Contemporary arts practices over the past decade have arguably exhibited a turn towards ‘the geologic.’ Admittedly but one of a plurality of co-existing ‘turns’ that contemporary art has been ascribed recently, this particular strand can be firmly located in a wider cultural event, namely the epoch of the Anthropocene. Arising in the geosciences and stimulating the humanities and beyond, the discourse of the Anthropocene implicates the human with a planetary agency, energising space-time entanglements that confound normal human
intuition. As a species, we have become a geological agent, moving “more sediment and rock annually than all natural processes such as erosion and rivers” (Gaffney & Pharande-Deschènes 2012). The irrefutable anthropogenic circumstances of climate change and resource depletion impact the lived present – and our increasingly precarious future – with responsibility lying in a complexity of activities that include corporate industrialisation, colonialism and capitalism, rather than individual human endeavour (Haraway 2015). Beyond the agenda of ecology and climate change that the arts has actively engaged with to varying degrees for over half a century, the impetus of the ‘geological’ lies with artists thinking about space and time from a geological and planetary – or more pointedly, a non-anthropocentric, point of view – and “turn towards the geologic as source of explanation, motivation, and inspiration for cultural and aesthetic responses to conditions of the present moment” (Ellsworth & Kruse 2013:6).

While the majority of disciplines humanities have engaged with the discourse of the Anthropocene to some degree, a notable under theorised exception is the category of the monument, traditionally cast within the scope of memory studies. The distinct temporal conditions proposed under the Anthropocene would appear to contribute, superficially at least, to the temporal features made available under the category of the monument. However, where the monument makes a distinct relation with the past, the Anthropocene is predicated on a precarious future. Nonetheless, the ideological features of the monument resonate with the notion of the post-human implicated by the Anthropocene, synthesising a potential ethical position in the ontological status of the monument. It is through this confluence this research paper will propose a materialist treatise for the category of the monument to uncover its potential in the era of the Anthropocene.

The historical and contemporary status of the monument is complex and contested. The term monument is eternally interchangeable with memorial, its purpose to enact a memorialisation, “a function to recall, to animate the past, whether an event, person or other significant occurrence, in order to visualise the future” (Ashton 2016 p.47). From prehistory, monumental sites include natural and manmade landscape features, stone arrangements and other archaeological architectures. The function and use of these monuments is not as fixed as their materiality might imply and changed over time in response to social developments.
Indeed, the varying configurations that developed over time indicate how domestic activities, hierarchical structures and the treatment of the dead shifted. But ostensibly these sites were for the transmission of rituals and other recurrent activities that included “prescribed postures, gestures and movements [...] characterised by a restricted vocabulary” (Bradley 1998 p.89), from one generation to the next for their careful preservation. The significance of maintaining such knowledge, whatever its character, designates a socio-political purpose to the prehistoric monument, through the conservation of social order. In more recent history, monuments assert a more deliberate political function, aiming to “commemorate important personages or patriotic events and memories” (Michalski 1998 p.8). Such acts of memorialisation are imbued with an ideological status, through what is remembered, how it is remembered and how that remembering acts upon the present and the future-to-come. A monument enacts a narrative of history through the (re)telling of a past, deploying fact and/or fiction, to make visible a state’s ideology and story of nationhood; the cementing of a mythology for the future citizen “to guarantee origin and stability as well as depth of time and space” (Huyssen 1996).

But how can monuments be considered materially? By this I do not mean how they might be fabricated or what materials they are constructed from. Rather, what is our material relation to the monument. To attend to this relation, I will turn to the technicity of French philosopher Bernard Stiegler. Tekhne or technics concerns the instrumentality that can be located in everyday technology, a means of getting things done, of manipulating and reaching out into the world. From Aristotle through to Heidegger, philosophy has developed the concept of technics within an ontological framework that can be poorly considered as technological determinism, the paradigm in which our being in the world is determined by the means through which we engage with the world. A social constructivist suspicion of technological determinism has opposed technicity to culture, explaining technology through culture and society. But Stiegler confounds this opposition, asserting technics as the condition of culture: “Human culture is the product of technics as the prosthetic relation between the human and its ‘exteriorisation’ in matter” (Ben Roberts). Technics does not assent it is the tool that makes the human, but rather the human is not simply a biological being. Moreover, it is upon exteriorisation that one’s interior being is brought about, an unfolding in simultaneity through which the human becomes present in the world.
It is also via technicity that Stiegler proposes a specific type of technics that is made for keeping memory; tertiary memory or “mnemotechnics”. Primary memory is the capacity to distinguish one moment to the next, while secondary memory is a traditional understanding of memory through the recollection of a specific past event. For Stiegler, tertiary retention is the capacity for an external object, such as a photograph or audio recording, to reactivate memory. Specifically, tertiary memory is a material relation with an artefact where the reactivation of a previously occurring event is constitutive of primary memory through one’s apprehension of the passing present. In the remembering of that previous event, one is aware of the distinction of the memory from the present moment, and so delivers an ontological significance through exteriorisation upon the artefact.

Under this paradigm, the monument is a technical object of tertiary retention, a means of (culturally) reaching out, exteriorising and imprinting a specific condition in matter. This modus is epitomised by Neolithic stone architectures that form solar, lunar and stellar observatories and calendars, recording the cyclical movement of astronomical bodies so that they may in turn be predicted and foretold. As the human species transitioned from a hunter-gatherer to agrarian culture, the timing and cycle of seasons were tracked through the movement of bodies in the sky, crucial to the successful implementation of agriculture; when to sow seeds and to harvest; when winter was turning and summer was waning. The very condition of civilisation’s development is a relation at the planetary and indeed stellar scale, and signifies a material relation with temporality, deploying landscape and monumental objects sited within it as technical prosthesis. These monumental apparatuses advance the capacity to not only record the past in the anticipation of the future but motivate the human with an ontological status at the planetary scale; becoming-stellar.
Monuments of the Anthropocene are already with us. They can be observed directly in the physical relation we have with the planet, through the violent industrial processes that inscribe and are inscribed by our species upon the earth’s geology. These activities and the detritus that accompanies them are already projected into the future and even our attempts to guard against catastrophe will mark the planet for millennia. Located within these many futural materialisms are the nuclear waste storage facilities documented via the Perpetual Architecture archival project by the Centre for Land Use Interpretation. These landscape forms might be framed by the category of the ruin or the unintentional monument as posed by Alois Reigl’s 1903 essay “The Modern Cult of Monuments,” but their deliberation to stand against time delivers a very specific intentionality. Constructed to avoid ruin and degradation, a guarantee of stability and security is required in addition to a clear message communicated to the future.

The future orientation of these proposed monuments is exemplified by the Waste Isolation Pilot Plant (or WIPP for short), a purpose built underground facility in New Mexico. The first and only permanent deep geological waste dump, this facility is designed to house radioactive matter securely, forever. However, with material stored here remaining at lethal levels in
excess of 200,000 years, it is only the first 10,000 years that is of direct concern to the architects of the project. It is in this timeframe, modest in geological terms, where the builders must account for the possibility of human intrusion into this lethal environment.

During the development of the WIPP program a series of studies were undertaken by anthropologists, archaeologists, engineers and linguists to explore how such a marker might be manifested to prevent future generations from digging, inhabiting or planting this poisoned landscape. These proposals, investigated recently through the 2015 film Containment by Peter Galison and Robb Moss, show a variety of possible responses, but most relatable being extensive land structures that are meant to incite fear and dread. Generally agreed is that any form of linguistic solution faces the risk of becoming illegible or untranslatable, its meaning lost in the 10,000 years when someone or something may encounter the marker. The WIPP program probably represents the most applicable and functional use of a possible nuclear monumentalism, yet also reveals the difficulties of attempting such.
It is under these conditions where the geological turn in contemporary art can contribute to the category of the monument. Considering first Revital Cohen & Tuur van Balen’s oft cited series of speculative geologies, these mutated forms have been fabricated and sculpted from technological waste, such as obsolete computers and other hardware. Most aptly, the waste products are drawn from the contemporary means of digitally storing memory and information, for these materials to be reformatted to propose speculative geological fragments that may arise in a future-to-come.
Another artwork is Trevor Paglen’s *Trinity Cube*. This was constructed from two types of glass; the first irradiated glass collected from the Fukushima Exclusion Zone, the second is Trinitite, a mineral created from scorched and fused desert sand from the site of the world first atomic
bomb test in New Mexico. This minimalist sculpture has been installed back into the Fukushima Exclusion Zone and will be without an audience until the zone is re-opened, any time between 3 and 30,000 years henceforth. The artwork occupies a space and time that is outside the lived human present. There is no public for this artwork, only the public of the future, the human to come. Through its irradiated materialism, this monument has instrumentalised the debris and fallout of nuclear development and nuclear catastrophe, reconfiguring a history of beginnings and endings to manifest a temporality referenced only as outside the immediate present.

These artworks display a clear geological condition in the materialisation of a temporal condition. But under the capacity of tertiary retention, these are artefacts which reach out into a future when the human as we currently recognise may not exist. In abeyance of a relation to what has come before, a recollection of a past that is brought forth into the present, these artworks manifest a temporal futurity in the lived present. The materialism activated by these artefacts is the memory of an event that is yet to occur, a memory-to-come.

The requirement for WIPP to preserve some type of message into the future becomes secondary to the monumental function exhibited by the materialism asserted by the waste storage facilities. When located under the conditions of monumentalism discussed above, these massive artefacts are devices that always already exert an ontological significance. Irrespective of any recorded message, it is by their designation as monuments that a temporal capacity is activated, where tertiary retention delivers the ontological significance of the present moment. In collaborating with their monumentalism, the human is becoming the human-to-come. The monument in the Anthropocene has not been discussed here under an ecological or ethical motif, but as a tool for ontological conditioning. Nonetheless, the capacity for temporal recalibration is essentially an ideological activity, which can contribute to proposing monumentalities that can better arrest the precarious future.