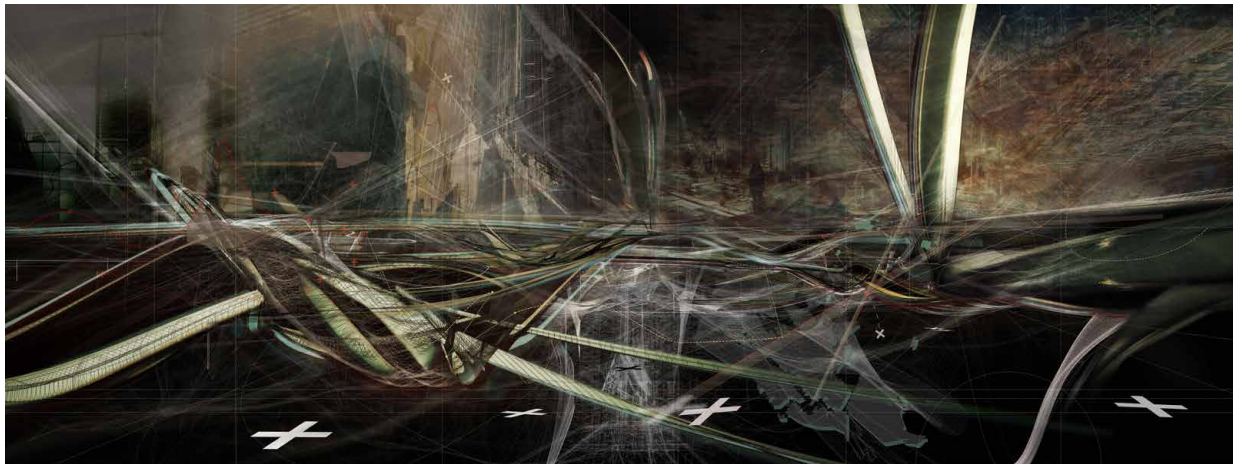Article

Future Urban Networks

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Jac Griffiths, Future Urban Networks, Chronogram, 2018

We are moving towards a society based on information exchanges that no longer conform to the structures and concrete locality of physical spaces. Not only are we confronted with a new condition of urban relativity to the geospatial milieu, but also new conditions of occupation and perceptions of place within a globalised sociocultural space that is constructed by informational networks. Future Urban Networks is a speculative project that explores the re-conception of perceived space in response to such contemporary trends within the social practice and the Everyday. The project encompasses the formation of an urban fabric that provides a framework for social utopian emergence through relationships with a proactive architecture.

The physical contemporary metropolis proliferates across all borders. The sprawl of the Everyday contained within, has converged across traditionally determined territories of natural and artificial landscapes, physical and digital realms, and public and private spheres. There has been a shift away from the historic form of the built environment towards the emergence of the virtual city (Virilio 2005.), a de-territorialised meta-city whose centre is everywhere and whose circumference nowhere. Transformations imposed by the Anthropocene have furthermore expanded urban space across the multiplicities and overlaps of connections and interconnections; pushing defined space beyond Euclidean geometry and Cartesian metaphysics in the wake of technological dynamism, as seen in the digital identities and connections that parallel the physical world. Changes in perception and representation brought about by technological dependencies have created a highly complex morphing reality that is vulnerable to the prevalent impositions that govern society's climate. It is through the interplay of digital space that we can provide an environment for spatial representation unbounded by the physical construction of Euclidean space.

Jac Griffiths, Future Urban Networks, Mapping Fragmentation, 2018

We are now globally connected, and yet locally disconnected, both physically and socially, strung between the discontinuous constellations of spatial fragments and stratification of place (Castells, 2010). This disjunction of place and activity, or rather cybernetic interactivity, proposes a distinct departure from the nation state, and twentieth century notions of geo-politics. As a result we can perceive a movement away from the prescribed physical notions of spatio-politics, the real and the precise, towards the meta-geographical; fundamentally changing the hierarchy and relations of space, place and action. As noted by Antoine Picon (2015), social networks bear witness to "a desire for spontaneous expression that cannot be satisfied within usual frameworks of public speaking and collective action" (Picon 2015: 84), or indeed traditional interpretations of public space and its social production.

The site of social practice, the Everyday, is no longer reducible to the urban, and exists within a wide range of platforms, such as social media and other circuitry networks of communication. Invariably, the relativity of space or place has been consigned to a secondary field of assembly. In place of direct, but restrictive analogue communication, the digital flows of networked communication allow for vertical and horizontal interactivity that defies traditional hierarchies and power structures and allow for unprecedented freedoms. Interaction now exists within this space of flows, instantaneous communications between nodes unencumbered by distance.

Within this praxis we require a new understanding of space, representation and perception; one that is equally unencumbered by the constraints of physical space and experience.

In order to explore the architectural relationship of spatial practice within this context, the creation of a speculative context allows for the expansion of contemporary trends and an unconstrained platform for conceptual re-imaginings.

The project is set in 2060, between post-scarcity and singularity. Widespread automation has led to a post-work society. In the wake of our capitalist driven society, the existing urban realm and infrastructure have been outgrown. These major shifts in the social everyday have dramatically ruptured the hierarchies governing space, and the utilization and distribution of its production. This calls for a fundamental reorganization of the process and outcomes of spatial production. The previous trends of communication and partitioning of space have been replaced by concepts exclusive of traditional values of ownership.
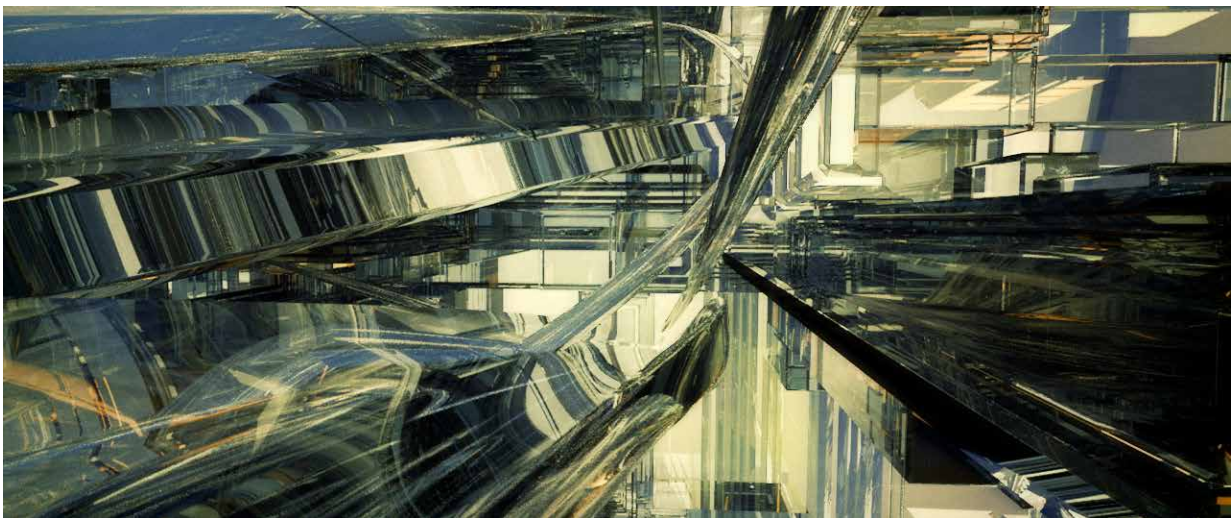
The site is the post-work Northern Powerhouse. Originally perceived as an economical region in 2015 to combat the London centric gaze of the UK. The setting of this particular region in the context of a post-work society asks for a pressing degree of enquiry in what would be a radical shift of traditional structures.
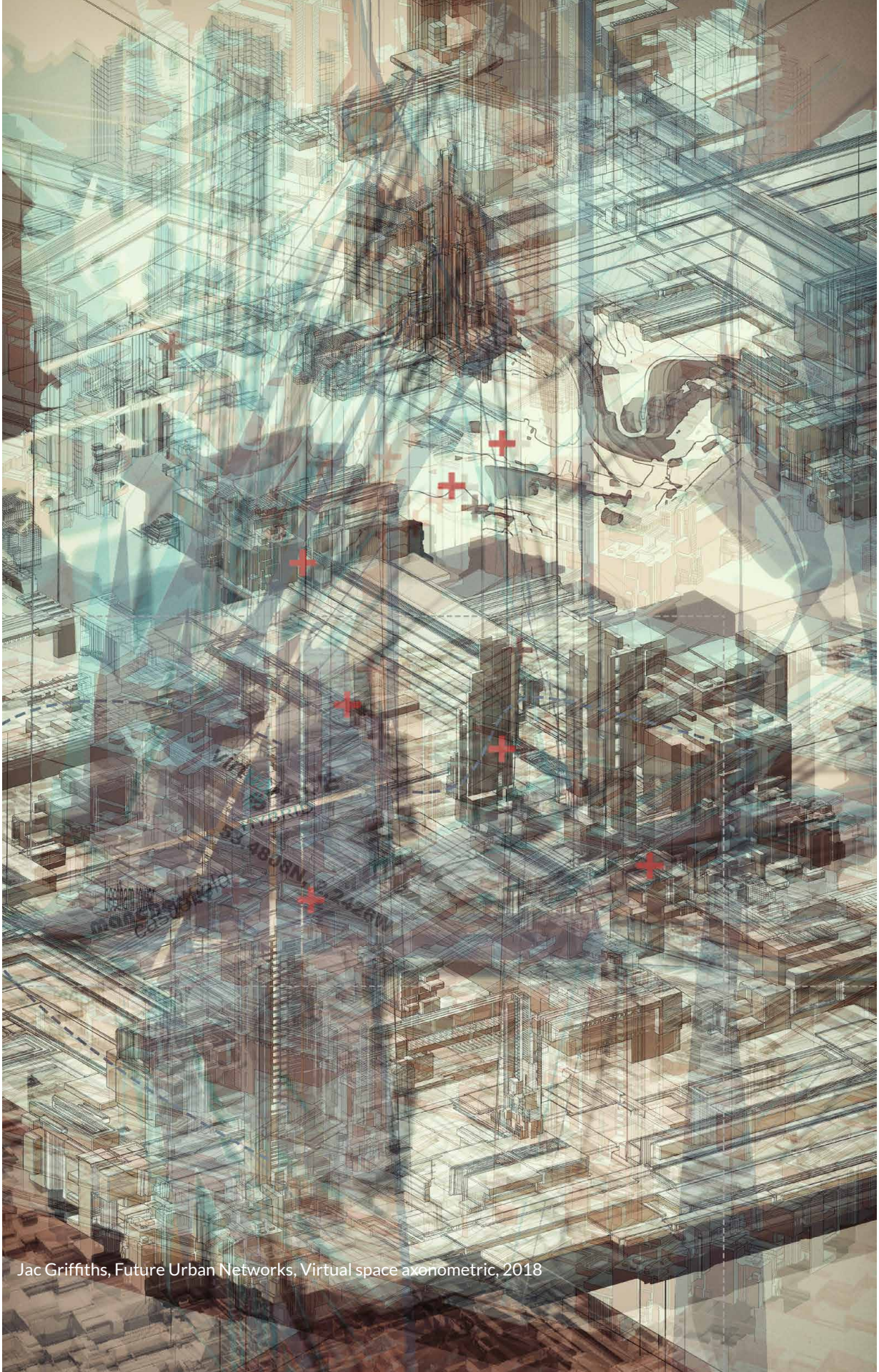
Jac Griffiths, Future Urban Networks, Virtual space axonometric, 2018
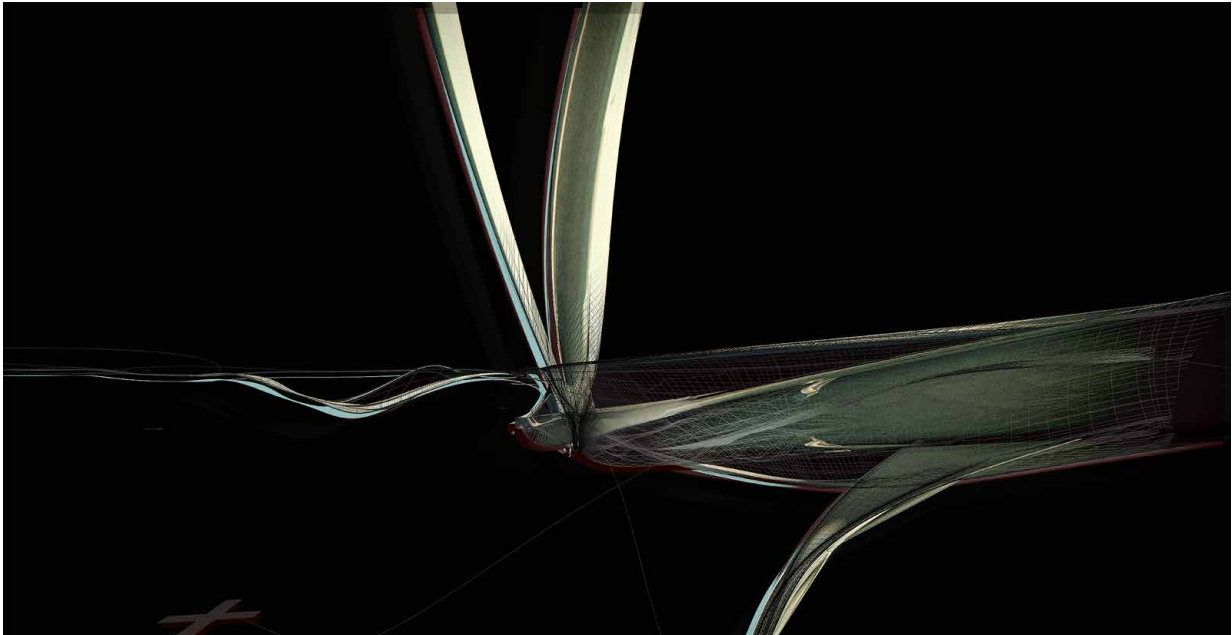
Jac Griffiths, Future Urban Networks, The Interaction of a Non-physical Network, 2018

Jac Griffiths, Future Urban Networks, Merger between Digital Assemblage Architecture and the Physical Data Network, 2018

The site is purposeful and considered; an abstracted regional conglomeration, 'The Northern Powerhouse', is assembled from fragmentations of state authority, business, commerce, and a diversity of agencies and partnerships "engaged in a 'politics of scale' exercise to fix resources and stabilise a geographical definition of the region to their advantage" (Allen and Cochrane 2007:1161).

A new space of social practice, of occupied space, is conceived as a vast network, at once non-linear and non-hierarchical. This network of networks draws comparison to Umberto Eco's (1984) description of the rhizome, as an "unimaginable globality" (Eco, 1984). Drawn with such intricacy, and interconnected over such vast distances, the processes and act of 'derive' is transformed within the network system to be transcendent of fixed

Jac Griffiths, Future Urban Networks, The Network above Manchester City Centre, 2018

geographical relationships. The physical infrastructure of this vast network is tied to its landscape, mirroring an array of industrial and natural interventions that distribute and converge. Canals that run with idyllic purpose, like carved wounds across the land, and desire lines that crisscross with organic abandon. It is the conflict and collision of this new network and the existing built environment that will lead to the emergent properties of an assemblage of the constituent parts of the 'city organism'. Reference to assembly and assemblage here, follows Gilles Deleuze. A groundwork for anamorphic representations of the urban-suburban-hinterland found in moments and artefacts, joined and meshed to form oppositional spatial formations that are to be disrupted and reshaped as non-linear multiplicities.

The network is the driver. Formed of the constant conglomeration of data interactivity, spatial displacement and social practice; the network forms the extension of global de-localisation fueled by the trans-political rupture of a cybernetic based cultural and economic exchange. The network architecture is itself pure infrastructure, an enabling platform for the becoming of emergence. The network builds on the democratic global net, a grid unfurled and planted across the landscape, plastic, responsive, synergistic, it is a hybrid caught between the physical and the virtual. Floating above landscape, intertwined within cityscape, this network, a vessel of relational intersections, standing as a hint to the rhizome, crashing unceremoniously into the existing built environment at various demarcated points. These

architectural interventions, born from assemblage, feed from captured relationships of exteriority, building and multiplying these layers of social practice, a New Everyday that combines a society with its architecture.

In the height of the technological capitalist age, the network was originally conceived as an economic infrastructural system that combined the region into a physical Northern Powerhouse. The initial network was based on the data mining and collection of individuals in the Capitalist age. The network was to bridge between the digital displacement of people and the social Everyday, a physical realization of our data lives. This connectivity of the region acts as a new form of infrastructure that maps the great Northern Powerhouse as a continuous cohesive whole. The new network denotes the region as a digital meta city detached from physical boundaries. Plotted as a diagram to the points of action and inter-relations, the network map becomes an intricate patchwork of meandering lines that traverse across the land and page based on organic measures of growth and form, the pathways of the network are consistent across scales, bundling together in improvised efficiency. The network was built in stages, with large platforms erected at significant points, the physical structures were left incomplete at the fall of the capitalist society. Following the end of the traditional Capitalist economy, the network fell into disrepair, until the network began to be colonized by the people as a means of social action, subverting the network's monetized intentions. The network began to act as a catalyst, providing an armature for a new form of architecture

and living as assemblages. Completed in its hybrid physical-digital massing, the network subverts its original intentions to provide an infrastructure necessary for the new forms of spatial production to be realized.

The old vestiges of the Fourth Capitalist Age, the totemic icons across the cityscape, have been re-engineered, possessed by a 'machinic architecture'; a mechanized architectural machine that produces emergent artefacts that hang, like parasites along the building form. Determined, and conceived across the vacant remains of its body without organs that espouse emergent tectonic materiality in the form of 3D-printed emergent artefacts.

The machinic architecture fills the void left vacated by commercial programme and the determination of spatial production as commodity fetishism. In the post-work age the machinic architecture infers the production of assemblages as a spontaneous action of heterogeneous collective activity. Further to a mechanic architecture, the architecture follows the order of the machinic assemblage, a body that is multiple; its function no longer depends on an interior truth or identity, but on the particular assemblages it forms with other bodies.

Contemporary urban spatial entities have been determined by an urban globalist organisation of complex connections of distinction, that introduces heterogeneous agents and convergence, which in turn proliferate a homogeneity of contemporary spaces. Future Urban Networks is neither tied to physical categorization or to visual perceptions, instead conceived as the representational spaces of active agents. Parasitic in nature, the infrastructural architecture of the network consumes and subsumes the built environment from which it emerges. The physical reality of the built form becomes reimagined as digital simulacra. Subverting Beaudrillard's negative theorization of the Simulacrum, the network instead become the facilitator of spatial assemblage, an interactive, immersive architecture again located somewhere between the virtual and the physical, dismissive of the original in favour of spaces of possibility, unencumbered by linearity and structural territorialization. The convergence of points, a platform for collective social practice, a machine of 'simulacra' harnessed as a production of metaphysical activity within a realisation of a digital spatial interface. A hyper-reality that moves beyond the limitations of existing spatial relationships.

Jac Griffiths, Future Urban Networks, Network Revolution, 2018
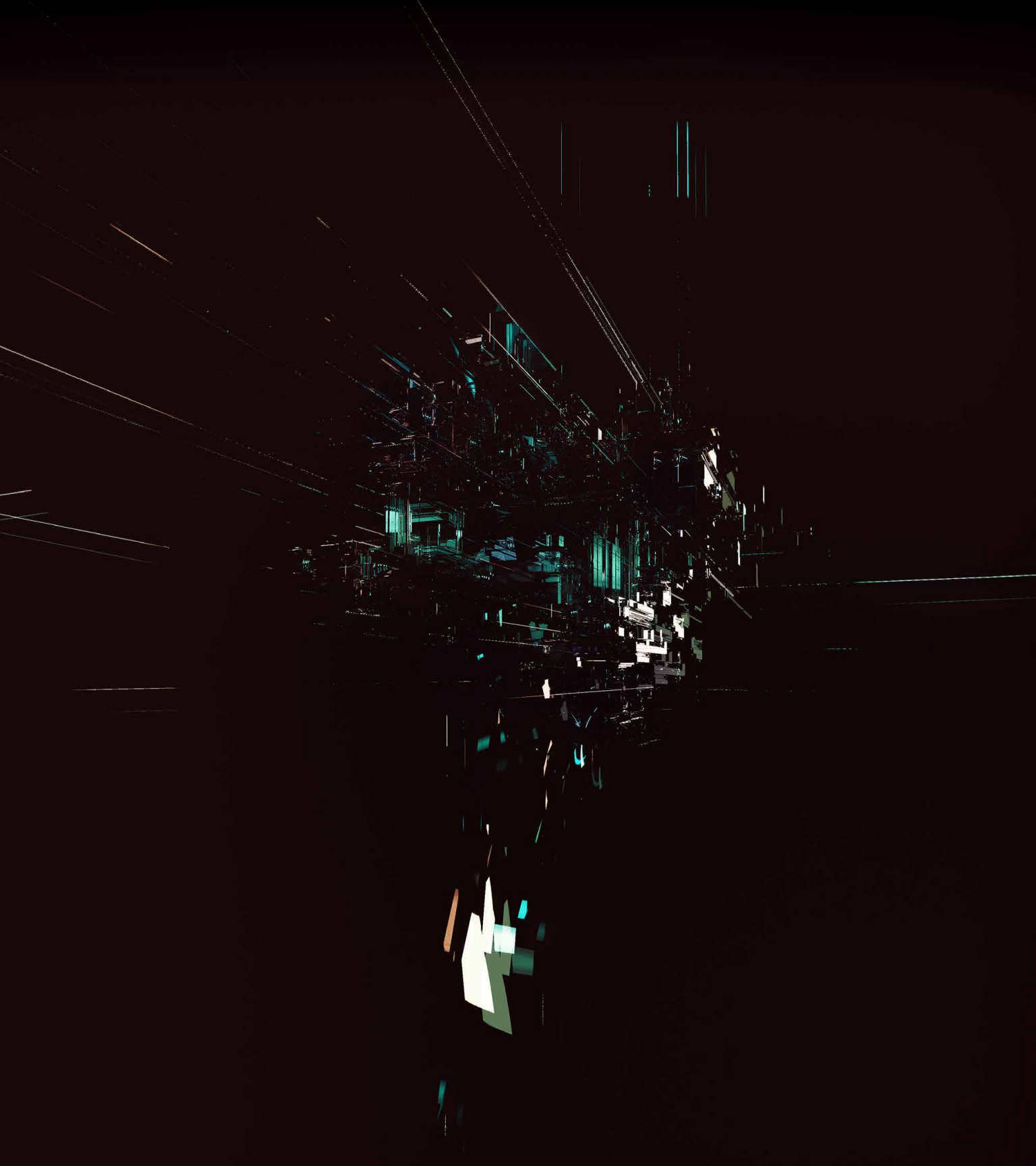
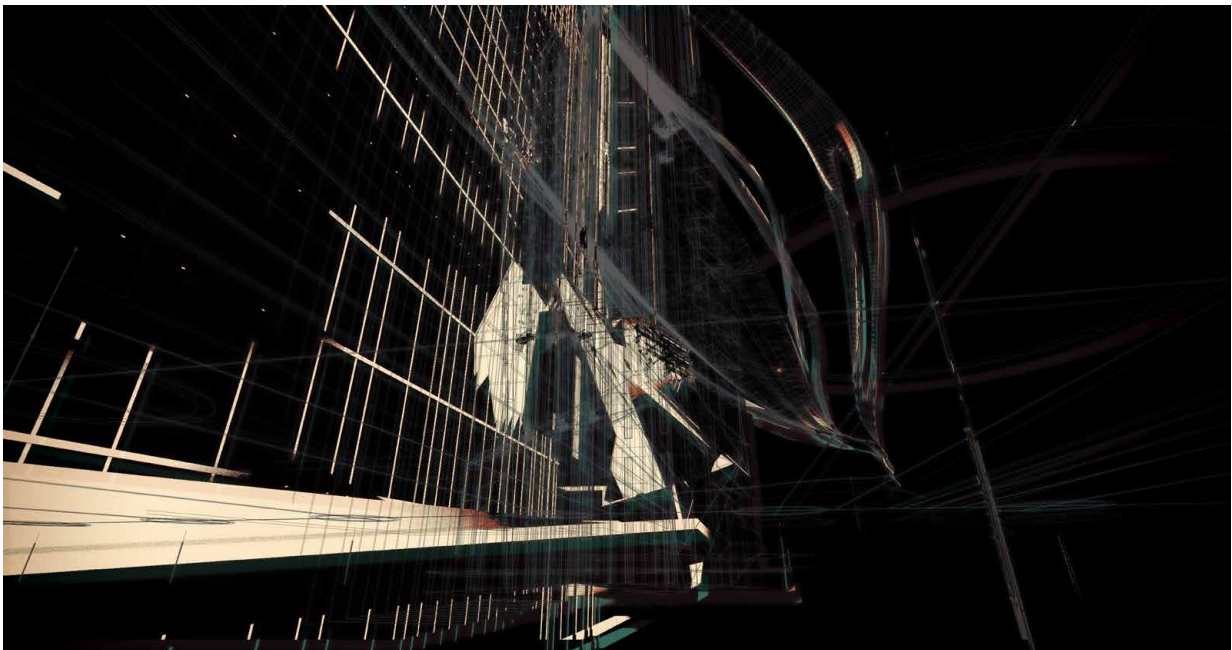Jac Griffiths, Future Urban Networks, Massing of a Grand Assemblage, 2018

Jac Griffiths, Future Urban Networks, Platform of Emergence, 2018

A process of assembly, the social practice of collective individuals within the network conceive the representation of the simulacra machine. Both conscious and un-conscious, free agency contributes to reflection, the fragmentation of perception into multiplicities of layered conceptions of space; the internal visualization of the network. The simulacrum machine is therefore produced through an organic dialectic that engages with the spatio-temporal rhythms of the city.

The Simulacrum is a communal tool, allowing for the facilitation of collective endeavor necessary in the production and projection of the spaces of possibility. An architectural space in constant flux that challenges perception, and looks towards our own speculative futures. Personal, internal spaces are strung together in a vast array of interconnecting relationships, dispersed along

Jac Griffiths, Future Urban Networks, Perspective of an Emergent Artefact, 2018

Jac Griffiths, Future Urban Networks, Virtual Assemblage, 2018

temporal planes, a traversable rhizome, that combines the spaces of the individual actor with the post-urban network of the collective.

Situated amongst the formerly latent data networks and the mass complexity of multitudes within the growing assemblages, the simulacrum machine is a responsive environment for the collective production of spaces in the re-representation of the city amongst physical and virtual planes. The simulacrum machine blurs the territories of simulation and actual, a production of space between the physical and the digital, the substitution of the signs of the real or the real, and operation of deterrence in each real process via its operational double, a programmatic metastable, perfectly descriptive machine that offers all the signs of the real and short circuits all its vicissitudes. Procedural re-representation that creates a spatial hyper-reality, formed without the constraints of linearity and outmoded conceptions of the metropolitan Everyday.

Journeying through this conglomerate architecture, emergent artefacts provide a medium between the lived space and the hybrid spaces of grand assemblages. Categorised by the emergent properties of their programmatic function, their form is produced through the non-linear logic of autonomous artificial intelligence of the machinic architecture. The emergent artefacts are produced as a constant output of social interaction, adaptable to a dynamic need for space. The spontaneous production of emergent artefacts grow like parasites along the cityscape. These machinic assemblages act as the link between the existing urban realm, the network and the simulacrum machine. A congregational entryway, the artefacts hug against the urban facades like a parasite, intertwining its structure with that of city's. A gateway to above, each is linked to the infrastructure of the network, transporting users from the ground. Machinic in their links to programme, they facilitate the accession to the simulacrum machine, and with it grand spatial assemblages. The grand assemblages referring to the spaces created within the simulacrum machine; the reimagined spatial constructs of perceived reality, they are the form of the simulacrum, its physical manifestation. A series of nested assemblages, their increasing complexity cites a re-imagining of the urban realm. Primarily the physicality of the grand assemblages is made

of a dynamic system of interchanging planes, a series of platforms that on which the virtual world is projected.

In the void left behind by capitalism, the commodification of space and the individual is replaced with a new found collective agency that promotes the organic growth of systems of multiplicities. The project calls for collective action in the active production of spatial possibilities. Future Urban Networks stands as a playground for challenging the production-consumption gap that followed industrialism. Networks of open data will allow for the equal distribution of space creation, a framework for assemblage, and active agency as a constructed process of collective desire.

References:

Allen, J and Cochrane, A (2007). Beyond the territorial fix: regional assemblages, politics and power, *Regional Studies*, 41, pp. 1161–76.

Castells, M. (2010). 2nd ed. *The Rise of the Network Society*. London: Wiley.

Eco, U (1984). *Semiotics and the Philosophy of Language*, Bloomington: Indiana University Press.

Picon, A (2015). *Smart Cities: A Spatialised Intelligence*, West Sussex: Wiley.

Virilio, P. (tr.) Turner, C (2005). *The Information Bomb*, London: Verso.