ESCAPE VECTORS, GRAVITATIONAL PULLS, AND MACHINE ONTOLOGY:

POLITICS AND SENSE-MAKING IN RYŌSUKE TAKAHASHI'S *FLAG*

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INTRODUCTION

Japanese popular culture can be comprehended as an ideological battleground where political notions are postulated and speculated on. The various machines and the assemblages they form that are constitutive of this cultural formation have the capacity to affect numerous users of anime.[1] I follow machine-oriented ontology (MOO) here and define a machine as any entity that operates on inputs and produces outputs: a "machine is a system of operations that perform transformations on inputs thereby producing outputs".[2] This is what Kleinherenbrink describes as Deleuze's machine thesis, that everything is machine all the way down: "everything is a machine".[3] In *A Thousand Plateaus*, Deleuze and Guattari note that there is no biosphere or noosphere but "everywhere the same mechanosphere", which is constituted by various pan-machinic processes.[4] To simplify, machine in this sense means any entity whatsoever (any *x*). Bryant uses the term media ecology to refer to assemblages or networks of machines in general, though we can use it to specify more specific kinds of networks, such as what Lamarre terms the anime ecology–the assemblages of entities and practices that constitute the reception and use of anime media in the broadest possible sense. Global anime ecologies are part of the mechanosphere; machines all the way down.[5]

This anime ecology is truly a globalized phenomenon, hence the call to think the relation between philosophy and anime. One can use anime to conceptualize emergent political, social, and cultural possibilities, as well critique stagnant actualities. Tosca and Klastrup argue that users engage in different sense-making operations in the comprehension of worlds and narratives: anticipating and connecting, interpretating and reflecting, appropriating and recounting.[6] The authors describe anticipating and connecting as forms of "pre-experiencing", where the former implies the movement towards "the yet to be realized experience" and the latter refers to a "sensorial first impression[s]" that precede any interpretation process of a transmedial or cross-platform world or universe.[7] Interpreting refers to "the effort of understanding what is going on", whilst reflecting "points to a self-oriented operation where we evaluate the outcome of an experience and how it relates to us".[8] Appropriating concerns the process of working through how an emergent experience of a world or narrative fits with our other experiences, where recounting describes "communication with others about those experience we already have internalized" to others.[9]

The philosophical reflection on anime is an act of communicating or making explicit anime's physiological effects on its users; a form of what Tosca and Klastrup term *evaluation*. Evaluation for Tosca and Klastrup is an attempt to make sense of the cultural significance of stories and the worlds they are situated in.[10] Perhaps what separates the philosopher from the ordinary user of contemporary media and popular culture is the emphasis on concepts. One form of critical practice (philosophical, professional, ordinary) is not superior to any other, they are simply different. In this paper, I engage with and evaluate the mecha science fiction (sf) of Takahashi Ryōsuke to think the relation between anime media and sense-making operations.[11] Mecha as a term simply denotes anime media where mechanical robots or their cognates are often the focus of plot or world-building. If interpretation is trying to understand what is going on, parsed as tracing what media can *do*, then this paper attempts to grasp how Takahashi uses anime to think the relation between media and sense-making.[12] Here, the emphasis is not primarily on meanings, but on "a texts functioning" in machinic assemblages.[13] I use Takahashi's anime to conceptualize the relation between politics, media, and sense-making. Whilst I refer to Takahashi's other mecha series–notability *Fang of the Sun Dougram* (*Nippon Sunrise*, 1981-1983) and *Gasaraki* (*Sunrise*, 1998)–in this paper I focus on Takahashi's *FLAG* (*The Answer Studio*, 2006-2007).

FLAG is a 13-episode anime series originally accessible on the Bandai Channel, created and directed by Takahashi Ryōsuke. The series used a plurality of framing styles, from still frames to the POV of a camera, as well as pre-recorded webcam diaries from the protagonist, the photojournalist Saeko Shirasu. There is a documentary-like tone throughout *FLAG,* which extends to how the character Keiichi Akagi narration style. Akagi's narration is both interpretative of plot events but also of the role of the journalist and the power of photography. Akagi is another journalist that accompanies the protagonist as she heads to the Tibet-like stand-in country Uddiyana. The protagonist (Shirasu) is assigned to a special forces' unit, SDC ("Seedac") that is tasked by the United Nations Forces ("UNF") to reclaim a UN flag. This flag attained symbolic value following its being photographed by Shirasu. The photograph depicts civilians raising the flag in the war-torn Uddiyana, plunged into civil war following the explosion of sectarian religious differences among Buddhists and a native belief system. The flag became a symbol for peace but was stolen by an armed extremist group (the "Gelut Sect") to disrupt peace accords. The SDC unit have in their possession the HAVWC ("High Agility Versatile Weapon Carrier", pronounced "havoc"), which is the primary mech of the series. Mecha anime often features mech-on-mech combat, but *FLAG* does not focus on this compared to other series like *Macross* or *Gundam*. In *FLAG*, The SDC unit do confront a Sino-Russian mech that is being utilized by the religious extremists to fight the UNF, which is the only mech-on-mech fight of the series.

I focus on *FLAG* as I ague here Takahashi most explicitly articulates his conception of the relation between media and sense-making. I argue that Takhashi emphasizes the significance of the "journalist-assemblage": the journalist, camera, computer, editing software, the physicality of film and

its development, and so on. Takahashi, unlike other auteur mecha directors like Oshii Mamoru, seem to place a high value on the truth-conditionality of event capturing and coding media. The function of the journalist-assemblage, the translation and expression of information that allows for the sense-making of current events, is a political process that is an element of wider pan-machinic processes. I follow Hannah Richter when she argues that contemporary politics concerns sense-making, specifically making sense of complexity. Richter introduces the notion of a politics of orientation to "describe a form of democratic politics in which authority and legitimacy rest not on whether and how political actors shape or propose to shape socieity through effective decision making but on the means of contingency control and uncertainty absorption they offer the citizens of complex democracies".[14] It is my contention that Takahashi uses the speculative medium of mecha sf to think through how both journalism (in the text) and anime (meta-textually) can intervene within this democratic conception of politics.

Richter argues that chaos and ambiguity are the norm, so political processes have to tame this in attempt to provide temporary stability for persons (i.e., so they can navigate their worlds without excessive confusion or ambiguity).[15] Orientation is a way of navigating a chaotic reality, and the journalists in Takahashi's *FLAG* are complexity alleviating agents. This form of politics for Richter "sustains its position as society's steering authority by guiding subjects on how to make sense of this world, and of their own position within it, by offering problem diagnoses, value systems, narratives, and explanatory frameworks".[16] Takahashi's *FLAG* as a narrative expressed through contemporary media (anime) is itself a text that can be used for orientation. Through the medium of anime, it can offer problem diagnoses. The diegetic reflection on the practice of sense-making as a pan-machinic process is then connected to the meta-textual engagement with anime media: media engagement has the capacity to develop sense-making capacities.

Whilst Richter engages with Deleuze in a postfoundational direction, undoing "any notion of ontological primacy", I instead read Deleuze in relation to machine-oriented ontologies (MOO) that follow from object-oriented ontology.[17] MOOs in this vein have been articulated by Levi Bryant, Arjen Kleinherenbrink, and Michael Ardoline. As the term machine here refers to the basic building blocks of reality, ontological priority is in some sense is granted to machines of various kinds. Takahashi also seems to articulate the view that new machines only emerge from existing machines. However, there is no ultimate ground because each machine is the "condition of possibility" for present and new states of affairs–in MOO's ontology and in Takahashi's view of the politics-journalism-information triad.[18] Machines are what Richter terms "contingent grounds" for the emergence of the new, which extends to socially significant phenomena.[19] This decision to read Takahashi in relation to MOO is not arbitrary. Firstly, I connect my reading of Takahashi's *FLAG* to Ueno Toshiya's reading of Oshii Mamoru, as he applies a machine-oriented ontological framework to comprehend both the form and content of anime.[20]. A contrast between two different meditations on the media-sense relation can be drawn out by

this comparison between Oshii and Takahashi. Secondly, I argue that Takahashi's anime emphasizes what Bryant terms "rogue objects"–those objects that disrupt the status quo organization of gravities and powers.[21] The machines that constitute the journalist-assemblage seem to be the most crucial rogue object in Takahashi's *FLAG*, which is true of other anime series directed by Takahashi even if this is not made explicit as it is in *FLAG*.

I proceed as follows. I firstly, I consider the relation between sf, mecha, and sense. I introduce the idea that anime's like *FLAG* can be conceptualized as laboratories for the (re)engineering of political concepts via ersatz propositions and the generation of data points. But for this to be possible, sf must be able to disrupt sense-making activities or be used within emergent practices of sense-making. I then introduce MOO. I focus on Bryant's version as it is the most explicitly political version. There, machinic gravities and what Bryant terms escape vectors are introduced. The former denotes the relations of power that hold between machines and the latter refers the affordances for a machine to escape a gravitational relation. [22] I use Takahashi's anime to contextualize Bryant's machinic typology of gravitational relations.

It is my view that Takahashi's worldbuilding lends itself well to a political analysis motivated by MOO. Various machines are entangled, including humans and their mechs. I argue that Takahashi's anime can be comprehended as expressing a form of machinic realism, a kind of politics that focuses on machinic relations in the broadest possible sense. By realism, I don't necessarily have in mind the idealism-realism distinction in International Relations (IR) scholarship, or the real-ideal distinction in philosophy. I have in mind a machinic realism whereby any kind of machine and its powers cannot be excluded from political considerations and their polyvalent (possible) affects are taken to have real effects. This includes incorporeal machines that can affect certain kinds of corporeal ones (e.g., humans affected by anime).[23] What is significant in this realism is the capacity for objects to affect the sense-making of agents, notably the camera and its capacity to capture information and express it at a future point in time.[24] Here, I introduce Ueno's reading of Oshii as a contrast class.

I then argue that whilst Takahashi and Bryant prioritize rogue objects, one could prioritize other gravitational relations, perhaps leading to different political priorities. The political prioritization of rogue objects by Bryant is a contingent choice. What would happen if we prioritized bright objects over rogue ones? In both perspectives, sense-making is important. Richter's Deleuze is both "an analyst of structural continuity as much as he is a thinker of revolutionary change".[25] I argue that Takahashi thinks radical change and "structural" continuity together. Bryant's typologies can be utilized to make this explicit. I close the paper by returning to the relation between the practice of sense-making and anime. Making sense of photographic instants (diegetically) and animated instants (meta-textually) is an *ability*. Abilities are something that ought to be cultivated and developed. One can describe the powers a machine has to do something its abilities (i.e., its abilities to perform an operation). One example is

reading and speaking English: this is an ability that must be developed and practiced.[26] The significance of this is that a distinction is drawn between a machine's being and how it manifests–expressed sense is a manifestation that holds between machines (e.g., anime and its users).

In object-oriented criticism, Hamilton Grant's *Failing Machines* seeks to revitalize reader-response theory by fusing it with Bryant's machine ontology.[27] In my view, there is not enough emphasis on the ability to make sense–or to use Grant's vocabulary, how a "reading machine" can make sense of what they have in view. If Richter is right that a democratic politics to come ought to orbit around the institutional absorption of complexities, then there may perhaps a corresponding artistic move to comprehend complexity in such a way that may develop sense-making abilities. This arguably requires the reintroduction of the philosophical essay into the ecology of machines and processes that forms contemporary globalized cultural criticism, as such essays have (and their reception and interpretation) can help us refine and develop our sense-making abilities. If this holds, then we cannot do away with interpretation in favour of a "creative criticism" (as Grant would have it). The latter, a criticism that puts fictions and worlds to use, may in fact follow on from the former (or, at least there is a continuity between the two). This then is closer to the media studies perspective Tosca and Klastrup advance in *Transmedial Worlds in Everyday Life* (introduced above) where different forms of experience and uses of texts (from sharing memes to cultural criticism) have their value and machinic function.

SCIENCE FICTION, MECHA, AND SENSE-MAKING

Whilst Takahashi did not exclusively work on sf anime, most of his directorial outputs are science fictional mecha works. Generally, sf denotes fictions where the world "in some respect" differ "from our own", or "describe the impact of some strange element upon our world". [28] Sf can be comprehended as "a kind of thought experiment, a way of entertaining odd ideas, and asking off-the-wall what if questions".[29] The way sf does this involves an othering process whereby the familiar becomes strange by the setting of sf narratives and the building of secondary worlds textured by an "imaginative framework alternative to the authors empirical environment".[30] In mecha anime, estrangement often occurs through the introduction of mechanized bodies or robots. In the mid to late 20th, Japan's robotics and computational industries were rapidly developing. The 'what would *x* be like' question in the Japanese context often focused on where robotics could go and its consequences for this reason. Some of the earliest mid-20th century sf, including the *Mighty Atom* manga (Tezuka, 1952-1968), focused on an androids and artificial persons. There was then a move to cyborgic hybridity, for instance Ishinomori's *Cyborg 009* (1964-1981). Mecha came into its own when it moved from androids and cyborgs to mechanical bodies as something piloted, something controlled and manipulated by a human (or human-like) pilot.

The first major real robot anime was the space opera *Mobile Suit Gundam* (Nippon Sunrise, 1979-1980) that featured a plausible conflict between Earth, the "spacenoid" colonies controlled by Earth, and "newtypes". Newtypes are those who have developed heightened senses through exposure to outer space (though, cybernetic newtypes are introduced in the 1985 sequel *Mobile Suit Zeta Gundam*). Real robot storyworlds are sustained by some presence of a plausibility principle, which differentiates them from their more fantastical counterparts within the super robot subgenre of mecha– think Mazinger Z or *Super Sentai* (*Power Rangers*).[31] Real robot narratives and worlds can be read as speculative explorations of the present through "what if" scenarios embodied in narratives and characters, that are intended (for the most part) to be taken seriously from a social, cultural, and ultimately a political perspective.[32] Takahashi's work is slanted more towards hard sf than some of his contemporaries (including Tomino's *Gundam*), which is to say that the world building is more plausible in his anime. Another way of putting this is that Takahashi's fantastical speculations are more grounded through the attention that is paid to political and economic processes–from land reform policies (*Dougram*) to the fluctuating price of wheat (*Gasaraki*).[33] The journalistic representation of events and processes after the fact gives texture and temporal thickness to Takahashi's worlds (e.g., much of the "grain crisis" arc in *Gasaraki* is expressed through characters watching the news or reading newspapers). Events really did take place, and they are received differently by different characters within Takahashi's worlds.

MacLeod argues that sf generally engages with politics either by interrogating ideological concepts that denote certain political principles, or by interrogating or representing political processes themselves.[34] I argue that Takahashi's mecha works explore both axes. Ideologically, they explore the idea of freedom in relation to a variety of political scenarios (colonialism and anti-colonialism in *Dougram* and *FLAG*; conservative counter-revolution conjoined to neoliberal corporate politics in *Gasaraki*). To anticipate Bryant's machinic vocabulary, one of Takahashi's questions is how one can follow or initiate escape vectors within worlds with intense and oppressive gravities. Riding escape vectors, so to speak, is a *political process* that is not necessarily connected to this or that ideological position. In this paper, I emphasize the latter (process) over the former (ideology). The way ideology functions in Takahashi's work is an important question, but this also concerns the ideologies of his directorial colleagues as well, which would constitute a comparative analysis of mecha that is beyond the scope of this article. Takahashi also traces complex relations between various human and nonhuman machines which are constitutive of broad political processes. It is from within complex material flows (machinic processes) and their (attempted) capture that the notion of freedom is explored. This notion of 'capture' is literalized in *FLAG* through the camera capturing instants of machinic processes that can be utilized in future sense-making processes.

The political significance of a sf text may derive from its being more or less plausible, as a totally implausible world may not be able to generate what Thomas Pavel terms *ersatz propositions*.

Ersatz propositions are those that can be abstracted from a text and used to make assessments about truthfulness, what he refers to as "decision procedures".[35] Ersatz propositions, because they have been abstracted from their origins (from fictional texts) are arguably indistinguishable from other forms of textuality, from (apparently truthful) newspapers to scientific papers.[36] They are also not analogous to direct propositions about fictional worlds, they are abstracted for the purpose of making judgements about the actual world. These propositions are not identical to what Pavel terms the "*global* truth of a work".[37] Because works explore their own autonomous worlds moral, political, psychological truths, they cannot be reduced to other texts, modes of presentation, or expression.

Following Dyson, we could see sf as generating data points, seeing mecha storyworlds as "realm[s] to think about theories". [38] It may be more accurate to describe worlds and narratives as laboratories where experiments that modify social and political variables can be observed and analysed. Dyson argues that storyworlds "could offer alternative reality data points' that would enrich our notoriously data-poor discipline".[39] Dyson has international relations in mind, but political philosophy is arguably data poor to the extent that it also requires thought experiments to test its hypotheses–the 'state of nature' in the contractarian theorizing of Hobbes up to Rawls is perhaps the most famous of these. Dyson and Pavel both view storyworlds and narratives as truth-conditional, that one can abstract from worlds and narratives propositions or data points that can affect sense–how we go about comprehending the world around us. In this way, mecha anime can be utilized in and as a part of sense-making activity.

The theorization of sense has a particularly rich philosophical history, though here I limit myself to Deleuze's use 'sense'. Deleuze's usage differs quite drastically from ordinary usage. For Kleinherenbrink, what Deleuze calls sense is "the result of the interaction between corporeal machines".[40] Sense refers to "what a machine does when engaging with others", and does not denote the being of a machine.[41] It is not about what a machine is, so having a clearer sense of events in the way I used sense above is not what Deleuze necessarily has in mind. Deleuzian sense is something that is "made to *happen*", hence Deleuze's usage of event as a synonym for sense.[42] Whilst this use is irregular, sense-making and the reduction of complexity (Richter's account) is relational: it involves relations established between many kinds of machine. But these relations are not exhaustive: "it is the same *sense-event* that I see, smell, taste, and touch in a given relation, a sense-event which is not the object *qua* object, but a translation or actualization of it".[43] In *FLAG*, the photographs and footage captured by the protagonist are not relations to objects *qua* objects, but are mediated translations of state of affairs. Likewise, *FLAG* (meta-textually) as a series can be put to use in new and emergent contexts, including thinking the relation between anime and philosophy twenty years after its initial release.

Deleuze in the *Logic of Sense* often used linguistic entities to exemplify general ontological categories, but it is not primarily about language. That said, Daniel Smith has extracted a theory of

language from the text. I take the representational content of sf to correspond to what Smith terms the "tertiary arrangement" of language (propositions, designations, manifestations, significations, and expressions).[44] This contrasts with the "primary order of language" (noises and intensities of the body– or perhaps the noises and intensities of media from videogame consoles to television sets) and the "secondary organization of language" (the condition of truth or denotation; the form of possibility of the proposition itself in all its dimensions).[45] Without pursuing this triadic Deleuzian theory of language and expression here, I argue that to realize or form any ersatz proposition (Pavel) or data point (Dyson)– actualized as a translation or relational connection between anime and the philosopher or critic–sense is required to establish meaningful relations in the first place (truthfulness for Pavel). Sense is also a relation between powers (e.g., the ability or power of a television to translate information into expressible content), a power that emerges from media ecologies.[46] In the political domain, following Richter, sense is required to establish, maintain, and radically transform relations between machines of different magnitudes.[47] Takahashi seems to think some machinic powers are more significant than others: the power of rogue objects.

GRAVITATIONAL RELATIONS, MACHINE ONTOLOGY, AND ROGUE OBJECTS IN TAKHASHI'S *FLAG*

How can Takahashi's *FLAG* be read in relation to machinic ontologies and how can Takahashi's reflections on the truth-conditionality of journalism be used to think through the problem of sense-making? I firstly introduce Ueno Toshiya's variant of machine ontology, which develops directly in relation to the anime of Oshii Mamoru. Interestingly, Ueno refers to Graham Harman and his withdrawn objects.[48] Harman's general thesis is that reality is differentiated not along an anthropocentric human-nonhuman axis, but along the lines of the real and the sensual.[49] Real objects withdraw from relationality and cannot be accessed or perceived directly.[50] Likewise, the real qualities of objects cannot be made present. A Harmanian object–like the machine in MOO–is literally anything at all: painting, robots, equations. Harman argues that objects cannot be "undermined" (reduced downward to its components), "overmined" (reduced upwards to what it does or its relations), or "duomined" (the combination of under- and overmining strategies).[51] It is not that one cannot contact things; it is that any entity whatsoever must go through the sensual–or the surface of sense in MOO.[52] As Ueno puts it, there is "*contact within distance*".[53]

For Harman, real objects "image" others through the constitution of sensual objects.[54] Such objects have accidents that accompany the imaged entity (sensual qualities) that are not analogous to its real qualities. Relations established on the surface of sense are not analogous to direct contact between any two entities. Harman's distinction between manifestation and being (machines and their relations) is the general point of departure for MOO. Levi Bryant splices Deleuze and Guattari with the

Harmanian position whilst Arjen Kleinherenbrink reads Deleuze as articulating a speculative realism that proceeds Harman's.[55] Michael Ardoline follows a similar line of reasoning, though his account focuses on mathematics and a reworking of what in analytic philosophy is termed dispositionalism.[56] In a similar fashion to Harman, Ueno is interested in the relation between dreamlike states and the real.[57] Ueno argues that this distinction between dream and reality is present throughout the works of Oshii Mamoru, especially his cyberpunk works like *Ghost in the Shell*. This can be inferred both from the level of narrative and from the machinic ontological character of anime itself.[58] Ueno argues that there is a desire present in anime that constitutes a dream like "milieu in which humans and nonhumans (animals, plants, and machines) mutually fuse with and interpenetrate each other".[59] The pre-logical or sensual can be described as a form of "unnatural participation".[60] Ueno then compares animation to animism and panpsychism in terms of bringing the inanimate to some form of life–a visual life in the context of animated content.[61]

Ueno then discusses the relation between dreams and reality as an error that brains produce auto-generatively.[62] In Oshii's *Patlabor 2: The Movie* (1993), the undecidability between dream or reality is cashed out in relation to military technologies. Throughout the film, characters are deceived by tricks (e.g., simulated and illusionary fighter jets). The lack of distinctiveness between dreams and reality is connected for Ueno not just to the specific political context in which the film is operating– discussed extensively by Fisch and Bolton–but to the wider machinic assemblages in which anime as a medium fits into.[63] Our world is already characterized by what we might describe as dream-walking, roaming on autopilot through the various info-spheres that condition perceptivity. This then introduces a rupture in sense whereby one cannot necessarily trust the tertiary arrangement of language ('meanings') to accurate reflect a reality punctured by digital technologies.[64] But this is not to say that there is no grounding reality, what Richter describes as the "material constituents" of sense making.[65]

Anime, like other forms of media, are for Bryant corporeal machines that have incorporeal elements.[66] Incorporeal machines (e.g., fictional worlds) are embodied in corporeal machines, from the human brain to physical inscriptions (from discs to HDDs).[67] Like Ueno, Bryant has a radically wide scope for what counts as a machine and how machinic composition works. For Bryant, all machines are split-objects as "they are split between their virtual proper being and their local manifestations".[68] As Kleinherenbrink notes, all machines have bodies, as "the body is that which remains external to relations between machines" thus "as everything is a machine, so everything is a body'"[69] Anime has its incorporeal elements that are grounded in a physical (corporeal) media ecology, where anime sits alongside manga, videogames, and their users).[70] Such grounds, as Richter argues, are contingent: anime need not be grounded necessarily in this or that corporeal form.

Whilst Ueno utilizes a machinic ontology to comprehend Oshii's fascination with dreams, warfare, and metallic-machinic bodies, Bryant deploys his typology of machinic gravities developed in

Onto-Cartography to comprehend sf content in general. I utilize his vocabulary to analyse Takahashi's anime. For Bryant, all machines possess their own gravity, a "field or topology that other objects follow in their movement'" insofar as a machine "bends the space-time movement and becoming of another".[71] Machines produce "paths" that can be thought of as generating specific "affordances and constraints" for an entity's movement.[72] A gravity is a machine's power, its capacity to affect and be affected by other machines. It is here where the typology is required because there is the question of qualitative difference between gravitational forces. The typology ranges from "dark objects, bright objects, satellites, dim objects, rogue objects", to "black holes".[73] To explicate the differences between these types, we can utilize elements from Takahashi's mecha anime.

Bright objects are those that "exercise immense gravity, capturing other objects in their orbit".[74] Uddiyana itself is depicted as a bright object that captures different actors in its orbit–different religious sects, citizens, journalists interested in 'the scoop', etc. But Uddiyana itself with its mineral wealth is also depicted as an object absorbed by different colonial and imperial powers throughout time. This mirrors the relation between Deloyer and Earth in *Dougram*, where the former interstellar colony is exploited for Earth's benefit (notably food and energy production). The UN in *FLAG* is depicted as the latest external power intervening in local Uddiyanan affairs–though if this constitutes a direct colonialism is neither affirmed or negated. *Satellites* are a name for objects that orbit around bright objects. In *Dougram*, the citizens of Deloyer and other actors are satellites whose becomings are affected by the conflict between the Deloyan resistance and the colonial Earth-backed government (a proxy for Earth's interests in the series).[75] In *FLAG*, the military personnel of the UNF orbit around the UN organization, as this organization gives personnel their sense (through the establishment of conjunctive relations). Contrarily, *dim objects* are those machines that exercise very little gravity. Bryant's example is the homeless, as they "often go unnoticed and have very little power or representation".[76] In Takahashi's *Gasaraki*, the Chinese immigrants that dwell in Tokyo's slums are a set of dim objects as they lack the power to affect soceiety and its arrangements (until gang warfare erupts in the latter third of the series). In *FLAG*, the actual citizens of Uddiyana seem to have little actual power to contest external influence. They are often victims of UNF collateral damage, and nomadic Uddiyanan tribes are not considered relevant at all–beyond Chirasu's fascination with the nomadic folk.

Rogue objects are those that "appear out of nowhere, disrupting and reconfiguring relations between objects", that "wander in and out of assemblages".[77] In mecha anime, often new mechs themselves are rogue objects that puncture extant relations–for instance, the Sino-Russian Roku mech that transforms extant geopolitical relations. Mecha in *FLAG's* world disrupts the existing patterns of warfare through technical abstraction and increased combat efficiency. Machines can become otherwise through activity (including the human use of mechs); they can change their gravitational situation. Whilst a gravity constrains movement, gravities also open up paths for becoming and movement, what

Bryant terms escape velocities: the "speed an object must reach in order to escape the gravity of another object".[78] Bryant notes that "we all can find ourselves […] enmeshed in assemblages or worlds from which we would like to escape", and that "mapping the way gravity is structured in these situations, we might devise ways of achieving the sort of escape velocity we need or desire".[79] This is not only the way mecha functions in Takahashi's corpus (i.e., granting bodies new affects through machinic entanglements), but this is also the function of journalism, as it is journalists that interrupt and disrupt sense-making practices through the translation and expression of newly captured and recorded information.

The camera in *FLAG* has a power to code and record pan-machinic gravitational relations through the "capturing of instants". The expression of these instants through news journalism is a sense-event that strategically uses tertiary arrangements of visual and audio language. Akagi notes that photographs and the recording of fragments may both change the course of history and determine a person's life (S1E1). In the closing episode, Shirasu dies in a plane explosion (if this was intentional or not is left vague). The footage and pictures captured by Shirasu are described as something her "soul" was "poured" into (S1E13). Akagi also discusses the relation between photography and the past: "that's why people like us always have our cameras raised, ready and waiting for the next instant" (S1E9). One cannot stop time passing, but the instant can be codified as an informational fragment that holds expressive power. As Akagi notes: "once you click the shutter, it becomes the past", but we photographers (journalists) have our cameras ready, 'believing in the future that will come next" (S1E13). The capturing of instants is connected to future possibility, that "tomorrow also implied there would be a different future" (S1E13), the sense of which is expressible through the journalist's data (photos, footage). There is faith in soul-pouring activity in *FLAG*.

Whilst Shirasu wanted to see with her own eyes that which the soldiers were "risking [their] lives for", she also wanted to capture and record events "for posterity" through the camera (S1E3). Takahashi stresses the importance and significance of people "knew what was happening" (S1E3), even in posterity. This, arguably, is the truth-conditional power of the camera. But there is a caveat: that the journalist may not continue to ascertain public interest, that the public will not continue to engage in sense making (S1E7). Richter identifies this as a problem for democratic politics–especially when mainstream sense-makers fail to successfully organize the tertiary arrangement into meaningful narratives that can orient persons future actions, where agents fail to discern reasonable possibilities from the field of virtual vectorial trajectories. But fictional works may continue to affect sense through expressing ersatz propositions and disrupting sense. This is the meta-textual aspect that *FLAG*, I argue, attempts to emphasize: where journalism can fail in the expressing truths (that such and such a situation or state of affairs is arranged in such and such a way), anime media may affect sense through the generation of disruptive ersatz propositions. This is not isolated in *FLAG*, as this attitude appears elsewhere but in a latent form. For instance, the cinematic condensation of *Dougram* is framed as a

journalistic documentary that covers the events of that series–1983's *Dougram: Documentary of the Fang of the Sun*.

Returning to Ueno reading of Oshii's Mamuro, Oshii is more sceptical about the power of the camera to meaningfully affect sense, as the truth-conditional value of the camera is compromised by the introduction of the dream like–what we could also call fantastical elements–into the actual. This is because for Ueno's Oshii, the machinic compromises the relation between dreams and reality. In our post-truth era, which is what Richter is responding to in her political theory of complexity reduction through sense-making orientation, this cannot be denied. Misinformation is tantamount. But journalists still complete important work in that they translate and express actualities that one cannot ordinarily access. They are truth-makers in the sense that they translate information through the capturing of instants. To this end, other media machines (Shirasu's laptop) and the information that is transformed through allows the instant-fragments to be pieced together to generate data points, ersatz propositions. The camera then, for Takahashi, can capture and convey to the public (vaguely defined) gravitational and anti-gravitational processes and structures, turning such processes and the machines that are their contingent grounds into coded and captured instants. These are generative escape vectors that can disrupt extant gravitational relations. The journalist-assemblage and not necessarily the mechs in are perhaps the most significant rogue objects in *FLAG*.

Whilst Bryant does not necessarily affirm it, analytical and political priority seems to be attributed to *rogue objects*. Bryant's politics are radical. There is for him an inherent connection between freedom and the emergence of the new (rogue objects have the capacity to produce the new through disruption). I agree, but I think it is important to note that this is a contingent choice. One can think of the emergent of the new alongside structural continuity, what Bryant terms the "immense gravity" of bright objects that capture other machines in their gravity. These bright objects, using Richters vocabulary, may afford persons orientation in sense–literally a sense of direction. Art can both intervene her to disrupt gravities and open up escape velocities, but it may also caution against certain forms or trajectories of escape. Takahashi's anime in general but *FLAG* in particular straddles this line between following escape velocities and the cautious continuation of existing institutional arrangements. There are conventional realist elements to *FLAG* (in the sense of *real politik*). In Episode 10, the UNF commander comments that "idealism is all well and good", but that political backing (i.e., force) is required or "even the noblest of ideas will end up as nothing more than a pipe dream". But *FLAG* is not necessarily endorsing this realism. Akagi: "it that sort of self-preservation hiding behind a mash of realism that led to the tragedies of Rwanda and Kosovo" (S1E10). In some cases, potential peace (Uddiyana); in some cases, tragedy. Beyond *FLAG*, Takahashi's *Dougram* essentially ends in a compromise between revolutionary forces and a revisionary government, where concessions are granted to Earth. Cautious compromise and radical velocities sit side-by-side uneasily–especially from the

perspective of the youth fighters who are told in the concluding Episode to create and forge a new path beyond the Earth-Deloyer colonialist dyad.

In *FLAG*, the activity of journalists is described in war-like vocabulary: "Our cameras are our rifles. We draw a bead on our subject, and we pull the trigger" (S1E6). Journalists are compared to "hunters" (S1E6). In Episode 5, after a group of journalists ascertain a leaked UNF email, Akagi describes following up on said email as "a battle" that was now underway (S1E5). One could interpret this under Deleuzo-Guattarian lines as the expression that the journalist-assemblage is a kind of war machine.[80] Or, this war-like interpretation could be interpreted as some tacit endorsement of journalistic *real politik*. I would argue that Takahashi's intentions in *FLAG* are closer to the former, but it is not a given that every journalist would be working against state organizations as war machines. Whist Oshii is sceptical, and Takahashi is optimistic, they both seem to share anti-war views. This is how Agaki in *FLAG* discusses the word terrorist: "but do they know how many people have been hurt in the name of the military actions that they call terrorist eradication" (S1E5). The word 'terrorist' is described as "one little world" (S1E5) that can be used to write off any faction that does not want to play along with the UNF. Diplomacy is important, and this requires the structural continuity of institutions as well as radical reconfigurations of sense from below. This is the machinic realism I see Takahashi as articulates: that media machines (the camera digetically; anime, film and photography meta-textually) can contribute to tanti-gravitational politics. This is connected to a realistic and generally materialistic concern for historical forces and nonhuman machines (including the mecha). However, it is the recording and capturing of pan-machinic processes that seems important in *FLAG* and elsewhere in Takahashi's corpus. Takahashi thinks, through artistic practice, a form of MOO that grants space for both structural continuity and radical or revolutionary change, at both the material levels (machinic transformations) and in terms of sense (relational configurations between machines).

CONCLUSION: ABILITIES AND SENSE-MAKING

Making sense of these instants (or conjoined instances in the case of the joining up of instants in video) is an ability. The ability to make sense of journalistic instants is textually presupposed in *FLAG* (hypothetical audiences will comprehend what the journalists are trying to convey through expression, the manipulation of tertiary arrangements). However, meta-textually the comprehension of a politics deriving from Takahashi–by way of trying to understand what is going on in Takahashi's *FLAG*–cannot be assumed. Mecha sf, I argue, generates data points and ersatz propositions. In *FLAG's* case, propositions and data regarding the power and political importance of journalistic practices. This may be more interesting now to a contemporary audience than an audience twenty years ago (*FLAG* was released initially in 2005), as the sceptical worms of our post-truth era erode our confidence in the efficacy of reporting–from conspiracy theories, misinformation, powerful biases, and so on. One of the

political functions of real robot anime then may be the emphasis on thinking future possibilities and ultimately the contingency of any gravitational arrangement. It is, for Takahashi, the journalist's camera that makes this contingency explicit. Photos are described in *FLAG* as a "prayer directed at tomorrow" (S1E13), as a vision for a different future. Even if journalism falters here, perhaps anime media-machines can affect sense instead. Anime and photojournalism are elements of pan-machinic processes that are real, part of an extended machinic realism. But evaluating, in Tosca and Klastrup's sense, is not a given.[81] Like speaking English, the sense-making of anime or other sf media (or the content of journalism–which is now often an extension of media literacy) requires refinement, development, and ultimately practice.

It is perhaps the critic, philosopher, or theorist that can turn dim anime objects into rogue disruptive ones through using them in their own conceptual sense-making projects–which perhaps justifies reflecting on the anime-philosophy conjunction. But this contrasts with Grant's Hamilton's conclusions in *Failing Machines*, Hamilton, like Tosca and Klastrup, emphasize the specific and situated experiences of "reading machines" (I prefer the term user). Hamilton, like Harman does in *Art and Object*, follows reader-response theories.[82] What Hamilton stresses is the productivity of reading, of functioning: how a text "works for me":

> By asking whether a novel or a poem "works for me", the reader draws attention to the fact that it is the reader herself who is responsible for constituting the meaning of a text and, more importantly, that the literary work is only to be understood and evaluated in terms of the reader's own goals and values.[83]

One consequence of this is that residues of universal of transcendental meanings embedded in texts finally evaporates, as "all texts are to be judged on a private scale, designed by the reader herself, which calculates whether or not a text increased the power of the reader to act in the world".[84] This is similar to my view that sense-making using anime (and also journalistic media) can enhances ones powers.

However, I argue that Hamilton privatizes the reading experience (using media) too much. One outcome of this is his treatment of secondary literature, including the philosophical essay:

> If readings of literary works are profoundly private affairs, then those so-called important and influential secondary texts that accrue around literary works (and those inherited reading practices that direct the way in which we engage a text) must lose gravity and eventually give way to such readings […] those authoritative essays and books that have traditionally focused our reading of, say, Shakespear cannot retain their position of influence in the realm of private reading'.[85]

Hamilton argues further that "private reading simply has no need or role for such writing".[86] Whilst he claims that "every reading machine is embedded in the swell of collective ideas that inform the attitudes of a particular culture" (i.e., that private reading is not solitary), how is the *ability* to make sense of

media formed if not through an engagement with the secondary literature? If the argument is to deflate the significance of certain canonical readings, then I agree ('canonical' does not mean transcendental or universal, either). But it seems that much intervention in disrupting the cannon follows *from* the secondary literature. I started this essay with Tosca and Klastrup's media studies work on transmedia storyworlds. There, canonicity and also *media specificity* is deflated (Hamilton's work is primarily about literary works and not other forms of textuality).

Tosca and Klastrup also have a robust account of how reading or using is not solitary: it is through the engagement with a wider pan-mechanistic media ecology that the ability to make sense of what one is seeing is developed and refined. This takes several forms, from engaging in social media groups, sharing memes, to reading philosophical essays. I simply do not see how we can do away with interpretation or the essay–Hamilton aims to displace this for what he calls a 'creative criticism'. The essay may take different forms–think of the rise of video essays, especially within the videogaming critical space–but we need these to get off the slippery ice of infinitely possible meaning (to use a Wittgensteinian metaphor). Another reason is that creatives also interpret the world. Takahashi's postulation of the power of the journalist-assemblage or journalism-machine, or better yet the networks of journalism-machines, to affect sense in *FLAG* is simultaneously an interpretation and a creative act. Some private users of anime may simply not be interested in plugging *FLAG* into concepts derived from Deleuze and MOO.

This brings us back to thinking the relation between politics and sense-making. Sense-making and orientation is an ability a person does not necessarily possess; it is something that is developed and refined. Thinking anime and philosophy (or philosophy and games, manga, etc) is a doing, a functioning within wider pan-machinic processes, that aims at making sense of what anime can do for us. What does an interpretation of Takahashi's *FLAG* look like? A MOO political theory cannot exclude the differential powers of differently organized machines–from cameras to anime. Anime and photojournalism are elements of pan-machinic processes that are part of an extended machinic realism. But we perhaps need the ability to notice the conceptual and thematic connections and threads on the surface of sense, this is not a given. In our world, Takahashi urges us to take journalism and the powers of the journalist seriously. Even if the journalist is not always absolutely true or right, at least photographs, sounds, and words do something to us. Takahashi contrasts with Oshii's scepticism. But without an engagement with interpretations, without the secondary literature, how well could one really join the dots between these anime–to say nothing of the anime-philosophy relation? Ultimately, Takahashi stresses the role of mediation: the journalist editing instant-fragments. This also applies to the critic or philosopher interpreting and putting together interpretated fragments, data points, or the ersatz propositions extracted from anime media. Without such practice, how can we make sense of what is in view?

[1] Thomas Lamarre, *The Anime Machine: A Media Theory of Animation* (University of Minnesota Press, 2009). Thomas Lamarre, *The Anime Ecology: A Genealogy of Television, Animation, and Game Media* (University of Minnesota Press, 2018); see also Marc Steinberg, *Anime's media mix: franchising toys and characters in Japan* (University of Minnesota Press, 2012).

[2] Levi R. Bryant, *Onto-Cartography: An Ontology of Machines and Media* (Edinburgh University Press, 2014), 38.

[3] Arjen Kleinhrenbrink, *Against Continuity: Gilles Deleuze's Speculative Realism* (Edinburgh University Press, 2019), 3.

[4] Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, Trans. Brian Massumi (University of Minnesota Press, 1977), 69; Levi R. Bryant, "Machine-Oriented Ontology: Towards a Pan-Mechanism" (2012), https://larvalsubjects.wordpress.com/2012/06/21/machine-oriented-ontology-towards-a-pan-mechanism/.

[5] Lamarre, *The Anime Machine*; Lamarre, *The Anime Ecology.*

[6] , Susana Tosca and, Lisbeth Klastrup, *Transmedial Worlds in Everyday Life: Networked Reception, Social Media and Fictional Worlds* (Routledge, London, 2020), 87.

[7] Ibid, 88-9. There is a debate regarding the relation between singular storyworlds and wider but potentially contradictory story universes (i.e., that storyworlds *a* and *b* may contain contradictory states of affairs whilst belonging to universe *c*). For an authoritative account, see Jan-Noël Thon, *Transmedial Narratology and Contemporary Media Culture* (University of Nebraska Press, 2016). Tosca and Klastrup name shared properties "worldness" and define this as a feature of "Transmedial Worlds" (TMWs) or "abstract content systems from which a repertoire of fictional stories and characters can be actualized or derived across a variety of media forms". See Tosca and Kastrup, *Transmedial Worlds*, 29.

[8] Tosca and Kastrup, *Transmedial Worlds,* 93.

[9] Ibid, 97.

[10] Ibid, 145.

[11] Where possible when referring to Japanese persons, I follow the Japanese naming convention of surname then forename. I make exceptions for fictional characters.

[12] For a discussion of media and "doings" (that representation of anything is follows from the expressive power of machines, which is the media "doing" something to some receptive body), see Tauel Harper and David Savat, *Media After Deleuze* (Bloomsbury, London, 2016).

[13] Hamilton Grant, *The World of Failing Machines: Speculative Realism and Literature* (Zer0 Books, Winchester, 2016), 111.

[14] Hannah Richter, *The Politics of Orientation: Deleuze Meets Luhmann* (State of New York University Press, 2023), 3. Quotation modified.

[15] Ibid, 24-35.

[16] Ibid, 3.

[17] Ibid, 9. See also Kleinhrenbrink, *Against Continuity,* 21-50.

[18] Oliver Marchart, *Post-Foundational Political Thought: Political Difference in Nancy, Lefort, Badiou and Laclau* (Edinburgh University Press, 2007), 15.

[19] Richter, *The Politics of Orientation*, 8. On social objects, see Arjen Kleinherenbrink and Simon Gusman, "The Ontology of Social Objects: Harman's Immaterialism and Sartre's Practico-Inert", in *Open Philosophy*, Vol 1 no 1 (2018), 79-93.

[20] Toshiya Ueno. "War and Anime in the Age of Machine-Oriented Ontology: The Case of Mamoru Oshii", in *Thinking with Animation*, ed. Joff P.N. Bradley and Cahterine Ju-yu Cheng (Cambridge Scholars Publishing, Newcastle upon Tyne, 2021),133-47.

[21] Bryant, *Onto-Cartography*; Levi R. Bryant, "Object-Oriented Ontology and Science Fiction Cinema" in *The Oxford Handbook of New Science Fiction Cinemas*, ed. J. P. Telotte (Oxford University Press, 2023), 249-264.

[22] Ibid.

[23] Bryant, *Onto-Cartography*, 16.

[24] I follow Kleinherenbrink by defining agency as the capacity to "discern possibilities". Arjen introduced this idea at a conference in November (2024).

[25] Richter, *The Politics of Orientation,* 9.

[26] Kleinherenbrink, *Against Continuity*, 44. David Lewis explicitly uses "ability" when referring to experience or a Deleuzian sense-event. See "What Experience Teaches" in *Papers in Metaphysics and Epistemology* (Cambridge University Press, 1999), 262-90.

[27] Grant, *Failing Machines.*

[28] Mark Rose, *Alien Encounters: Anatomy of Science Fiction* (Harvard University Press, 1981), 3.

[29] Steven Shaviro, *Discognition* (Repeater Books, London, 2015), 8-11. Quotation modified.

[30] Darko Suvin, *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre*, (Yale University Press, 1979).

[31] James Gunn, "Reading Science Fiction as Science Fiction" in *Reading Science Fiction*, ed. James Gunn, Marleen Barr, and Matthew Candelaria (Bloomsbury, London, 2008), 162.

[32] Shaviro, *Discognition*.

[33] Sf is still a fantastical genre. Often, the fantastic is defined in contrast with mimesis. Both can be differentiated based on their relationship to reality: mimetic writing sticks to the consensus view of what reality is like (but this consensus is historically contingent), whilst the fantastic goes beyond it. Sf often uses extrapolation and speculation to push certain elements beyond consensus views whilst retaining some connection to actuality and the possible. See Brain Atteberry, "The Fantastic" in *The Oxford Handbook of Science Fiction*, Ed. Rob Latham (Oxford University Press, 2014), 129.

[34] Ken MacLeod, "Politics and Science Fiction" in *The Cambridge Companion to Science Fiction*, Ed. Edward James and Farah Mendelsohn (Cambridge University Press, 2003), 230.

[35] Thomas G. Pavel, ""Possible Worlds in Literary Semantics", *Journal of Aesthetics and Art Criticism*, Vol 34 no 2 (1975), 168.

[36] Ibid, 168. Pavel assumes that quality newspapers are truthful, that they can generate sense-making events where valid inferences can be made from accurate data. This cannot necessarily be assumed in the contemporary post-truth situation. However, this problem of the truth-conditionality of journalism is interestingly one of Takahashi's concerns in *FLAG* (and elsewhere).

[37] Ibid, 171.

[38] Steven Dyson, *Otherworldly Politics: The International Relations of Star Trek, Game of Thrones, and Battlestar Galactica*, (John Hopkins University Press, 2015), 8.

[39] Ibid, ix.

[40] Kleinherenbrink, *Against Continuity*, 121.

[41] Ibid.

[42] Ibid. Original emphasis.

[43] Ibid, 124. Original emphasis.

[44] Daniel W. Smith, "The Concept of Sense in Gilles Deleuze's *Logic of Sense*", *Deleuze and Guattari Studies*, Vol 16 no 1 (2022), 5.

[45] Smith, "The Concept of Sense", 4-10.

[46] See Lamarre, *The Anime Ecology.*

[47] Richter, *The Politics of Orientation.*

[48] Ueno, "War and Anime", 137.

[49] Graham Harman, *The Quadruple Object* (Zer0 Books, Winchester, 2011).

[50] Graham Harman, *Tool-Being: Heidegger and the Metaphysics of Objects* (Open Court, Chicago, 2002).

[51] Graham Harman, "Undermining, Overmining, and Duomining: A Critique" in *ADD Metaphysics*, Ed. Jenna Sutela (Aalto University Digital Design Laboratory, Espoo, 2013), 40-51.

[52] Harman, *Quadruple Object.*

[53] Ueno, "War and Anime, 137.

[54] Graham Harman, "The Current State of Speculative Realism", *Speculations*, Vol 4 no1 (2013): 22-7.

[55] Levi R. Bryant, *The Democracy of Objects* (Open Humanities Press, Ann Arbor, 2011). See also Bryant, *Onto-Cartography*; Kleinherenbrink, *Against Continuity.*

[56] Michael J. Ardoline, *Deleuze, Mathematics, Metaphysics: Difference and Necessity* (Edinburgh University Press, 2024).

[57] Ueno, "War and Anime", 133; Graham Harman, "Object Oriented Seduction: Baudrillard Reconsidered" in *The War of Appearances: Transparency, Opacity, Radiance*, Ed. Joke Brouwer, Lars Spuybroek, and Sjoerd Van Tuinen (V2_Publishing, Amsterdam, 2016), 128-143.

[58] Ueno, "War and Anime", 134.

[59] Ibid, 139.

[60] Ibid, 138.

[61] Ibid, 140-41.

[62] Ibid, 142.

[63] Michael Fisch, "Nation, War, and Japan's Future in the Science Fiction "Anime" Film "Patlabor II"" *Science Fiction Studies*, Vol 27 no 1 (2000): 49-68; Christopher Bolton, "The Mecha's Blind Spot: Patlabor 2 and the Phenomenology of Anime" in *Robot Ghosts and Wired Dreams: Japanese Science Fiction from Origins to Anime*, Ed. Christpher Bolton, Istvan Csicsery-Ronay Jr., and Takayuki Tatsumi (University of Minnesota Press, 2007), 123-47.

[64] Smith, "The Concept of Sense".

[65] Richter, *The Politics of Orientation, 4.* Richter also discusses epistemic constituents, which I take to be the "tertiary arrangements" discussed by Smith.

[66] Bryant, *Onto-Cartography*, 16.

[67] Ibid.

[68] Bryant, *Democracy of Objects*, 114.

[69] Kleinherenrbink, *Against Continuity*, 87.

[70] Lamarre, *The Anime Ecology.*

[71] Bryant, *Onto-Cartography*, 186-88.

[72] Bryant, "Object", 255.

[73] Bryant, *Onto-Cartography*, 198. I do not discuss dark objects here, those objects 'are so thoroughly withdrawn from our perceptions that they don't manifest themselves or seem to appear at all' as they do not seem to be present within Takahashi's anime. Their existence for Bryant is 'a purely speculative question', so I leave this aside for the sake of economy. See Bryant, "Object", 256. I also do not discuss black holes, as this seems to be a complex case where gravitational change seems to be near impossible. The question is simply how nearly impossible it is to change a black hole's gravitational relations. I leave this problem aside for now.

[74] Bryant, "Object", 256.

[75] Ibid.

[76] Ibid.

[77] Ibid. See also Bryant, *Onto-Cartography*, 208.

[78] Bryant, "Object", 257.

[79] Ibid.

[80] Deleuze and Guattari, *A Thousand Plateaus*, 351-423.

[81] Tosca and Kastrup, *Transmedial Worlds.*

[82] Graham Harman, *Art and Objects* (Polity, Press, Cambridge, 2020), 69-73. Hamilton introduces the "reading machine" in Chapter 5. See Grant, *Failing Machines*, 86-103. I agree with much in *Failing Machines*, my critiques here are additive to the project.

[83] Grant, *Failing Machines*, 111-112.

[84] Ibid, 112.

[85] Ibid, 113.

[86] Ibid.