experience during this research the two states oscillate and frequently combine, so that hard physical reality and thought, or the virtual, become part of one reality. This helps in translating ZH where she melded thought with her buildings.

The implication for translation especially of architecture is that hard physical objects and associated concepts of creative design and structural calculations, like Barthian and Saussurian connotations and denotations, connective descriptors that fly out in every direction, linking thoughts and objects, their attributes in a network, like all the networks (world wide web, neural nets, network information, the wood web (as described by David Attenborough), mycelia webs, spiders' webs, hub theory, actor network analysis, planning systems, critical path analysis, power grids, transport systems, communication systems, the cosmic web, the Vedic Net of Pearls, networks of family, friendships, organisations, committees, library systems (in the real world and in computers) and so on, all imply connections (and ideally needed for all to be included in any listing for full comprehension) that blur the distinctions between the abstract and the concrete. This helps in elucidating what and how to translate, and specifically relates to ZH as greatly influenced by Kazimir Malevich, with his blend of constructivism, suprematism, anti-objectivism and abstract expressionism.

The possibilities are endless. This can be problematic, since pragmatic decisions are needed about what sets or clusters of information are to be used to make a set of explicatory translations, whether, linguistically, or literarily, or musically.

Another point that elides with modern electronic music evocation is as regards what can happen with such phenomena as feedback and hysteresis as fits into catastrophe theory which in turn fits into concepts to do with how the universe works, which again is something that was never far from ZH's conceptions. Much of this is epitomised in *Space Machine*.

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For comparison, some other proponents of theories of everything or grand sweeping theories:

A few, with personalised remarks:

**Emmanuel Levinas:** (1969; Bergo, 2019) with his notions of infinity, resonating with concerns of Georg Cantor (Dauben, 1983), yet for this theory there is some difficulty with his 'other', causing a separation, an incompleteness. In a way, only a mild objection.

**Maurice Blanchot:** (Kuzma, 2020), similar to Levinas, with a literary and political activism slant (where the latter is not necessarily deprecated especially given the primacy of literary text within translation and politicality within this thesis such as of autonomy, egalitarianism and rights to hear building workers' voices).

**Frank Wilczek:** (2021), a scientist at MIT, classically oriented, yet thorough on gaussian physics.

**Luciana Parisi:** (2004, 2013, 2017) approaching from feminism and computer instrumentality, yet arriving at similar end points as the theory here and that of the following.

**Alfred North Whitehead:** with his seminal work *Process and Reality* (1985). A consummate work, process related, as the title indicates. Possibly a starting point.

**Gilles Deleuze:** (Daniel Smith, 2012, 2013, 2018), possibly on a par with Alfred North Whitehead; where Whitehead is thorough and dense, Deleuze is elliptical, abstruse, folksy and with a tendency to dialectic (like Theodor Adorno).

**George Ivanovich Gurdjieff** (Ouspensky, 2011; Wellbeloved, 2011; Sutcliffe and Willmet, 2020), an esoteric, individualistic, new age exponent (Wellbeloved, 2011).

**Ramon Lull:** (Ball, 2023; Yates, 1954), an early numerologist and presager of combinatorics.

**Rupert Sheldrake:** (2009; Segall, 2020), a believer in precognition and fine adjustments of time about the moment, a bit like Deleuze and a devotee of Alfred North Whitehead.

**Jude Currivan:** (Ferrari, 2023), an archaeologist and quantum physicist believing in a holographic universe.

**Herbert George Wells:** (1908) published a little known book of thoughts which included some with which I agree on logic and world systems.

**Hildegard de Bingen:** (Cashman, 2020; Stuehlmeier, 2020) an innovative feminist before feminism was invented, a strong person prepared to stand up to authority, male authority, a leader of her religious community, pious, sexually aware in a holy way, holistic (chiming with the Zaha Hadid approach), monastically musical, a categoriser of whole healthy foodstuffs and medicine, an early promulgator of sustainability before the word was invented and greenness as *viriditas*.

**Deepak Chopra:** (Welss, 2017), a new age guru who has friendly exchanges with Brian Cox, the musician, physics professor and radio and television presenter including the solar system, the planets and the universe (in this respect he chimes with Zaha Hadid).

**Beverly Rubik:** (2018), an academic proponent of fields about the body; this chimes the thesis theory of everything originally called total field theory.

**Ben Itzhak:** (Mirtala, 1990), an autodidact, scientist, military man, creator of an illustrated continual theory of the universe involving ancient symbolism, not too far removed from a continual proposition of Roger Penrose (2020).

**Ervin Laszlo:** (2004). *Science and the Akashic Field: An Integral Theory of Everything*. Rochester, Vermont: Inner Traditions Bear and Company; a collaborator with Jude Currivan.

**Ken Wilber:** (2001). Ervin László may well have gotten his integrated theory from Ken Wilber. I evolved my theory independently. This is immaterial. What matters is that many people are coming up with similar ideas. There are differences. They | we | do not need to compete, rather be overlaid and commonality celebrated, like when all composers interpret Zaha Hadid in music tending towards a truthful whole.

There are of course many more and apologies if I have missed out a favourite philosopher, mathematician, or divine.

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