Ambiguous, Bipolar Beauty.
And Similarly Agile and Fragile Post-digital Practices

O Beauty! My Beauty! Mystical, magical, divine muse — animal, visceral, ugly bitch. Bipolar hybrid: cyborg, chimera, siren, faun, mermaid, minotaur, sphinx; shapeshifting therianthrope; androgynous Ardhanarishvara; bastard offspring of hard work and virtuosity, of discipline and ecstasy. As agile as fragile, you seduce all into chasing you, conscious never to capture you forever.

Many discredit you as proper, modern ‘valuable’ design paradigm. Not us — post-digital designers who do not understand post-digitality as an anti-digital trend but as the next step of design evolution to make architecture adaptable and sensible to the 21st century. To us you are not important because attractive, but you are attractive because important: your ambiguity challenges and defies default, neutral, unbiased design decisions that do nothing to progress, improve and empower architecture in today’s world. Thus we embrace you, regardless — or owing to — your ambiguous, equivocal nature, because our designs are equally ambivalent: nature-inspired yet computational; environmental yet technological; artistic yet scientific...

I admit that I have been strongly intrigued and influenced by concepts with ambiguous, ambivalent and equivocal associations; very much in line with Umberto Eco, who asserts that ‘the author of a message with aesthetic aspirations will intentionally structure it in as ambiguous a fashion as possible precisely in order to violate that systems of laws and determinations which makes up the code.’[1] I have explored, experienced, experimented with, and exploited in particular ‘poetics’[2], ‘mimesis’[3] and evidently ‘beauty’. Strong eighteenth century romantic nuances, such as ‘idyllic’ or ‘picturesque’ are attached to the term poetics; but in truth it denotes a strategy, a strong rationale (i.e. Jan Tornovksy’s ‘form and structural plan of a work’, and ‘the artist’s operational programme’).[4] Mimesis conveys a strong notion of mimicry, but is foremost linked to world-making (i.e. Benjamin’s ‘nonsensuous similarity’, interpretation) and opening up an ‘imaginary space’; hence it is projective rather than derivative.[5] Beauty is equally whimsical and capricious a concept. It typifies and fluctuates between opposites: pretty/sublime, shallow/divine, superficial/transcendental, sensuous/spiritual, commercial/metaphysical, erotic/neurotic etc. To me, the oscillating nature of these hybrid terms is beautiful and thought-provoking, for it is dynamic, vibrant and elusive. Let me explain why.

Meeting Beauty Then
I was born in an extremely beautiful scenic Alpine landscape (nearby the UNESCO World Natural site Dolomites) in Italy, where nature offers four distinct and picturesque seasons, i.e. flowery springs, sunny summers, golden autumns, snowy winters. The thrilling topography and extreme environments (harsh mountain peaks and lush green valleys) have greatly formatted my beauty canon. But us locals and many tourists enjoy abundant hi-tech skiing infrastructures on those peaks, and the valleys are agriculturally fully industrialized; nature is not the untouched, idyllic, pre-industrialized bucolic beauty you may assume; it has been ambiguously (i.e. with success and with failure) fashioned and hybridized — some say ‘bastardized’ — by human intervention.[6] The whole socio-political and cultural context of bilingual South Tyrol (Italian, German) is hybrid (and the food, as it combines the best of both worlds north and south of the Alps). As a family we explored Italy, its lovely beaches but also its historic cities, busy museums and renowned buildings. Thankfully we travelled to many other places and cultures so different and yet, better: therefore, so fascinating! I learned early on that travelling, learning to appreciate the other, the alien, was possibly the best preparation for studying a creative discipline like architecture. Culture is beautiful, beauty is culture.

I was educated in a Classical Humanist Gymnasium studying this ‘proper’ Western culture: ancient Greek, Latin, German and Italian literature; English, basic French; history, art history, philosophy, maths and the natural sciences. I was raised to love human/ist endeavours and the fine arts. Of course like everybody else I like/d music (as a child I wanted to become an orchestra director,
yet I only learned some piano and the guitar, which I played in a Metal band, television (in the 80s MTV and various Italian private commercial channels were launched) and technology (ahhh, how great were those arcade games: Frogger, Donkey Kong, Star Wars...). Inevitably, all classicality was crossbred by popular culture— I am told this ambiguous hybridity transpires through my work.

Meeting Beauty Gently (Divine Muse)

Why this personal and at face value superfluous introduction? Because beauty as cultural production is not random; it is autobiographical.[7] To Carlo Mollino, nothing can be expressed that is not simultaneously intuited. Architecture – beauty – is directly, even if subconsciously, informed and dependent on his/her ‘culture’ and ‘whole internal landscape’. [8] Indeed, the amassed pluralities of personal and professional experiences fuel the core engine that powers our creative drive. And we all run on different fuels: premium processes, turbo form-making, green dogmas, high-octane styles, or diesel narratives. Mollino’s overlap of intuition and expression is the poetic image, which Gaston Bachelard describes as that ‘sudden salience on the surface of the psyche’, with ‘an entity and a dynamism of its own’, that ‘flare-up of being in the imagination’. [9] All designers have experienced it. Meeting the creative muse is an exhilarating, very gentle and beautiful moment of awareness, consciousness, mindfulness. Of course it is not limited to artistic content. A child during make-believe play can experience such a poetic moment; a scientist discovering a striking mathematical formula or astounding technical data; an athlete achieving a remarkable performance, too.

I personally aim to trigger these poetic images both on an aesthetic, playful and on a technical, rigorous level. In my doctoral thesis I campaign for computers as ideal companions for such endeavours. When it becomes as intimate as a soft toy to a child – capable of ‘as if’ and ‘make believe’ play, it turns into a powerful mimetic, poetic, agile machine for ambiguity, openness and beauty. I embraced an ‘abnormal’ and fragile aesthetic vocabulary: soft, feathery, fluffy, downy, cute, velvety, smooth, foamy, spiky, spiny, thorny etc. Unsurprisingly my culturally-driven non-engineered digital design-research was out of the norm then; in hindsight it is safe to say that it was, in essence, proto-post-digital — to me ‘digital’ was from the outset greater than its disciplinary (i.e. silo) understanding of ‘efficient’ and ‘structural’.

Meeting Beauty Violently (Ugly B1tch)

Directed by Italian horror-master Dario Argento, the 1996 movie La Sindrome di Stendhal narrates the total breakdown of its protagonist Anna Manni in front of Brueghel’s The Fall of Icarus at the Uffizi in Florence. The film is based on the namesake condition, aka hyperkulturation or Florence syndrome, analyzed in 1977 by Florentine psychiatrist Graziella Magherini and named after French writer Marie-Henri Beyle – aka Stendhal – who first described it in Rome, Naples and Florence, en 1817 after his personal experience in the basilica of Santa Croce. Raum, the German word for space, is extremely close to Traum (dream), and Trauma; architecture can therefore seriously distress people in their most inner sentiments. Argento admits to have suffered the same symptoms when visiting the Parthenon as a teenager. I have experienced a mild Stendhal syndrome moment when visiting Francesco Borromini’s tiny yet prodigious San Carlino in Rome. My 4-5 years old son in the Viennese Gothic cathedral St. Stephensdom: he was deeply distressed and scared by its darkness and graveness; we had to leave immediately.

Before you discount this as an inevitable slight overdose of alcohol (a good Chianti in Florence, a Frascati in Rome) and proteins (the typical Fiorentina steak, the juicy Roman Abbacchio), similar signs of phobia and elation are known to be triggered by religious psychosis in Jerusalem, and by sexual arousal caused by Rubens. Magherini has encountered over 100 cases of acute psychiatric breakdowns involving sensorial disturbances, hallucinations, illusions, manias, euphoria, panic, anxiety and ecstasy. Here beauty is not poetic, but predatory. It attacks soul, body and brain: a clear case for neurobiology [Semir Zeki p.XX]. Never mind ‘wholeness, harmony and radiance’, St. Thomas Aquinas’ main characteristics of beauty. It is ‘savage’ (Alexander McQueen), ‘terror’ (Rainer Maria Rilke), ‘unbearable’, driving us ‘to despair’ (Albert Camus), ‘convulsive’ and ‘veiled-erotic, fixed-explosive, magic-circumstantial’ (André Breton).[10]

Meeting Beauty Now

So, why should we post-digital designers not fear beauty? Because we are not unconsciously soothed into passivity by its poetics and fragility, nor agitated to angst and psychosis by its intensity and elusive agility. Because we naturally embrace architecture’s bipolar powers of being art and science,
beauty and technology, intellect and body, material and computation, phenomenology and mathematics, making sense and flirting with the senses. 21st century cultural production can, better, should be powered by beauty, poetics and mimesis to entice a hybrid, synthetic, and convoluted design practice with blurry disciplinary boundaries. Post-digital is not against the digital. It is an evolution; a revolution, a ‘turn around’: after decades of learning what digitality could do to architecture, we now explore what a hybridizable digitalized architecture can give back to the real world. This is true cultural production for it puts personality, subjectivity, individuality in rapport with, at disposal to, plurality, society and human culture – and vice versa. Of course a fragile relationship that needs to be nurtured.

Core post-digital tenets beyond hybridity are therefore collaborativeness and transdisciplinarity, i.e. the quality of linking singularity with plurality, subjectivity with collectivity across domains. ‘Author or unemployed’ Paul Virilio used to tell his students. [11] An updated version should read: ‘co-author or un-employable’. There is no incompatibility between authorship and teamwork in what we do now. Singularity and plurality (singular–singular, singular–plural, plural–plural) affect each other – a rhizome of interconnected two-way processes to stipulate concepts and filters that challenge common rudimentary ‘laws and determinations’. Inherently, this particular post-digital position of ‘subjective interestedness’ [Yael Reisner p. XX] in beauty is a balancing act. Constantly finding equilibrium, avoiding on one hand fetishization—the excessive aspiration for gratification of one’s own preferences, soft spots and obsessions—and on the other hand repression—the inhibition of others’ and/or one’s own inner landscape; gagging processes with beauty as primary or a collateral casualty. In both instances the dynamic cross-influencing of singularity/plurality is broken—cases for psychology and psychoanalysis (Zeki, Stendhal...), rather than poetics and phenomenology (Mollino, Bachelard...).

Incidentally, it is a balancing act on a fast moving train! At the dawn of the fourth industrial revolution, we disagree to u-turn to pre-digital, retro, old-fashioned and nostalgic historicizing pastiches and untimely bric-a-brac. We are too aware that every industrial revolution—the first (Victorian) powered by steam engines, the second (electrical) motorized by fossil fuel internal combustion engines, and the third (the digital) determined by computers—caused fear of dehumanizing technological and socio-political advancements. It resulted in a nostalgic and short-lived beauty concept, too pure to deal with the erratic acceleration and behaviour of progress. Colin Rowe asked ‘Why should we be obliged to prefer a nostalgia for the future to that for the past?’ [12] Because we ought to be agile and participate and contribute to the advancement of our civilization. Because beauty, both inspiring muse and demanding bitch, calls for cultural and technological progress. Because it teases us to externalize our past experiences, our inner landscapes, into common cultural strategies for the future. And they will seduce you and strike you—sometimes gently, sometimes violently. O Beauty! My Beauty!

Footnotes

Figures and captions

**Figure 1** / architect TOYS and TOXIC
Self-portraits taken 20 years apart. The architect interfacing with opposite extreme environments: softness, domesticity, privacy and intimacy (represented by the soft toys) but also with toxicity, pollution, health and safety (exemplified by the mask). Photography: Marjan Colletti.

**Figure 2** / PC_section new
Student project (MArch, The Bartlett School of Architecture, UCL) for an infrastructure/nature hybrid building. CAD splines and polylines are misused to crossbreed architectural elements and vegetation in a drawing that looks hand-drafted, but in fact cannot be executed by hand with the same precision.

**Figure 3** / Plantolith front and back
A 250kg plus 1700/1000/200mm 3D silica sand print (sponsoring: ExOne Digital Part Materialization) that combines the complexities of growing, complex, multi-layered and convoluted plant geometries with the contrasting static, homogeneous, heavy characteristic of monoliths. Photography: Marjan Colletti.

**Figure 4** / ELEFALLA 6 (2 pictures to select from)
Semi-beautiful objects. A hybrid between an elephant and a butterfly (ital. farfalla) as design for a funnel.

**Figure 5** / marjan XenoBaroque model LR (2 pictures to select from)
An approx. 300/300/300mm 3D SLS print that borrows and re-interprets some of the classical ornaments and embellishments in Baroque music, such as the ‘Appoggiatura’ [from Ital. appoggiare, to lean upon], the ‘Acciaccatura’ [from Ital. acciaccare, to crush], the ‘Glissando’, the ‘Schleifer’, trill, the mordent, the turn. Photography: Marjan Colletti.

**Figure 6** / DSC_5341b (2 pictures to select from)
marcosandmarjan (Marjan Colletti, Marcos Cruz) and Guan Lee, with Richard Beckett et al, *Algae-Cellunoi*, London/Orleans, installed at the 9th ARCHILAB at the FRAC Centre, Orleans France (now in its private collection).
An approx. 4000/2000/165mm milled foam and soft 3D printed algae vessels wall installation. Each clean cellular component, similar in morphology to growth layouts in sea barnacles and shells, is seeded with terrestrial algae that will overgrow its every gap and crevice to create an artificial-hybrid ambiguous structure.

**Figure 7** / Coralloids (2 pictures to select from)
Marjan Colletti, Johannes Ladinig and REX|LAB collaborators at Innsbruck University, *FrAgile 3: Coralloid Cocoons*, Innsbruck/London/Linz, installed at Ars Electronica 2016.
An approx. 7000/4000/1200mm Robotically 3D concrete and ABS print that symbolizes the on-going metamorphosis of robotics in architecture from stubby and clumsy ‘Fordian caterpillars’ to frAgile ‘Post-Digital chrysalises’. Photography: Marjan Colletti.

**Figure 8** / Quaquaversal
Iris van Herpen with Jolan van der Wiel and Marjan Colletti with REX|LAB collaborators at Innsbruck University, *Quaquaversal Centrepiece*, Musée d’Histoire de la Médecine, Paris France, 8 October 2015.
A trans-disciplinary project that brings together fashion designers, architects, researchers, artists, robot technicians, event managers, models et al to showcase a newapproach to garment construction, mixing various analogue and digital/robotic techniques (cutting, weaving, folding and 3D printing) into a process that transcends the boundaries of traditional clothes-making. Photography: Marjan Colletti.
CV

Marjan COLLETTI
Dipl.Ing. dist.(A), MArch. dist.(UK), PhD(UK); dott.arch. (I), ARB(UK); Prof. (UK), Univ.-Prof.(A)

Marjan is an architect, educator, researcher and author. He is co-founder and co-principal of MAM-arch in London; Full Professor in Architecture and Post-digital Practice, Co-Director of the MArch Architecture (ARB/RIBA Part 2) at The Bartlett School of Architecture UCL London, where he has taught since the year 2000; Chair Professor of Building Design and Construction, Head of the Institute of Experimental Architecture and founder of REX|LAB, the robotic experimentation laboratory at the University of Innsbruck. He lectures, exhibits, publishes and acts as peer reviewer internationally.