

COLLIDING

AND

**TOTALITY
CONTINGENCY**

Kirsten Cooke

Introduction

Can an object differentiate itself from its landscape to forge itself as distinct, correlating with the operation of an artwork, but without deploying its context or communicating this procedure? Or, to put it another way, can an object have immanence for itself without relying on or producing a relation with consciousness?

A question that two philosophers, with just under a century elapsed between them, have tried to respond to and for which they have provided two very different formulas. Both Carl Einstein and Quentin Meillassoux reject representation, the former on the grounds that it creates ownership and the latter because it is 'correlationist'.¹ In response to the issue of representation, Einstein pictured a total artwork that absorbs its context into its form so that no room is left for a relational (capital) operation. In contrast to his predecessor, Meillassoux theorises a multiverse in which a total object would be impossible because in reality there are no stable laws.

Consciousness tries to find patterns in nature and constructs laws where there actually are none because, as Meillassoux states, outside this procedure there is 'super-contingency'.² To support their claims each theorist provides a positive alternative but also criticises a previous structure: Einstein negates artworks that rely on the perception of the subject and their movement around an object. Meillassoux contests the correlation and tries to posit a theory of objects that does not rely on any relation to human consciousness, as well as reframing the parameters of human thought. Both theorists aim to counter the ideological effects of normalising what we think human consciousness is in the world, as a means to disrupt

¹ See book 'The Plot: Complicity with Ambivalent Objects' for a definition of the term 'correlationism', pp. 46–7.

² 'If facticity is the absolute, contingency no longer means the necessity of destruction or disorder, but rather the equal contingency of order and disorder, of becoming and sempiternity. That's why I now prefer to use the terms 'surcontingence', 'super contingency', rather than contingency.'

Quentin Meillassoux, *Time without Becoming*, London: Mimesis International, 2014, p. 25.

the status quo. To do this both attempt to compose alternative teleological and spatial operations.

Einstein's theory relies on the notion that cubic mass operates distinctly from three-dimensionality, as the latter relates to a viewer's movements around an object and results in a representation. Cubic mass supposedly absorbs this movement into itself so that the viewer does not have to piece together the image but perceives it in its totality. This produces an immanent object that is contradictory because it contains more than itself in its form. On the other side of this double-edged answer, Meillassoux states that the multi-verse is actually grounded in unreason and this super-contingent backdrop is why self-differentiation is necessary if anything is to appear (which it does). Self-differentiation, as a universal operation, entails that when an entity appears it is non-contradictory or else it would not be distinct from the contradictory and contingent substructure.

A discrepancy is produced between how an object can distinguish itself from its background, as one theorist asserts that an entity's immanence is in its contradictory form and the other claims that it must be non-contradictory because its virtual landscape (the fabric in which an entity comes into being) is super-contingent. 'Colliding Totality with Contingency' acts like a Large Hadron Collider and sets Einstein's and Meillassoux's theories on a collision course, which creates areas of fission or fusion between the two areas of research: resulting in a manipulation of the lacunae that exist between them and thus forging a clustered composite.

Totality against Capitalism: Function of the artwork

Einstein's theory of the total artwork was an attempt to create a positive form of iconoclasm against capitalistic practices and the longstanding bourgeois belief in individuality because, 'individuality is the sentimental excuse for the tyranny of objects.'³ Ironically, Einstein chose to produce a theory based on artworks even though he was against objects in general because he believed that visual practices organised the public's relationship with the world. Einstein's

³ Seth Zeidler, 'Totality Against a Subject: Carl Einstein's Negerplastik', *October*, 107 (2004), 15–46 (p. 9).

theory of the total object could have been an attempt to deploy the artwork as a fast track through the bureaucratic and legal stages presented in the *The Manifesto of the Communist Party* (1848) toward an immediate society of paupers.⁴ A direct dictatorship of the pauper, as opposed to the mediatory stage of the proletariat, would not start with a redistribution of wealth but would transform the economic system in its entirety through the encounter with the artwork.

... the poor are by definition bereft of objects, and are as such the most adequate candidates for a revolution during which objects would not simply change owners but whose decisive gesture would be the expropriation, once and for all, of the ideology of ownership itself – including that ideology that defines the subject as a core identity plus properties, as owner of his proper traits.⁵

For Einstein, no longer should objects and wealth merely exchange owners but the whole system of ownership itself should be immediately dismantled. It was important for him to locate the mechanisms used to facilitate the capitalist construction of identity and ownership, in order to reconfigure them. It was through organising the visual field and manipulating vision that Einstein believed capitalism was able to cultivate consumers. If he was to undermine capitalist operations then Einstein needed to reconstruct the way people saw themselves in their environment. Artistic practice was the arena in which theories of the visual could be performed and presented to the public and so Einstein waged his war on capitalist perception by challenging many of the claims that were being made for visual practices in the arts. Einstein took it upon himself to rigorously attack his academic predecessors and their tendency to

⁴ 'When, therefore, capital is converted into common property, into the property of all members of society, personal property is not thereby transformed into social property. It is only the social character of the property that is changed. It loses its class character.'

Jeffrey C. Isaac, (ed.), *The Communist Manifesto: Karl Marx and Friedrich Engels* (New Haven and London: Yale University Press, 2012), p. 86.

⁵ *Ibid.*, p. 9.

advocate artistic and architectural practices, which cultivated an individualistic viewer. Any art form that required the viewer to apply their individual memories was erroneous:

Frontality concentrates all power into a single aspect and essentially cheats the viewer out of the experience of the cubic. It arranges the foremost parts according to a single viewpoint and endows them with a degree of plasticity. The simplest, naturalistic aspect is chosen, the side closest to the beholder... Through a pattern of rhythmic interruptions, the other, subordinate aspects suggest a sensation that corresponds to an idea of three-dimensionality based on our ideas of movement.⁶

Einstein was not against the idea of sculpture presenting itself in a perceptually one-dimensional formation, in fact he was all for that procedure because it stops the subject from being kinaesthetically active. It is three-dimensionality that poses the problem, as a subject's movement around an object creates a series of fragmented images, which are then pieced together in the individual's mind: producing an infinite number of subjective montages based on each viewer's identity rather than instigating an encounter with the real artwork. A capitalist subject is manufactured through a kinaesthetic practice because the artwork is dependent on its relation with the viewer's identity, through their movement or their memory of dimensions experienced through previous movements. In contrast, a universal form that is experienced in the same way by everyone is only possible if it is distinct in its own singularity and exists outside the normative ways of experiencing or reading an artwork.

On these grounds Einstein was opposed to his contemporaries' temptation to build a sculptural form out of a subject's memory of movement, a process he termed 'optical naturalism'.⁷ If the sculpture requires the subject to fulfil it then it would always preserve the existing subject's experience of movement around objects rather

⁶ Carl Einstein, 'Negro Sculpture', *October*, 107 (2004), ed. by Sebastian Zeidler, Cambridge: The MIT Press, 122–38 (p. 132).

⁷ Seth Zeidler, 'Totality Against a Subject', p. 29.

than challenging expectations of knowledge. He described this type of art, which was produced in order to make the subject feel like they had control over the world, as naturalising the subject's viewpoint. Einstein accused Georg Simmel's theorisation of Auguste Rodin's sculptures (1870s-1900s) and Herman von Helmholtz's ideology of the relief (the latter as depicted through the sculptor Adolf von Hildebrand's Wittelsbacher Fountain (1890-95) in Munich) of planting the prior knowledge of their viewing subject in the vindication of such works. Einstein accused the critics, as well as the artists whose work they advocated, of projecting their memories of movement into the sculptures and thus producing a subject-centric view of the world. Einstein believed that both methodologies impoverished the artwork: in the former because the sculpture illustrated duration, rather than being able to activate an alternative experience of time, and in the latter because it planted a seed in the sculpture that germinated through the subject's knowledge of movement rather than emanating from the artwork itself. In both scenarios the existing identity of the subject is evoked and maintained, rather than opposed. A ramification of such artworks is that the existing society is also preserved and nothing new can occur.

Claims in Einstein's work revolve around the concept of the original artwork, which can break with convention. In opposition to Walter Benjamin's democratic theory of 'reproductions', Einstein advocated the intensity of an individual artwork.⁸ Einstein's image exists for itself, distinct from the realm of production and ownership. At first glance Einstein's theory of visiting an artwork in situ appears to endorse a very similar individualistic encounter to that produced by hierarchical structures. Instead of being available to the masses, an image could only be viewed in a gallery context. In contrast, Einstein turned this sense of viewership on its head and believed that mass production could actually be linked to mass control. As a result Einstein needed to produce a mass movement through an individualistic, rather than a mass-conditioning, encounter. All forms of organised viewership are individualised: even when situated in a congregation, cinema or gallery, a subject is always viewing something at a distance to others. Einstein perhaps endorsed a theory of total artworks due to this: calling for the production of

⁸ See book 'The Plot' for an account of Benjamin's theory, pp. 24– 8.

singular forms, which are so distinct that they are capable of producing a public rather than limiting the artwork's reach by catering to an existing audience. In this sense, the transformation of the bourgeois individual into Einstein's pauper could only ever happen after the encounter: in the futurity produced by a confrontation with the total artwork.

Einstein believed that the way a total artwork could break with convention was through deploying a methodology he called 'decomposition'.⁹ Decomposition is a process that deconstructs and reconstructs the visual landscape. The production of decomposed images invests in the ability of a destructive strategy to have a positive effect: it is able to force the viewing subject to rescind their divine dominion over the world (property).¹⁰ It is also a constructive methodology, which wipes the canvas clean so that the artist can pose new ways of seeing. Einstein proposed an art form that was destructive and constructive in nature, which meant that it could decompose and reconfigure vision. As a result, Einstein attested to the belief that the very nature of form making is violent, '... every precise form is an assassination of other versions.'¹¹ In this scenario, forms are workers (or assassins) that execute their labours through a transformation of vision. Einstein's decomposition is a dialectical performance, as an art form must contain the existing system and its opposite if it is to deconstruct vision, so his theory of form aims to split the human gaze and shatter anthropomorphic behaviour.

To explore this dialectical mechanism further, Einstein abstracted African art from its original context and placed it in Western criticism

⁹ Georges Didi-Huberman, "Picture = Rupture": Visual Experience, Form and Symptom according to Carl Einstein', *Papers of Surrealism: The Use-Value of Documents*, 7, (2007), 1– 25 <<http://www.surrealismcentre.ac.uk/papersofsurrealism/>> [accessed 15 October 2014] (p. 2).

¹⁰ See book 'The Plot', pp. 29– 30, for an account of practices (War Communism) that take this stance on a negative process having positive outcomes.

¹¹ Didi-Huberman, 'Picture = Rupture', p. 2.

through his essay 'Negerplastik' (1915).¹² In contrast to the 1400-1500s Renaissance of African art, produced through the development of trade routes and Europe's thirst for new markets, Einstein did not perform this procedure in order to present African art as an example of exotic primitivism. He rejected this portrayal of art because it was an exercise in ownership. When fantasised as exotic, African cultures were presented as objects that could be consumed and if Einstein took this approach then it would undermine his intention for African art to act as a visual weapon against capitalism. Einstein deployed African sculptures because he believed them capable of challenging the ruling aesthetic order in the West. In effect he was attempting to violently displace the Western bourgeois formalism with an alternative theory of form that could perhaps shatter the former. Einstein believed that certain African tribes had been able to craft sculptures, which did not care for the viewer and absorbed all forms of contradictory spatial experience in their construction.

This is how one should understand the so-called twisted joints or limbs of Negro sculptures: this coiled bending represents in a visible concentrated way the cubic character of two otherwise abruptly contrasting directional movements; recessed parts that could otherwise merely be intimated become active and functional in a focused, unified expression.¹³

Einstein's total artwork is only achieved when it unifies all potential kinaesthetic acts in its form so that the sculpture can transplant the need for subjective movement, as the latter would displace the object. Einstein's sculptural form should absorb everything in its internal folds and present a total image to the subject so that no space is left for the viewer's individual interpretation.

In African art, Einstein claims that the sculpture does not represent the deity but is a God. Refusing to merely represent a God, the

¹² The English translation of Einstein's 'Negerplastik' is 'Negro Sculpture' and this book continues to reference both titles.

¹³ Einstein, 'Negro Sculpture', p. 136.

sculpture avoids a conservatively causal relationship with the viewer, as happens in optical naturalism. African sculpture exists for itself and has an isomorphic or asymmetrical relationship with the viewer, which is produced through its intensification of form. It is asymmetrical because it does not act as a mirror for subjective projections. For Einstein, African art is experienced universally because it absorbs all interpretation and presents a one-dimensional force. Ironically, this one-dimensionality or intensity does not close down contingency but rather opens it up because the nature of form as force (rather than representation) connotes that its meaning has not been predicted or over-determined, so in the moment of encounter the sculptures produce political possibilities.

Einstein also advocated abstract practices in the West and believed that Analytic Cubism's abstraction and geometry, which wiped all subjects and objects from the canvas, was a truly iconoclastic art form because it deleted figurative elements from its canvas. 'Tectonics' is the term that Einstein deploys to describe how a painting should function.¹⁴ A tectonic artwork is like a colloid of tiny particles (subjects and objects) that are dispersed across and held in the largely non-figurative canvas: resulting in a visual solute that purportedly produces mixed experiences and putrefies existing models of vision. As Didi-Huberman states, 'This would be cubism's most shattering value, according to Carl Einstein: this dialectical inclusion of the very thing it breaks down – that is to say, anthropomorphism.'¹⁵ Einstein's tectonics included both figurative aspects and their decay, in order to perform the disintegration of subject-centric vision. Decomposition in mass can be examined further through the plot of J. G. Ballard's *The Crystal World* (2014), in which the lead protagonist, Dr Sanders, compares the virus of lepers with a crystallizing African forest.

...in our work on the virus, with its semi-animate, crystalline existence, half in and half out of our time-stream, as if intersecting it at an angle... often I think that in our microscopes, examining the tissues of those poor lepers in

¹⁴ Didi-Huberman, 'Picture = Rupture', p. 7.

¹⁵ Ibid, p. 4.

our hospital, we were looking upon a miniscule replica of the world I was to meet later in the forest slopes near Mont Royal.¹⁶

In Ballard's Mont Royal, anti-matter (anti-time) is colliding with matter (time) in space, the reactions producing anti-galaxies that are depleting the time store of existing galaxies. Teleological and spatial sediments encase a world that is itself emptied out during the process of organic and total crystallisation. Dr Sanders associated the latter macro scenario with the microbiological landscape of those suffering from leprosy, whose molecular atoms are described as producing more and more replicas without mass. Mimicking the leper's empty mass, *The Crystal World's* space-time is transforming the universe into a cosmic zero.

In a similar vein to Dr Sanders, Einstein is preoccupied with the possibilities that a concept of mass opens up for the total artwork. Einstein proposes that cubic mass possesses an immanence that three-dimensionality cannot. Three-dimensionality is an operation that produces an object for a subject and merely frames the object as a conduit for a conversation between two people, artist and viewer. This is because Einstein conceives that three-dimensionality is allegorical in nature and a form of visual knowledge. Investing in a seamless causality of meaning from object to subject, three-dimensionality impoverishes and destroys the artwork.

Causal thinking dissolves into an unarticulated multiplicity and disposes of its object as an allegory of a nonsensible process that lies outside of the object. For that reason it says nothing about form or its quality.¹⁷

In opposition to three-dimensionality's negative causality Einstein deploys a notion of cubic mass, in which the image is non-figurative and therefore, dialectical and multiple. Cubic mass empties out the contents of three-dimensionality and replaces it with a form that consists of collisions between matter and antimatter. Einstein's

¹⁶ J. G. Ballard, *The Crystal World*, London: Fourth Estate, 2014, p. 84.

¹⁷ Zeidler, 'Totality Against a Subject', p. 39.

matter is anthropomorphic and his antimatter is decomposition: including opposite operations in order to create a total zero ground of the artwork. In 'Negerplastik' Einstein describes how a sculpture can perform its cubic mass:

Yet if one considers that three-dimensionality is to be represented not as some object in space but rather as form... this three-dimensionality, which we cannot apprehend in a single glance, must be organized not as some vague optical suggestion, but as a self-contained, actual expression.¹⁸

When not tempted to refer to something beyond its form but instead able to encapsulate oppositions in its structure, Einstein claims that a sculpture can have a singularity that does not rely on a relation or background but can stand on its own: it has the ability to challenge the context that it finds itself staged in. A sculpture is singular when it deploys cubic mass because it is not referring to anything beyond itself but is stating its own unusual formula. Einstein deploys the term totality to describe an artwork that carries its singularity in itself, 'Totality excludes nothing, i.e., it is preceded neither by a positivity nor a negativity, for the contrast, i.e., the unconditional unity of opposites, constitutes totality.'¹⁹ An artwork that is created out of a concern for its cubic mass is total because it dialectically absorbs all opposing positions in itself, displacing any need for the subject to be active in their viewing.

In Dr Sanders' scenario, Einstein's cubic mass stages the clash between anthropocentrism and decomposition, in order to create a total artwork that challenges, rather than communicates with, its audience. Einstein's theory refuses to present the artwork as a facilitator for the transference of meaning from artist to viewer and instead presents it as a totality that can shatter this very process of meaning-making:

¹⁸ Einstein, 'Negro Sculpture', pp. 131– 2.

¹⁹ Einstein, 'Totality', p. 119.

And this act of deletion would be what would make this art 'absolute': not because it would 'absolutize' the non-objective as its new object, and so produce the most metaphysical version yet of optical naturalism, but rather because what was being 'absolutized' here is the concreteness of visual experience as an active, processual, open-ended performance that will no longer generalize the image either as mere instantiation of a prior concept or as a false actualization of the memory image of some absent, pre-existing thing.²⁰

Einstein is not stating that artworks are absolute in the sense that they act as a meta-relation, which would absorb the universe (all that is outside them) into their structure. Rather, specific forms are absolute for Einstein because they do not refer to anything outside themselves: they are complete in themselves. This completeness of the artwork in itself might be radically different from thought and could act similarly to Dr Sanders' crystallising force, which reduces all teleological and spatial entities to a cosmic zero. A zero for both Dr Sanders and Einstein is the end of subjective time and space. Zeroes can be described in number theory as entities, which exist in themselves but only become the number one when a bag is wrapped around them, then a number two if another bag is wrapped around the previous one. Zero is the smallest whole number and central to any mathematical number theory, in this sense it can be compared to a void space that is filled with potential. Created through decomposition, Einstein's artwork is this zero ground of possibility. It has a dense cubic mass, as opposed to being an empty structure, and could be described more closely to that of a grammatical bullet point. His condensed artwork carries a decomposed zero force, which produces ripples that move outwards from the object's centre. This echo effect indiscriminately interferes with the subjective landscape and creates a flat-line in the viewer's consciousness. A flat-line is produced due to the zero force in the artwork, which displaces the viewer by dissolving and re-constituting time and space in its visual folds. Einstein's bullet point empties out its context, in order to create a space for future potential and so the artworks he advocates becomes the ground for a new reality.

²⁰ Zeidler, 'Totality Against a Subject', p. 9.

Contingency against Reason: Backdrop for the object

Einstein's refusal of representation is not that dissimilar from Meillassoux's more recent rejection of correlationism, the term Meillassoux himself coined. Meillassoux's theory contests the naturalisation of the human subject's tendency to correlate everything in the universe back to him or herself. Foundational for correlative theories is the Kantian 'a priori', which invests in the theory of the mind and its faculties prior to experience.²¹ Meillassoux's theory starts from the Kantian a priori in order to challenge its impoverished view of the world: a subjective world that only acts as a correlate to thought and being. Kantian thought states that 'things-in-themselves' cannot be known because they exist outside a subject's cognitive faculties.²² Picture a scenario in which an object takes the place of the moon and the subject the sun; the subject lights up only one face of the moon and the facade that appears coheres with his/her predetermined understanding. Faces that might challenge human knowledge – the dark side of the moon – are never encountered and so the subject's world remains cohesive with their perception. In this situation the subject cannot escape the relation between themselves and the world. In a sense both Meillassoux and Einstein are anti-relational and want to create a schism with the current state of affairs, hence the term absolute deployed by both theorists.

For Meillassoux, there exists an absolute in the realm of mathematics that is necessarily contingent rather than consistent or stable. Absolute mathematics distinguishes itself from theories of probability, which believe there are underlying laws that explain the consistent world we experience.

Philosophy's task consists in re-absolutizing the scope of mathematics – thereby remaining, contrary to correlationism, faithful to thought's Copernican de-centering

²¹ See Book 'Glossarium: a collection of glosses' for a definition of Kant's 'a priori' under the title 'xii Filtered', p. 10.

²² Ibid, for a definition of Kant's 'things-in-themselves' under the title 'xv Outside', p. 12.

– but without lapsing back into any sort of metaphysical necessity, which has indeed become obsolete... It is a question of absolutizing ‘the’ mathematical just as we absolutized ‘the’ logical *by grasping in the fundamental criterion for every mathematical statement a necessary condition for the contingency of every entity.*²³

Meillassoux’s mathematical contingency negates any belief in natural laws because it is transfinite and his mathematical axiom rules out theories that invest in the existence of a finite totality. Meillassoux disproves the correlationist belief in a consistent universe by undermining the operations of probability or what he terms the ‘aleatory reasoning’.²⁴ Probability requires a finite number of possible outcomes so that a ratio can be ascertained. In mathematics probability always adds up to one and the ratio determines which outcomes are more or less likely to occur. He states that the aleatory argument is a belief because it is underpinned by a dramatic leap of faith, which assumes that the system of possibilities adds up to one (whole or totality). Limiting, simultaneously, the possibilities of the universe by equating it with the operations of thought, the aleatory argument does not allow for a radical exteriority to consciousness. Instead it actually conflates the operations of the universe with the mechanisms of thought and suggests that the universe is consistent with what appears to the mind.

Meillassoux deploys the scenario of a gambler to depict the operations of probability; in order to make a prediction a person staking must consider all possible, as well as cumulative, outcomes of the dice throw. This procedure limits the field of possibility because it relies on a finite number of outcomes. Therefore, roulette is not a game of absolute chance and this simultaneously necessitates that if a die continuously lands with the same face up then it is loaded. A theory of gambling is then erroneously applied to the universe, in which it is assumed that the universe is a loaded die

²³ Quentin Meillassoux, *After Finitude: An Essay on the Necessity of Contingency*, trans. by Ray Brassier, London: Continuum, 2009, p. 126.

²⁴ *Ibid.*, p. 103.

and there is something necessarily underpinning the consistency of the face that appears to always turn up for human subjects.

In opposition to a gambler's universe, Meillassoux suggests that there is an alternative scenario in which a transfinite universe consists of absolute mathematical chance. In the aleatory argument it is assumed that the context of the die throw and the die will remain consistent and so the possibility of the die imploding, fusing or rolling into a different dimension is not possible. It, therefore, relies on the supposition that there are fixed laws, which Meillassoux states is disproven through an absolute mathematics that is produced in part by set theory. In set theory there are alephs and alephs are the sequence of numbers, which are used to represent the size of an infinite set. These alephs are transfinite because they cannot be collected into an ultimate quantity. For example, imagine a group of libraries that have created a catalogue, which indexes all their reference books. Among these indexes there are catalogues that do and others that do not list their own title alongside the reference books they each itemise. A librarian of that local area then wants to make a master contents page of all the catalogues' titles but is not preceded by a consistent logic, so cannot decide whether to insert its name into its own master index alongside the other index books. This process of listing or sequencing could go on indefinitely, as a totality cannot decide whether to include itself in its totality. As a result there is always a void in a set: a virtual site that cannot be totalised. Meillassoux's universe is constructed out of transfinite numbers, which means that it is an infinite series of infinite sets no one of which is the master. Universes are non-totalizable, so they are not limited by a principal logic and are necessarily contingent.

In order to circumvent the tendency to align an absolute mathematics of unreason with a metaphysical entity or negative form of critique, Meillassoux grounds his theory in actual empirical reality and the scientific process of dating objects. Meillassoux states that the dating process of objects has enabled human subjects to access a realm that is itself anterior to thought. In order to undermine the correlationist's temptation to still link this anterior time back to thought, Meillassoux applies a methodology of facticity that looks into the correlation itself. Through looking into the factual nature of the correlation Meillassoux intends to prove that, 'facticity will be

revealed to be a knowledge of the absolute because we are going to put back into the thing itself what we mistakenly took to be an incapacity in thought.²⁵ He completes this move by adhering to the correlationist's own logic: correlationists' are anti-absolutists and do not believe that a subject can access a truth outside their perceptions. This entails that they must accept a contingency of the correlation, which is exemplified through death. Meillassoux asserts that death occurs whether a subject thinks it or not. If death did not exist externally to subjective thought then humans would only disappear if they remained alive to think this disappearance: continuously dying without their bodies actually deteriorating. By exposing that facticity is produced through the contingency (rejection of an absolute or truth) in the correlationist premise, Meillassoux states that facts are a necessity and that the principle of factuality, or the conditions of facts, is an absolute. Meillassoux's facticity attests to a virtual time that exists in objects, so he locates a universe that exists independently of thought. Releasing, instantaneously, the universe from its human limits and widening the scope for subjective thought, which can now access the things-in-themselves without these things existing for them. Facticity attests to the existence of unreason and unlocks a future of delimited possibilities: a contingent world in which there is no reason for the way things are or are not. By focusing on the relation between thought and universe, Meillassoux suggests that in fact there is no such relation. A relation is not required because, rather than there being a limit to subjective thought, there is an absolute positivity in things-in-themselves. Meillassoux's theory pictures an autonomous multi-verse, which concurrently opens up an infinite scope in thought because subjects can understand that they exist in absolute contingency.

Meillassoux thus avoids recreating an ultimate reason for things by placing his necessary contingency in the things-in-themselves. A ramification of locating contingency in the things-in-themselves is that it could quite easily place each entity in the shadowy realm of potential, never to be realised. This would replicate the situation he was trying to counter by suggesting that entities themselves dissolve into an ultimate condition of absolute contingency. Existing in their multiple possibilities these chimeras would never actually occur and

²⁵ Ibid, p. 53.

this lack of actualization would produce further myths, as well as a world without concrete objects. As a result, Meillassoux attests to the existence of actual non-contradictory entities but these concrete actualities are produced through facticity or unreason because they are subject to conditions that could change at any moment. This requires each entity to be singularly differentiated in-itself: as these entities exist in their own contingency or unreason, their eventual concrete existence needs to be distinguished from their internal virtual background. Meillassoux's virtual chaos does not provide a consistent backdrop, as each virtual entity carries its alternative possibilities in-itself. There is no milieu that could act as the entity's negative so in its actualisation it needs to be singular or it would never be realised.

Meillassoux's scientific claim focuses on 'dia-chronicity',²⁶ which posits anterior or ulterior models that disrupt assumed 'terrestrial-relations-to-the-world'.²⁷ Meillassoux's argument is that science located dia-chronicity, which is a lack of synthesis between human and world, even though it could quite easily have found that the universe synthesised with the subject's assumptions. Scientific discourse and the very mode of scientific discovery is that which creates a temporal discrepancy in the terrestrial-relation-to-the-world. Discovery of pre-human fossils produced statements that were anterior to the world of humans. Not only this but the actual process of science, which is to abstract data from the world, always produces a hiatus between being and thought.

... science carried within it the possibility of transforming every datum of experience into a dia-chronic object – into a component of the a world that gives itself to us as indifferent, in being what is, to whether it is given or not.²⁸

This interval between being and thought, itself suggests that thought is not synthesised with the world and so the multiverse does not

²⁶ Ibid, p. 112.

²⁷ Ibid.

²⁸ Ibid, p. 116.

exist for thought. Consciousness can, therefore, be re-contextualised as just a specific event in time and cannot be the reason for the universe. Like Einstein, Meillassoux does decide to communicate this lack of synthesis to the reader and as he refutes the possibility of causal representation his theory comes up against the issue of representing an anti-representational philosophy. To counter this paradox, Meillassoux deploys his theory of an absolute mathematics to try to prove what science uncovered without reintroducing the correlation: that the universe is not-for-us because it is an infinite chaos that exists for-itself. Unfortunately, in order for his theory to have agency Meillassoux must still linguistically communicate this absolute mathematics to thought. He does this in order to explain the infinite nature of the multiverse, which also produces an infinite expandability in thought, so that humans are aware of their ability to explore this absolute contingency as opposed to reinserting the correlation. Meillassoux argues for absolute contingency at the same time as communicating that the world is not-for-us. In this sense Meillassoux has to resort to a similar method as Einstein does for his theory of the image and cut through the correlationist circle (assumed to exist by the reader's expectations) precisely to communicate this cut to the reader. So, even though the philosophers deviate in terms of whether entities are contradictory, or not, they both invest in the ground of other arguments in order to reject them. Einstein decomposes optical naturalism and Meillassoux attempts to prove the fallibility of the correlation. They deploy this method of refutation to provide the necessity for their alternative theory, while highlighting that objects are asymmetrical to thought or systems of power. As a result both have a problem when they choose to convey their a-causal views of these objects to subjects. Both philosophers claim that they have knowledge of the absolute while denouncing any relation to it: Meillassoux's mathematical access to the real and Einstein's language of forms are meant to be absolute to avoid conjuring a meta-physical being or an unknowable backdrop. Paradoxically, in order to communicate their lack of relational investment they have to reinsert a relation.

Hallucination: Reception of the artwork

Einstein justifies his theory of a violent artwork by reinserting its relation with consciousness, after it has been released from optical

naturalism, by hypothesising the image's emancipatory potential for existing subjectivities. He, like Meillassoux, takes Kantian thought as his starting point but he inverts Kantian philosophy. Einstein starts out with a similar question to Immanuel Kant, '... whether there exists knowledge altogether independent of experience, and even all sensuous impressions?' but has a different solution.²⁹ Unlike Kant, he does not curtail the realm of science and subjective knowledge but rather seeks to extend and open up the subjective circle to allow for total access to the empirical dynamism of objects. Instead of working from the subject towards externality and thus limiting what is known, Einstein does not think that there is any difference in kind between subject and world. If quantitative difference is the only existing distinction, then subjects and objects are on the same plane rather than in parallel realms (e.g. animate versus inanimate gives way to a singular continuum). On this plane, not only are both subjects and objects endowed with agency, artworks are actually given the unique ability of existing outside the relational systems in which subjects are enmeshed. It can be claimed that Einstein replaces the transcendental Kantian subject with the ascending image, the latter endowed with the ability to rise above the systems in which subjects are trapped (capitalism) and create new encounters.³⁰

The artist produces a work that is self-sufficient, transcendent, and unentangled. To this transcendence corresponds a spatial vision that precludes every function of the beholder; it is an exhaustive, total, and unfragmented space that must be given and guaranteed... The self-containment of the work is guaranteed only if the cubic space is fully realized, such that nothing further can be added. The activity of the beholder is not even considered.³¹

²⁹ Immanuel Kant, *The Critique of Pure Reason*, Mineola and New York: Dover Publications Inc., 2003, p. 1.

³⁰ See book 'Glossarium' under the title 'xii Filtered: Anthropocentric and the Black Maria', p. 10, for an account of Kant's transcendental subject.

³¹ Einstein, 'Negro Sculpture', p. 129.

Einstein inverts Kant's anthropocentrism and swaps the latter's theory of an object that can never be fully comprehended in-itself, which only exists as a backdrop for the subject's individual interpretations, for an absolute image that does not care for the viewer. Einstein's theory of a transcendental object, which when cut from the landscape can problematise the milieu it enters is the force he hopes will intercept the norm and create a new experience: and thus he denatures, re-shapes and conflates Kantian thinking.

An inversion of the Kantian doctrine is combined with a re-thinking of Henri Bergson's theory of time. Einstein translates Bergson's durations, which facilitate an endless becoming, into discontinuities that break with the past and forge the possibility of new experiences of time and space. For Einstein, a transcendental object (or matter) pierces the subject and not the other way around.³² In this scenario the subject has to be at their most relaxed degree so that a contracted object can enter them. Einstein deploys Bergson's theory of intuition and pure duration in order to displace the viewing subject's conscious and, therefore, distancing operations so that they can be absorbed by the object.³³ A theory of pure duration is necessary if Einstein's total artworks are to have any agency, as they need to be singular in order to produce a qualitative difference in a landscape of merely quantitative difference. As a result, viewing subjects are required to lose their conscious faculties, which are obsessed with counting and mapping time in space and experience the artwork's discrete multiplicity. For each viewer must enter or be entered by the duration produced by the total artwork to experience its oppositional perceptions, which then destabilise the subject. Einstein uses both Kantian and Bergsonian concepts so that he can theorise the agency of a total artwork; a total artwork that can de-centre the subject's sense of self. Einstein's transcendental image requires a subject to intuit the artwork, rather than filter and obscure it through the conscious 'I'. This is because the conscious 'I' would spatialize time and create an image for a subject's identity:

³² See book 'Glossarium' under the title 'xxix Dilation: Relaxation/contraction and film', pp. 24– 5, for a definition of Bergsonian durations and becoming.

³³ Ibid, under the title 'xxvi Pure Present Solute: Osmosis', pp. 20– 1, for an account of Bergson's pure duration and intuition.

subscribing to the existing capitalist model rather than breaking with the current state of affairs. In order to provide the correct conditions for the viewing subject's intuition, and to curtail the tendency to consciously map thoughts onto the image, the force of cubic mass needs to be deployed in tandem with a theory of duration. Einstein's qualitative time and space exist outside the subject (who conforms to society's quantitative views) and in the image. As a result, the artwork carries the ability to transform perception rather than the subject.

A 'Kantian-Bergsonian dialectical image' is both produced and inverted by Einstein, in order to construct a transcendental object that is intuited in pure duration.³⁴ Bergson's continuum is punctured and rearranged by the Einstein-Kantian transcendental object, which is an inverted derivative from the subject's a priori. Einstein deploys their conflicting positions to produce a new and total image: a crystalline dialectic that is razor sharp and capable of puncturing existing ideologies and systems. Transforming Kant through Bergson, or vice versa, creates a novel composite and a temporal viscous image, which Einstein believes can tear and reshape the fabric of the real. Integral to Einstein's revolutionary hopes is that the sculpture produces an excess of experience: an excess that has been produced in the moment, which means that it is not pre-determined and so will not fall back into a stagnant past technology. A saturating surplus that can disperse the subject so that they no longer can identify themselves as individuals but experience their existence as only quantitatively different from their environment. In this scenario a collision between artwork and viewer produces an excessive and spontaneous experience, which through its incongruous nature (autonomy) posits an anterior position not yet recognised by any existing system. Einstein's procedure relies on a radical encounter between artwork and viewer, which produces as much as it reveals reality. Einstein's totality defends a real but a fabricated real that can be continuously decomposed and constructed, so it exists as a series of durations that are filled with actual potential.

³⁴ See book 'Confrontations' in order to encounter one of the possible visualisations of this dialectical image.

Einstein differs from his above intention when he starts to predict the effects that the artwork will produce in the viewer. He becomes concerned with the object's reception when he invokes a method that requires an artist to induce a 'hallucination'³⁵ so that they can transpose their 'vision force' into the artwork, which can then tear the fabric of the viewer's reality.³⁶ Einstein promotes an artistic methodology that involves entering a trance because in such a state the author can deploy their subconscious and dismantle their normative conscious operations. This is what produces the artworks vision force, a malignant and hallucinatory vision that can create a scission in the viewing subject and break with the belief in an individualistic self who holds dominion over the world. A hallucinatory duration is what emanates from the artwork and enables it to communicate to the viewer. This hallucinatory methodology situates Einstein's duration on either side of the artwork and is projected from the artist into the artwork and then finally transferred to the viewer: encouraging artists to produce forms that act as conduits for their disobedient vision force, which can decompose anthropomorphic reality. Einstein refers to images 'as the crossroads of [psychical] functions'; asserting that the image is produced through a psychical process, which fractures the artist's normative vision.³⁷ In the hallucinatory model, these visual crossroads are translated into the artwork, which then ruptures the viewing subject's psychological reality. A hallucinatory artist can produce an image that acts as a 'crystal of crisis' when viewed by a subject.³⁸ This is a result of the image's ability to absorb the imprints of an artist's destabilising vision

³⁵ 'The object-directed, intentionality of phenomenology is subverted in the hallucination as perception without a cause. Perception crystallizes in the hallucination as a moment of the continual production of the new reality. Hallucination as world process is an inhuman vision taking shape precariously on the verge of disorder.'

David Quigley, *Carl Einstein: A Defence of the Real*, Vienna: Pakesch & Schlegelbrügge and Verlag Kunst u Literatur, 2007, p. 167.

³⁶ Didi-Huberman, 'Picture = Rupture', p. 6.

³⁷ Ibid, p. 7.

³⁸ Ibid.

and to communicate this trace, of the artist's initial shock and 'psychical trauma', to the viewer.³⁹ It is then claimed that this trauma can create a crisis in representation, which ruptures the visual operations of capitalism. A hallucinatory artwork produces a magnetic 'form-field' that is not dissimilar to the force-fields found in physics and, therefore, total artworks render a stable axis problematic.⁴⁰ In physics a force-field is a vector-field that produces non-contact forces, which emit certain intensities that can only be approximated. Through his inclusion of opposites, positive and negative, healthy and insane etc., Einstein intends to produce an intensity that can rupture the existing social fabric. Unfortunately, these attempts to create effects in the viewer, reinsert a tautological relationship between artwork and subject that Einstein initially tried to circumvent. He simultaneously endorses and undermines his theory of an autonomous artwork by attesting to a form's ability to be violently indifferent to its viewer, while asking it to serve the redemption of its subjective counterparts.

Non-contradictory: Indifferent transmission

Einstein conjures an innate and ubiquitous communication channel between objects and subjects to facilitate human progress or revolution. Meillassoux's object lacks a stable radio frequency necessary to send signals directly to a subject: in super-contingency messages cannot be received clearly and without distortion. Meillassoux's objects do not require a communicative channel because they already self-differentiate. They do not have to be violent toward a subject because there is no consistent backdrop that exists for them to break with and there is no way of ensuring the transference of their effects or shocks. In Meillassoux's model there is no consistency to durations because there is no possibility of measuring any period or for believing that time will always exist: time is the mode of super-contingency and so it is chaotic even for itself. It can never be assumed that artworks are directly tautological and, therefore, cannot be relied upon to constantly act as conduits for meaning from artist to viewing subject.

³⁹ Ibid.

⁴⁰ Ibid.

This point becomes readily understandable if we relate this capacity-to-be-other-without-reason to the idea of a time that would be capable of bringing forth or abolishing everything. This is a time that cannot be conceived as having emerged or as being abolished except in time, which is to say itself.⁴¹

Unreason is the absolute and so time, which is the condition of this unreason, has to be consolidated with chaos. Meillassoux's theory of the absolute unreason of time has ramifications for Einstein's project: it does not secure a tautology that would facilitate the production of a viewer-turned-pauper, or necessitate a revolution after the image-event. There is no stability in the process of time itself on which an absolute belief in the emancipative quality of totality could emerge or stand. A total artwork, if it could exist, can only ever create contingent effects, as it exists in unreason and a-causal time.

Meillassoux's theory of time can be explored through Ann Kavan's novel *ice* (2006), in which the lead protagonist lives through the same episode repeatedly but in completely contrastive times and scenarios. In this surrealist endeavour, dreams and reality become indistinguishable and the contingency of reality is exposed. Kavan's constant deployment of repetitive, yet differentiated, scenarios would remain in the realm of potentiality rather than actuality, so for Meillassoux it would be a weak form of contingency. However, Kavan's notion of the threatening vacuum, which is produced by a chaotic time, is applicable to Meillassoux's super-contingency.

A terrible cold world of ice and death had replaced the living world we had always known. Outside there was only the deadly cold, the frozen vacuum of an ice age, life reduced to mineral crystals... there was no escape from the ice, the ever-diminishing remnant of time that encapsulated us.⁴²

⁴¹ Meillassoux, *After Finitude*, p. 61.

⁴² Ann Kavan, *ice*, Chester Springs and London: Peter Owen Publishers, 2006, p. 158.

Ice as a metaphor for time, depicts the way in which the nature of time itself has changed in Kavan's novel; from being in a state of flux, which can be linked to an image of liquid, to a solid state quite contrary to its previous ontology. Not only is this ice-time threatening as it could crystallize and empty out all life, it also denatures its very being or substance. Through this process time becomes frozen and no longer can any entity come into being or continue in its previous form but time itself cannot carry on in its progressive mode. Kavan's *ice* can act as a preface for Meillassoux's super-contingent teleological process, which could at any moment demolish every existing entity and in the process alter time's processional format. Einstein's crystallized totality, therefore, would not be able to positively secure the actual transformation of subjective conditions in pure duration because in this interval human subjects may not receive the message, or could be destroyed by the very time in which this subjective conversion is intended to occur.

Fission and Fusion

Each philosopher's stance is problematized by the other's position and this proposes a state of fission, or splitting. In light of Meillassoux's account, Einstein's revolutionary image relies on a theory of probability and a cohesive or stable time. A theory in which a total artwork is necessarily violent assumes that it has been chosen over a variety of other possibilities. An absolute artwork relies on a concept that all possible outcomes for the image add up to one and so it can displace the other objects that could have come into existence. In this scenario, Meillassoux's transfinite and contingent universe pulls the cloth from under Einstein's carefully laid table because it exposes that the total artwork's violence depends on a finite system. Brian Massumi also renders Einstein's belief in a violent image, as well as possible or causally probable relations, problematic. Massumi cites Bergson's description of Zeno's paradoxes of movement, in order to highlight that effects are always retrospectively read back to their cause and so may not be related to that cause at all. Massumi states that the shooting of Zeno's philosophical arrow poses a complex and contingent trajectory:

Or ... if the arrow moved it is because it was never in any point. It was in passage across them all. The transition from

bow to target is not decomposable into constituent points. A path is not composed of positions. It is nondecomposable: a dynamic unity. That continuity of movement is of another order of reality than the measurable, divisible space it can be confirmed as having crossed. It doesn't stop until it stops: when it hits the target. Then, and only then, is the arrow in position. It is only after the arrow hits its mark that its real trajectory be point-plotted (before, for all we know, the arrow could have taken a different path and missed).⁴³

Zeno's philosophical arrow exemplifies how an egocentric subject erroneously reads effects back to their causes. Subjects produce laws that are always based on the past, as it is after the movement takes place that the dimensions are registered. Cause and effect can only be registered as homogenous or consistent with each other if we assume that both time and space remain constant. If we follow Massumi's arrow theory and Meillassoux's transfinite universe, then time and space are not consistent laws, and so we can never pre-empt what will happen to the arrow. An arrow or image cannot predetermine its violence. Einstein's positive discontinuity, which disrupted the Bergsonian continuum of total becoming, actually spatializes time and its processes.⁴⁴ This renders a static time because the artist's hallucinatory concept of movement has been transposed into the spatial configuration of the artwork. Einstein's total artwork performs a conservative trajectory because its revolutionary effects have been pre-empted by the artist's chosen methodology or formula and embedded spatially in the object.

In an act of fusion, when vision force is taken out of Einstein's formula for a total artwork then his objects no longer rely on any predetermined ground or supporting grid. In this scenario the total artwork could be understood as existing in Meillassoux's contingent molecular make-up of unreason: each total artwork appears in the necessary contingency of its own virtual time. Einstein's becoming is

⁴³ Brian Massumi, *Parables of the Virtual: Movement, Affect, Sensation*, London: Duke University Press, 2002, p. 6.

⁴⁴ See book 'Glossarium' for a more in-depth description of his continuum under the heading 'xxviii Control', pp. 22–4.

no longer conservative because it does not pre-empt the artwork's effects but it is still able to be discontinuous, as discrete forms are produced. J G Ballard explores a similar concern with the spatio-temporal conditions of singularities in his fictional novel *The Atrocity Exhibition* (2014). Ballard states that a preoccupation with time and space actually produces pornographic forms: framing pornography as an obsession with the isolation of an image and the transformation of the conditions that construct an image's reality. Ballard states the following when referring to the lead protagonist's obsession with carving out singularities from a contingent, yet interconnected, milieu:

However, you must understand that for Traven science is the ultimate pornography, analytic activity whose main aim is to isolate objects or events from their contexts in time and space. This obsession with the specific activity of the quantified functions is what science shares with pornography.⁴⁵

Einstein, similarly to Ballard's protagonist Traven, does not believe that there is a qualitative difference between subjects and objects but only a quantitative one: in Bergson's terms this could be described as only being a 'difference in degree' but 'not in kind'.⁴⁶ Both Traven and Einstein believe that the qualitative separation between human consciousness and cosmos is erroneous, as things can only be quantitatively distinguished. This is why a qualitative continuum between object and subject is required to undermine capitalism's tendency to quantify its environment. Meillassoux also theorises that subjective thought is no different from other contingent entities in the universe, as thought is just another event in a chaotic universe that exists before and will exist after consciousness ceases. Counter-intuitively, Meillassoux states that it is also thought which enables humans to access this ambivalent universe. He posits this to counter the assumption that the world outside provides a limit for thought (ignorance) and the things-in-themselves constitute what we cannot

⁴⁵ J. G. Ballard, *The Atrocity Exhibition*, London: Fourth Estate, 2014, p. 49.

⁴⁶ See book 'Glossarium' for a definition of the Bergsonian terms difference in degree/kind under the heading 'xlviii Change in State', pp. 39–41.

sense. There is no limit to knowledge because there is no totalising context: all entities are already released from reason and humans are capable of knowing that this is the case.

We can now claim to have passed through the correlationist circle – or at least to have broken through the wall erected by the latter, which separated thought from the great outdoors, the eternal in-itself, whose being is indifferent to whether or not it is thought.⁴⁷

This bursting through the subject-centric circle to the outside is an act of violence not unlike the image of Neo breaking through the artificial placenta that encases him in 'The Matrix': he pierces through to an outside that exists beyond the virtual world that is produced in the subject's internal perceptions.⁴⁸ Still plugged into the matrix, Neo is convinced by Morpheus (who lives in the real outside the matrix) that what he perceives is not coextensive with reality but rather a programme, which human subjects have simultaneously bought into and by which they are subjugated. Meillassoux is not unlike Morpheus when he states that humans have bought into a programme of reason and believe that there is an underlying metaphysical reality that explains our existence. Meillassoux also attests to the fact that this belief produces a myth, which limits humans' scientific and philosophical knowledge: a belief in a fictional, yet cohesive, subterranean vitality behind all things that limits human knowledge by producing an ultimate reason that we cannot locate. Instead, Meillassoux states that there is an absolute unreason, which we can absolutely know: a theory opened by scientific discourse and closed down by philosophy but that can be proven through mathematics. We can, therefore, know the thing-in-itself and step outside into the real.

Einstein's Kantian-Bergsonian dialectic is also a piercing through to the outside, in which subjects are shocked into experiencing a new reality. Einstein applies this methodology by abstracting certain works from one culture (African sculptures in 'Negerplastik') and re-

⁴⁷ Meillassoux, *After Finitude*, p. 63.

⁴⁸ *The Matrix*, The Wachowski Brothers (Burbank: Warner Bros, 1999)

positioning them in another. He also abstracts works or even heralds abstract artworks (Cubism) because they alter the anthropomorphic context. Einstein applies the following formula to image production: if an object represents, it speaks for something else, whereas if it is abstract then it exists for-itself. Meillassoux's deployment of science and the dating of objects also requires that we isolate objects in an attempt to highlight the fallibility of current knowledge systems. As a result Meillassoux and Einstein are both pornographic in their obsession with cutting, magnifying and piercing through objects and subjects. They do so in order to signal the possibility of alternative events that could break with our existing belief in stable laws and ultimate reasons.

Black Hole

While it is possible to conceive of a subject's ability to think a time that is anterior to human knowledge while acknowledging that this time is not-for-us, there is still an issue with Meillassoux's theory of 'ancestrality', which the term itself highlights. Ancestrality actually connotes a conservative time that is linear or inherited and refers to a genealogical or archaeological process.⁴⁹ It invokes a processual image of a singular trajectory or time, which belies the claim that it consists of super-contingency. Meillassoux does state that he does not identify science as a privileged or 'true' discourse because science's very process constantly destroys its own theories and replaces them with paradigms that could not have been premeditated.⁵⁰ But, as a result, Meillassoux's ancestral claim that grounds his theory of super-contingency requires a chronological time to undermine the anti-absolutist correlationist argument.

For the correlationist, ancestrality cannot be a reality prior to the subjects, but a reality said and thought *by* the subject as prior to the subject. It is a past for humanity which has no more effectiveness than that of a past humanity that is strictly correlated to actual humans. But this assertion is, of course, a catastrophe, because it destroys the sense of

⁴⁹ Meillassoux, *After Finitude*, Chap. 1, pp. 6– 47.

⁵⁰ Meillassoux, *Time without Becoming*, p. 14.

scientific statements, which, I insist, just mean what they mean. An ancestral and scientific statement doesn't say that something existed before subjectivity *for* subjectivity, but that something existed before subjectivity, and nothing more than this: the ancestral statement has a realistic meaning, or it has no meaning at all.⁵¹

Meillassoux's focus on denouncing the correlationist belief that the world exists 'for subjectivity' obfuscates his assumption that there is a 'before' in the process of a monastic time. In Meillassoux's scenario time has not, up until now at least, broken from a linear format because the 'arche-fossil' still existed before (although not for) humans.⁵² Although Meillassoux's time can be equally stable and unstable, a chronological time still presents a problem for his claims in *Science Fiction and Extro-Science Fiction* (2015). In the aforementioned book, Meillassoux sets out a possible terrain for Extro-Science Fiction (ESF) by presenting us with three existing Science Fiction books that are models for ESF but need to be destabilised further. One such example, provided by Meillassoux, is Douglas Adams' *The Hitchhiker's Guide to the Galaxy* (2009), which is seen as a possible ESF model because it is a form of 'nonsense'.⁵³ Adams' framework of unreason coincides with Meillassoux's call for super-contingency but the novel does not break enough with conventional laws because it is based on probability, through the improbability machine. Ironically, it is Adams' theory of time in the novel, which highlights that Meillassoux's theory of

⁵¹ Ibid, p. 15.

⁵² 'I will call 'arche-fossil' or 'fossil matter' not just materials indicating the traces of a past life, according to the familiar sense of the term 'fossil', but materials indicating the existence of an ancestral reality or event; one that is anterior to terrestrial life. An *arche-fossil* thus designates the material support on the basis of which the experiments that yield estimates of ancestral phenomena proceed – for example, an isotope whose rate of radioactive decay we know, or the luminous emission of a star that informs us to the date of its formation.'

Meillassoux, *After Finitude*, p. 10.

⁵³ ____ *Science Fiction and Extro-Science Fiction*, Minneapolis: Univocal Publishing, 2015, p. 47.

super-contingency is not as unstable as it first appears. It is suggested in *The Hitchhiker's Guide to the Galaxy* that time might not emanate from a singular origin but could be constantly created through various vectors. An infinite plurality of vectors would deform any consistent or chronological basis for time.

The nothingth of a second for which the hole existed reverberated backwards and forwards through time in a most improbable fashion. Somewhere in the deeply remote past it seriously traumatized a small random group of atoms drifting through the empty sterility of space and made them cling together in the most extraordinary unlikely patterns. These patterns quickly learnt to copy themselves (this was part of what was so extraordinary about the patterns) and went on to cause massive trouble on every planet they drifted on to. That was how life began in the Universe.⁵⁴

A universe or multi-verse in which present disturbances could cause life to begin now is impossible in the trajectory of Meillassoux's time. In Meillassoux's theory of time the arche fossil existed before human thought. Despite basing his theory on scientific procedures and privileging their statements so that we can have the knowledge of an empirical realm external to humans, Meillassoux ignores the developments in Quantum Mechanics. It is only Meillassoux's virtual time, which exists differently in each entity before it comes into being, that is necessarily contingent. His actual time, which produces physical objects like the arche-fossil, does not attest to the possibility that the time interior to entities, as opposed to the virtual time that precedes their becoming actualities, may not be coextensive with a subject's experience of them. Under certain conditions, such as acceleration, an object's time can actually slow down when any exterior observation would attest otherwise. If an object in space speeds up, a human observer would say that it has accelerated but its internal time could have slowed down, so it is not moving at the same rate as its perceived motion. This is particularly problematic because Meillassoux's contingent virtual time exists in the thing-in-itself and yet his concept ignores the internal or atomic

⁵⁴ Douglas Adams, *The Hitchhiker's Guide to the Galaxy*, London: Pan Books, 2009, p. 68.

reality of actual entities, an internal reality that could actually contradict their external effects (e.g. a fossil's internal reality might not be as old or could be older than it appears). Meillassoux seems to have either placed a subjective view of time in the things-in-themselves or presented a virtual super-contingent time as external to their physical processes.

Meillassoux's conception of time is also interrogated in Elie Ayache's economical critique of the former's mathematical theory in *the blank swan* (2010), which suggests that Meillassoux's whole argument is based on the fact that the event will never happen. Ayache states that Meillassoux's contingency can only ever happen in the future, so the event (absolutely distinct from what has come before), which could change all laws, is inevitably always deferred. In fact, Ayache's supposition actually undermines any humanist criticism that would define Meillassoux's speculations as that of a casino man. An argument that would describe necessary contingency as a malignant theory because it does not care for the human subject, running similarly to as follows: *super-contingency is as unstable as the market and we should be trying to control the latter (as opposed to it us)*. In contradistinction, Ayache states that necessary contingency can never be that unstable or radical because it cannot actualise its presence. Super-contingency does not provide the pressurised environment required for forceful collisions: you cannot cast the die with confidence that there is a totalizable possibility of worlds because in super-contingency anything may happen to the die in the process, even a change in its own structure. This is exemplified in Meillassoux's account of David Hume's and Isaac Asimov's billiard balls, which suggest that we cannot be sure of the causal necessity of the laws of collision.⁵⁵ In both their scenarios current laws cannot ensure that when a billiard ball is struck it will follow its presumed trajectory. Asimov's billiard ball, for example, turns into a photon, travels at the speed of light and pierces a subject's heart.⁵⁶ Through recounting the billiard balls, Meillassoux undermines the belief that our current subjective systems can prove that physical laws will continue to exist. As a result he undermines the following schemas

⁵⁵ Meillassoux, *Science Fiction*, pp. 8– 17.

⁵⁶ *Ibid*, pp. 85– 6.

that are often used to construct the subjective belief in the perseverance of laws: 1) the consensus of the scientific community; and/or 2) the frequency of their occurrence; and/or 3) the belief that the human environment correlates with an a priori knowledge because it is only able to perceive as a result of the consistency of laws.

Ayache suggests that if super-contingency cannot be totalized then neither human nor virtual agency can exist: if anything can happen then nothing happens. Rather than being so absolutely chaotic that anything could happen, Meillassoux's system is painted as stagnant and conservative:

His [Meillassoux's] speculation has to take place and maintain itself in the waiting period that precedes the event, and it keeps intact its content and intensity as long as the event doesn't take place.⁵⁷

Meillassoux's speculation, on the existence of necessary contingency, as opposed to a consistent underlying law, has to remain in the space where the laws never change or else his theoretical statement would no longer apply to those laws: it would be self-evident and redundant or impossible to translate into any new universe that could be created through contingency. In Ayache's theory, Meillassoux's necessary contingency cannot produce difference because it refuses a field of possibility.

Ayache also proposes a positive aspect to Meillassoux's time and states that the latter has actually flattened time out and removed any belief in the existence of an origin to the universe(s). An important exercise, for Ayache believes that if an elusive ultimate being was ever located it would actually close down time and make anything in the middle unimportant. Ayache then goes on to suggest that this does not support a theory of necessary contingency but actually replaces it with the necessity of speculation:

⁵⁷ Elie Ayache, *the blank swan*, Chichester: John Wiley & Sons Ltd., 2010, p. 149.

Concomitantly, I believe he [Meillassoux] has redefined the word 'speculation', as I wonder whether to insist on speculation while insisting that speculation shall not aim at being a metaphysical being does not come down, in the end, to maintaining speculation itself *as the only necessity*.⁵⁸

In contrast to a closed time, necessary speculation configures a world that is merely a surface or plane, on which no philosophical debts appear but also where no one can ever cash in on an event occurring. For, as Ayache suggests, a world of necessary speculation flattens time and so destroys any depths that would constitute the past, as well as any concrete activities that could create a future. Ayache states that Meillassoux creates a system in which he is not culpable because he does not stake a claim: he speculates and thus evades responsibility for any future. A serious ramification of this necessary speculative system is that we find ourselves in a virtual hiatus, in which we exist as potentialities that can never be realised.

In order to distinguish from the shadowy realm of necessary speculation, Ayache goes on to state that Meillassoux's super-contingency actually does require a real future. Necessary contingency can only happen in the serious future where there is no reciprocity or relativity between states of the world: a future that creates a schism with the past. As a result, Meillassoux's future can only be communicated retrospectively, so super-contingency actually creates an absolute cut in the timeline of events. A surgical incision is performed that removes the present from the normative passage of time. It appears that Meillassoux's super-contingency requires a chronological notion of time, which not only foregrounds a past that happened 'before' human thought but constructs a future that is always 'ahead' or 'in front' but never unstable in the present things-in-themselves.

Meillassoux's super-contingency is not only problematic because it relies on a chaotic time in which nothing happens, it also requires a chronological time that can be measured by carbon dating. The

⁵⁸ Ibid, p. 150.

arche-fossil still relates back to the period we are in now because its date is reliant on the world's current date for it to make any sense, which means that the passage of time has to be stable. He thus equates the conscious experience of time with that of the internal time that inheres in objects. This results in a super-contingency that is constructed out of a chaotic virtual time and a conservative actual time. Meillassoux's theory of a super-contingent time does not require the correlationist's appearance-relation because he enables subjects to understand that the period previous to humans did not exist merely to give birth to thought. To achieve this Meillassoux places a human perception of a consistent, processional and trackable time in the thing-in-itself and thus produces a passive time, which originates from the human expectation of it. Even if super-contingency is an instantaneous system and does not claim to be an entity that precedes becoming, Meillassoux still claims that it is the condition of becoming. This spontaneous system, which works in the bounds of what humans expect and can perceive, can never be anything other than subjective.

This is also apparent in the very structure of Meillassoux's theory of facticity, which states that it is the human subject's speculative capability that enables us to access or act as our own pivot in the empirical realm. This process is designed to negate metaphysics so that we do not produce an ultimate being and therefore, as Ayache states, the correlationist circle is re-circled. Heralding an infinite production of circles because, 'The real meaning, or real implication, of the correlational circle is that to think its facticity is ipso facto to think it in all successive rounds: to think it absolutely.'⁵⁹ Meillassoux begins with correlationist theory, in order to re-think Kantian suppositions and repositions them toward an outside so that the subject can gain access to them when utilising scientific and mathematical tools. In order to not hit on a metaphysical being these valves towards the outside must always curve themselves back into thought so as not to be co-existent with externality, which would – as Meillassoux himself has pointed out – produce a contradictory being that would undermine the necessity of contingency. In order to remain non-contradictory the human subject needs to maintain an

⁵⁹ Ibid, p. 143.

amniotic sack around its capacity for thought, to account for the fact that we have not dissolved into the outside.

Meillassoux suggests that the operator of these valves, which can allow us to access the thing-in-itself, is absolute mathematics. He proposes that it is through mathematics that we can speculate and remain separate from the thing-in-itself but can also access its reality. Meillassoux makes this mathematical intention explicit through the following question, which he poses towards his future research:

... would it be possible to derive, to draw from the principle of factuality, the ability of the natural sciences to know, by way of mathematical discourse, reality in itself, by which I mean our world, the factual world as it is actually produced by Hyper-chaos, and which exists independently of our subjectivity?⁶⁰

By presupposing that mathematics is absolute rather than responsive or creative, Meillassoux is theorising a circumstance in which mathematics exists in objects and we are merely to locate this real or true form of language to understand the thing-in-itself. This procedure is not unlike the localising of geometrical patterns in nature, which assumes that there is an underlying law governing all formations and ignores the human subject's tendency to produce as much as reveal the connections between these natural designs. Creating a schema that suggests that all things are already preordained and just waiting to be accessed. This assertion is partly due to the conditions set by super-contingency, in which Meillassoux's event can only ever take place in the future. A set of parameters, which positions human knowledge as a retroactive procedure and one that encounters any actual entities of study as fossils from the past. Furthermore, Meillassoux's valve naturalises mathematical language and renders it different from other forms of subjective language. It suggests that mathematics is a pure eternal and infinite realm without acknowledging that it, like the scientist with his experiment, produces the conditions, structure and apparatus for its numerical praxis. Contingency becomes Meillassoux's

⁶⁰ Meillassoux, *Time without Becoming*, p. 29.

metaphysics, as it is this higher or lower order with which he can explain a coherent universe. This simultaneously situates the universe in a chronological time, with all of the things-in-themselves firmly in the past and framing all intellectual activities as archaeological endeavours.

In contrast to Meillassoux's conservative time, Einstein claims that we can locate a revolutionary time by inducing a hallucination but this different teleological hypothesis actually produces similar results. Einstein assumes that there is an underlying consciousness that when tapped into by a hallucinatory subject can create and change the reality of all things (subjects and objects) in the universe. Einstein's chaotic milieu is conscious because it can communicate with the subject, who then absorbs and translates this information into forms. This conjures a subterranean meta-psychology that runs through all things, animating from behind the scenes. No longer obviously egocentric, human psychical functions are displaced from the centre of the solar system and projected into the atomic make-up of the universe. In this scenario, subjective consciousness is not that dissimilar to the light radiation in the Big Bang theory, which constantly travels and stretches through the universe: radiation that gives the universe an image of teleological consistency and stability. Einstein believes that hallucinations are capable of locating a destructive force, which if found has the potential to revolt against the very structure of the universe. In both cases the universe is equated with vision and Einstein's meta-psychology eclipses empirical reality. Einstein's hallucinatory artist forecloses any difference between subject and world because vision is that world, resulting in an outcome that is interchangeable with Meillassoux's premise of a time that coheres with the subjective experience of duration.

This has ramifications for Einstein's total artwork because autonomous images can only be created through vision force. By placing human subjects at the inauguration of the image, vision force actually undermines the autonomy of the image because it is already in the service of subjective communication. Even though he states that the ideal vision force is a hallucinatory one, and therefore distinct from our limiting conscious mappings, it still embeds a tautological theory that Einstein himself rejects. Einstein initially sets

out to undermine the conscious faculties of human beings because he sees them as being saturated in capitalistic conditioning but his theory of vision force actually invests in the belief that humans are not only the problem but also the remedy. Einstein's project is driven by the need to create circumstances in which an image can break with capitalistic conventions. Capitalism is seen as weaving a grammatical web around images to keep them in their place. In contrast to both Einstein's and Meillassoux's hypotheses, it should not be assumed that simply projecting these structures into the objects themselves will actually break these bonds. For example, putting the word 'Animal' into italics or bold in place of a prefix or suffix, which would normally emphasise the terms importance but is also assumed to be what makes language static, does not get rid of the prefix and suffix but actually inserts these devices into the term. A repercussion for such arguments is that the image is again situated as a conduit for human redemption, rather than having the autonomy that was initially proposed. Both Einstein and Meillassoux succeed in repositioning human consciousness but mistakenly place it in the whole of materiality, through their theories of absolute access. Meillassoux assumes that an object's age is the same as what humans perceive it to be and Einstein asserts that an artist's hallucination (unconscious) is the way that an artwork can gain its force.

Is it necessary to follow Baudrillard's suit when he tells us to *Forget Foucault* (2007) and ask the reader to forget Einstein and Meillassoux? While acknowledging that the negative imperative to 'forget' automatically configures itself dialectically with an assumed causality in any future form. Baudrillard successfully identifies the metaphysical assumption behind Foucault's theory of power and then asks the reader to rescind the knowledge he has imparted, which is not only paradoxical but simultaneously exposes a lack: there is nothing to take the place of Foucault's meta-physical power just the negative request. If fulfilled, this negative request would then combine itself with any future form (if realized) that replaces it without displacing the former's existence: the predecessor's power remains as a hangover in any future body of work that tries to forget it. This is the trap that Meillassoux sets in his theory of factility, which summons correlationism in order to break with it, and Einstein also triggers when he deploys anthropocentrism in the decomposition of

forms. In contrast, this book will resituate Einstein's and Meillassoux's theories, so the positive elements that have surfaced can be reconfigured. As opposed to presenting a negative theory, this text will end with a development of the authors' theories: resituating their thinking to actually produce an approach that aligns itself more closely with both of their initial intentions.

Liquid Crystal

It is necessary to be aware of the limitations in both Einstein's and Meillassoux's theories even while pursuing their initial aims. This summary revisits the theorists' main claims: colliding their theories into each other so that a positive and liquid crystal cluster is produced but avoids the temptation to create a dialectical theory. Einstein assumes that the world is constructed out of a stable background, which consists of economic, social and physical laws. This is why he eventually advocates a violent decomposition, which should act as a positive disruption of this assumed static foundation. In contrast, Meillassoux theorises a background of absolute contingency, in which there are no fixed laws, so entities have to be discrete in order to distinguish their forms from chaos. This leads to the question: *does an object not-for-us actually have to be a non-contradictory being?* Meillassoux's absolute contingency negates the existence of contradictory entities because these beings would usurp and envelope a totality of possibilities within themselves, displacing contingency and replacing it with a total and consistent governing law or being.

But it then becomes apparent that one of the defining characteristics of such an entity would be to continue to be even were it not to be. Consequently, if this entity existed, it would be impossible for it simply to cease to exist – unperturbed, it would incorporate the fact of not existing into its being.⁶¹

If we pursue Meillassoux's super-contingent backdrop then it appears to entail that either:

a) *Einstein's total object cannot exist, or b) a total object exists but as*

⁶¹ Meillassoux, *After Finitude*, p. 69.

a non-contradictory totality, or c) Meillassoux's necessary contingency does not exist. However, there is a fourth option, if Meillassoux's super-contingency is not just theorised as a chronological process but also a spatial or physical one, which could actually transform the trajectory or spatial quality of time itself. If, like in quantum mechanics, all entities operate differently and may not even be aware of their own total operations then physical entities can be contradictory. This posits the fourth scenario: *d) Meillassoux's super-contingency exists as a time in the spatial reality of actual physical entities.* These entities may be in more places than just one, travelling at different speeds to any exterior observation or could be creating ripples that traverse time and space in all directions.

This points to a theory of a more radically contingent time, which could actually render all human historical procedures problematic. Leading to the following hypothesis: *time inheres in each entity in a different way, so there is not a holistic plane through which these different entities can directly communicate. It is through writing or staging these entities, which exist in contingency that objects can confront and/or act on each other.* Contingency exists in all things but it does so differently, at this present spatial-temporal moment, because conscious subjects can create the conditions in which they interact with objects, while inanimate objects confront and can act on each other but without purposively forging the encounter. There is nothing, however, which can determine whether this will be, or has always been, the case. It will be proposed that in its current state, the inanimate object's capability to be simultaneously unintentional and confrontational is what provides the artwork with agency. Objects are distinct from the subjective realm, and are not merely an extension of thought, so the confrontations they produce will not necessarily produce the causal affects that we assume.

Einstein's theory of a total contradictory artwork is deployed but is stripped of its dialectical notion, as there is no stable backdrop for it to include and decompose in its form. It is proposed that the realms of all entities are qualitatively and quantitatively different, which also suggests that the relationship between every entity is more complex. An absolutely asymmetrical relationship is theorised in which there can be no clear trajectory for the transference of meaning from artist to artwork and then object to viewer. A theory that entities exist in

asymmetrical realities and differ in relation to their appearance, attests to a contingent a-causality in artworks. Dynamics in this asymmetrical friction can also be intensified when an object's contingency exists in tension with other objects and/or subjects a-causality. This replaces the need for a total artwork to be constructed into a violent decomposition or resistant formation, with a theory that this resistance is the very nature of the object. An object can be manufactured by a subject but its signal will always be contingent because there is nothing to secure its communication, as a result artists do not have to create contradictory forms in order for their labours to have agency. An artwork's ontology refuses to conform to Einstein's dialectical process because there is no stable passage of time to secure the transmission of meaning. Artworks appear in Meillassoux's theory of a super-contingent time but one that is not necessarily chronological.

Asymmetrical causality does not abolish subjective agency but reconfigures its parameters. In creating and staging objects, artists and curators are active in the choices that they make. These decisions are prefigured by the system that co-constructs the practitioners' identities and knowledge. Artists and curators cannot transcend their environment to either highlight its problems or create its solutions, as a subject is networked and plugged into the current state of affairs. Any attempt at a directly redemptive programme or revolutionary practice would project the conditions of the past into the future. For such artistic practices assume that there is a teleological process, which takes place in meaning-production. A tautological relationship is created between the cause (artwork/past) and the effect (encounter/present), which prescribes the subject's (viewer's) future action. The past is embodied in this process and it is the past's idealised future that is prescribed, which sabotages any possibility of an alternative future. Actual objects do not correlate with the language projected onto them so it is the artist who is producing the contradictory syntax not the material itself. This results in a twofold impoverishing practice because it not only uses the artwork as a conduit to carry a predetermined meaning but also, and through this very process, only communicates past ideologies to a viewer.

Resituating subjective agency in the primary modes of production and creating or staging of object(s) (artworks, exhibition or literature etc.), as opposed to being preoccupied with administering and framing the secondary effects of these objects, resists the temptation to provide a meta-text for the artwork, exhibition or text. This process invests in a theory that objects are recalcitrant in themselves, as opposed to a belief that artworks should facilitate the transmission of meaning from artist to viewer. The term recalcitrant is deployed in distinction to the definition 'block', which is used by Quigley to describe Einstein's artworks as producing 'blocks of experience'.⁶² This is due to the fact that Quigley's blocks are already prescribed with the requirement to create a meaningful encounter. Recalcitrant artworks do not try to communicate blocks of the artist's and/or curator's experience, nor do they attempt to block experience, which would be in the service of doing or communicating this block. On the contrary, the artwork or exhibition is recalcitrant in-itself.

A recalcitrant artwork exists in Meillassoux's super-contingency and so new things and laws can come into being. Contrary to Meillassoux's theory, in order to affirm a multiverse in-itself we have to concede that human knowledge cannot be equated with the whole of its environment. This does not entail that human thought is finite, which would produce a mythical outside, as knowledge of the multiverse can continue to increase. The only prerequisite is that the thought procedures deployed in knowledge production are not naturalised by being equated with the actual multiverse. Put another way, time and space should not be theorised as completely synthesising with thought. As a result, this does risk reinserting a gap between subjects and objects that would then require bridging through the correlation. Asserting that there is fundamental difference between every entity could be accused of relying upon a Kantian subjectivity, in order to account for the agency of artworks. A

⁶² 'African art reveals the potential force all forms could have if appreciated as blocks of experience. In this way, the tectonic, monumental and abstract forms of African sculpture show how, for example, cubism might be seen, not as historical conclusion of representative painting, but rather as the immanent intensification of form.'

Quigley, *Carl Einstein*, pp. 77–8.

subjectivity that has limited access to the real would then be reinstated. Partly responsible for this accusation is the need to account for an artwork's autonomy, which entails that we have to acknowledge that its internal reality does not correspond with human thought. Salvaging Einstein's total artwork from vision force severs the object from any belief in a subjective continuum. So we return to the question: *Can artworks have agency in themselves without building a relationship with a subjective context?*

An entity appears in-itself, as opposed to for-us but it does still appear. Creating a scenario in which the multiverse of potentiality exists in the things-in-themselves, in the form of a liquid state, and only solidifies when things appear as distinct entities. The resultant crystallised forms are asymmetrical to thought and, indeed, could change at any moment. As a result, this text does not require its readers to take the position of a solipsistic Kantian subject who only ever perceives and projects their internalised reality. You do not have to accept that these entities, which lie outside subjects, are mystical, unknowable and untouchable. The multiverse is neither a sublime realm of mystical beings, nor a conscious continuum, but consists of entities whose realities we are learning more about but that are not necessarily coextensive with our own. We will never have a total image of the object, world, or our relationship to the world, as even though the information we collect is becoming ever more accurate (within our current laws) it remains fragmentary or abstract. The ramification being that any collaged whole image, which is produced cannot exhaust the object whose holistic reality it knows nothing about (it may not even be a singular entity). It is the very fact that the objects and the world do not directly translate into our subjective worlds that makes these entities and, as a result, artworks effective rather than stagnant, or subsumed into our existing state of affairs.

