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Montage after Navigation

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Abstract: The concept of navigation, introduced by Harun Farocki in his lecture Computer Animation Rules, explains the digital/algorithmic choreography of consumer behaviour through media platforms. This article contends navigational connectivity is a cybernetic operating structure for capital, which mediates the techno-geographic milieu of the capitalocene and is a key factor in the present destabilization of earth systems. There is, therefore, an urgent need to formulate ways of disarticulating navigational processes to fragment global capitalism and re-establish a diversification of local cultures. We undertake this task in tandem with the critical project of cosmotechnics developed by Yuk Hui and examine how an ontological disagreement between Gilles Deleuze and Quentin Meillassoux shapes Hui's analysis of cybernetics. Contra Meillassoux's correlationist reading, we argue Deleuze foregrounds machinic becoming through a primal contact with the virtual and claim practices of montage are machines of analysis that dismantle navigational connections and establish alternate patterns of feedback estranged from the capitalist process. To this end, we examine models of montage developed by Jacques Rancière, Farocki and Deleuze, and consider the potential of such models to function as machines of navigational disarticulation and cultural pluralization. This approach reframes user engagement as modulative becoming in a manner that introduces new techno-cultural-geographic conjunctions appropriate to cosmotechnics.

Keywords: capitalocene; Deleuze and Guattari; Farocki; Meillassoux; navigation; montage; Rancière

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1. Erysichthon

> 'Twas night, when entring Erisichthon's room,
> Dissolv'd in sleep, and thoughtless of his doom,
> She clasp'd his limbs, by impious labour tir'd,
> With battish wings, but her whole self inspir'd;
> Breath'd on his throat and chest a tainting blast,
> And in his veins infus'd an endless fast.
>
> (Ovid 1727, Book of the Eighth)

In book VIII of Ovid's *Metamorphoses* Demeter punishes Erysichthon for destroying a sacred woodland by requesting Famine visit an insatiable hunger upon the nobleman. This leads him to expend all his resources and sell his daughter Maestra to attain and consume food. Exhausted and penniless, he ultimately eats his own body. This article reads the myth of Erysichthon in a parallel relation to the capitalocene—a cycle of value extraction that necessitates endless growth, an ever-expanding production base, resource depletion, and the unbalancing of earth systems. This relation is demonstrated in an edition of *Metamorphoses* published in Venice in 1497 at Lucantonio Giunti's printing works. The breath of Famine that accelerates Erysichthon's hunger into an insatiable and destructive force is represented by a series of lines connecting the mouths of Famine and Erysichthon (Figure 1). These lines are a diagram of desiring-production, a respiratory circuit formed between the exhaling, transformative figure of Famine and an inhaling, transformed Erysichthon, whose body is portrayed in the poem as an over-coded system.

Considered at a planetary scale, the diagram also articulates the modulative dynamic between capitalist production, navigational infrastructure and dividuated subject that constitutes our techno-geographic milieu. Navigation, which optimises capitalist exchange by constructing innumerable pathways for consumer movements through digital fields, is considered in this article as an accelerant of surplus extraction and climate change. Our aim is to think with histories of montage how this navigational milieu might be reconstructed outside of or against the operations of the capitalocene to initiate cultural, technological and geographic becomings that Yuk Hui has called cosmotechnics (Hui 2020).

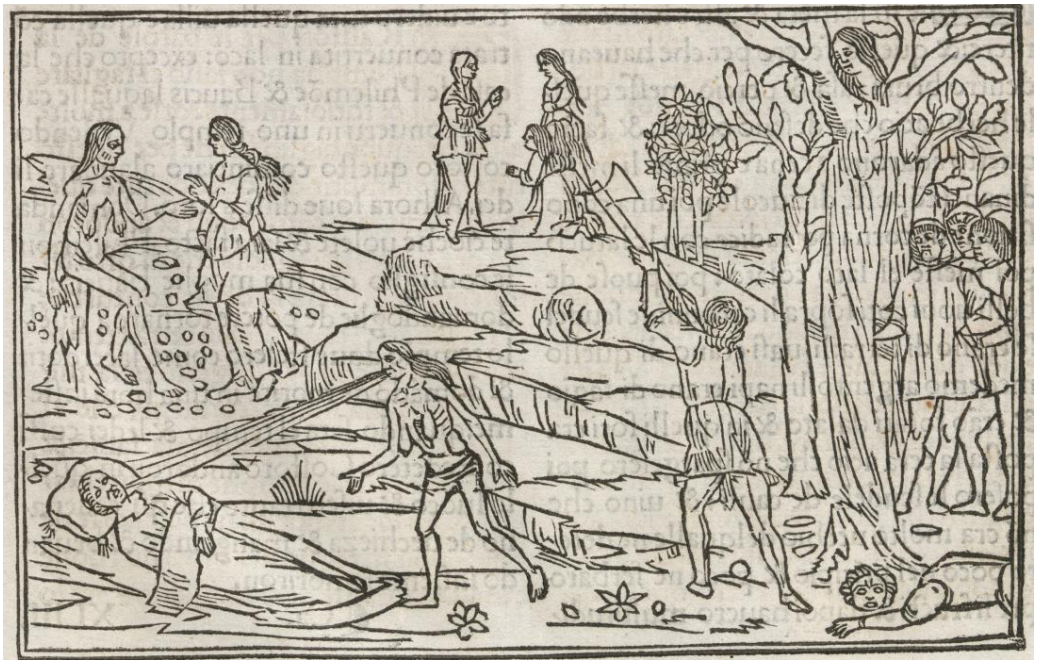

Figure 1. Erysichthon Falls Ceres Holy Oak and is Punished with an Insatiable Hunger, In: Ovidius Naso, Publius/Bonsignori, Giovanni: "Ovidio methamorphoseos vulgare", Venice 1501, Book VIII, p. 69 verso, 1501, Woodcut, 92 × 145 mm (image) 288 × 200 mm (sheet). © Hamburger Kunsthalle/bpk, photo: Oliver Schweers.

2. Navigation

Navigation is a digital infrastructure that algorithmically choreographs frames of interpretation around consumers, guiding their behaviour, predicting their preferences, and optimising outcomes (Rouvroy 2013). In these terms, navigation allows innovation and knowledge exchange to augment the valorisation of capital (Moulier-Boutang 2011), realises bio-info production integrating human wet wear with digital communication networks (Berardi and Goddard 2007), and focuses the attention of producers and consumers in such a way that attention itself becomes a source of surplus extraction (Beck and Davenport 2001). Kitchin and Dodge explain how such coded objects and infrastructures capture everyday actions as an accumulation of digital traces utilised as associated algorithmic and analytic logics (Kitchin and Dodge 2011). Navigation thus extracts data patterns, constructs digital pathways, and channels user agency. This has led Haggerty and Ericson to discuss the production of data doubles (Haggerty and Ericson 2003) and Pasquinelli to consider how machine learning can imitate human actions (Pasquinelli 2019). Hito Steyerl extends this analysis to consider how a user's online activity is correlated through predictive algorithms to restricted and ideological parameters. She concludes, "Games are new technologies of government, of trying to compute and manage populations" (Steyerl 2020). Navigational research also promises future applications in the form of brain-computer interfaces termed Neural Dust and Google DeepMind, which Warren Neidich identifies with the optimisation of cognitive capitalism (Neidich 2020). Navigational connectivity has become a cybernetic

operating structure for capital, making it a culturally homogenising force. Hui explains, "Huge varieties of knowledge and knowhow are replaced by the domination of a global *episteme* imposed by capitalism" (Hui 2016, p. 301). By formulating user pathways through data management and the predictive modelling of user identities, navigation has re-aligned the social to harness its subjectivizing functions more precisely to the logic of consumerism. Regarding this development, Hui contends, "This technological becoming of the world has to be challenged in order to interrupt its hegemonic synchronization and produce another mode of co-existence" (Ibid). Achieving this end requires the re-routing and disruption of navigational processes.

3. Capitalocene

Navigation optimises mercantile, financial and industrial capital towards the aim of producing a compounding rate surplus extraction (Moore 2017). Prioritising the "metamorphosis of fossil fuels into CO_2", Andreas Malm simply calls this process fossil capital (Malm 2016, p. 290). The capitalocene is therefore a complex of socio-technological development Gilbert Simondon has described as a technical milieu. This structure's "mode of presence" is, according to Louis Althusser, "in its effects" and can be characterised by the term darstellung, meaning staging and theatricality (Althusser et al. [1965] 2015, p. 344). We identify the capitalocene with a scenography of sedimented yet dynamic materialities comprising "non-homogeneous set[s]", or assemblages, whose chains of association are supplemented by navigational infrastructure and identifiable from the subject positions these processes generate (Deleuze and Parnet 2007, p. 52). Deleuze and Guattari name two functions—placing value in circulation to extract a surplus and de-territorialising at points of breakdown. These necessitate the reduction of concrete values to a computational operating language, decoding flows and disassociating them from alliances beyond capitalism's internal operations (Deleuze and Guattari [1972] 1994).

Yuk Hui articulates the structural dynamic of fossil capital, as an inter-relation of machine and ecology based on the historic development of cybernetics, whose recursive logic now underpins digital infrastructure (Hui 2020). The significance of the cybernetic to recent techno-cultural development is demonstrated in Norbert Weiner's claim that "messages between man and machines, between machines and man, and between machine and machine, are destined to play an ever-increasing part" (Weiner 1989, p. 16). This destiny is, in fact, the mutual reinforcement of an outlook conditioned by cybernetic thinking and the production of digitality as the axiomatic of the capitalist process. In short, when the world is reduced to information and feedback, all systems can be subjected to statistical modelling. Cybernetics, as the command structure of navigation, is an outcome of this history and demonstrates how interpretation informs the production of social forms. This reciprocal anchorage of ideology and infrastructure mutually reinforces the trajectory of the capitalocene, requiring a force of disarticulation to de-rail its processes.

Such a force is already present within the compressions of difference enacted by navigational modelling. Thus, though the capitalocene aims at techno-economic homogenisation and synchronisation of capitalist productivity around a global time-axis (Hui 2016, p. 282), it remains a complex of inter-articulated processes that subsumes diverse cosmologies, whose specificity can be rearticulated. Considering the modes of alterity subsumed by the capitalocene takes us outside of the safety of correlationism, which Quentin Meillassoux defines as "the idea according to which we only ever have access to the correlation between thinking and being" (Meillassoux 2008, p. 5). Doing this allows us to grasp how analytic configurations of specific cosmologies co-exist and complement each other. Hui situates cosmologies, including the Capitalocene itself, against the backdrop of Meillassoux's principle of factiality—the idea of a reality that is independent of thought (Meillassoux 2008, pp. 50–81). This backdrop is an absolute that resists correlationist thought, which Meillassoux claims can no longer appear as "the index of a limit of thought—of thought's incapacity to discover the ultimate reason of things—but the index of thought's capacity to discover the absolute irreason of all things" (Meillassoux cited by Hui 2019, p. 36). Meillassoux identifies this absolute as hyper-chaos "for which nothing is or would seem

to be, impossible, not even the unthinkable" (Meillassoux 2008, p. 64). As a result, the limits of correlationism reveal the necessity of contingency, which means, according to Hui, any one universalising system/standpoint cannot hold and will ultimately fragment against the force of alternatives. Hui draws two further claims: (1) absolute contingency affirms the plurality of systems/standpoints; (2) fragmentation (as we see in the example of the capitalocene) initiates a return to cosmologies specific to localities. In summary, within the capitalocene forces of techno-geographic homogenisation co-exist with forces of heterogenous fragmentation and localisation against the backdrop of an unknowable absolute.

To lay the ground for the disruptive operations of montage within navigational infrastructure, we will now map some key processes informing its political, economic and ecological dynamics, and foreground the mutability of this map viewed from the differing standpoints it entails.

3.1. Subjectivity and Politics

Navigation 'frees' libidinal investment within a computational flux of exchange relations. Subjectivities are captured within a formative series of associations Deleuze and Guattari describes as desiring-recording (Deleuze and Guattari [1972] 1994, p. 72). Just as "Libido as energy of selection [. . .] is converted into [the] phallus as detached object", money serves as detached object, becoming axiomatic and triangulating links across the entire chain as a general equivalent (Ibid, p. 73). Deleuze theorises this modulative dynamic in Postscript to Societies of Control (Deleuze 1992) as a metastable configuration of productive forces (training, competition, incentivisation) that treats subjects as dividuals defined by data and performance (1992). Capital as axiomatic grafts onto a digital/cybernetic flux shaping 'hyper-subjects', Rouvroy argues, around parameters of 'self-control', 'self-entrepreneurship' and 'self-evaluation' (Rouvroy 2013, p. 153). For Rancière, this is the subject of consensus, constituted within the capitalocene as a discursive field as follows: a mise-en-scène he terms the distribution of the sensible—a "system of self-evident facts [. . .] that discloses the existence of something in common" (Rancière 2004b, p. 12). Rancière considers consensus to be "the reduction of the people to the sum of the parts of the social body", (Rancière 2004a, p. 111). This is representative of the dominance of post-politics, a collaborative policing of the social order that excludes "modes of dissensual subjectification" (Rancière 2015, p. 51) upon whom politics as "an operator of difference" depends (Rancière 2011, p. 2). This is affirmed by Bonneuil and Fressoz, who emphasise that the history of energy is not simply driven by technical processes or resource scarcity, rather "[it] is above all one of political [and] ideological [. . .] choices" (Bonneuil and Fressoz 2017, p. 107).

3.2. Finance and Industry

Navigation similarly grafts industry onto a flux of digital exchange relations. The breakdown of the Bretton Woods system in 1971 has accelerated the dependency of industry upon finance, making credit a driving force of industrial expansion. This updates Marx's insight that "[T]he circulation of money as capital [. . .] takes place only within this constantly renewed movement" (Marx [1867] 1976, p. 253). The necessity of surplus extraction forces a constantly expanding productive base, which in the context of resource scarcity, is increasingly displaced onto credit. Yet, the financer also requires a return on their investment, creating a downward pressure on industrial expansion—between 2017 and 2018 China made more cement than the United States did throughout the 20th century (Smil 2020). This creates a chimera of compound growth within the financial sector, whose instability was demonstrated by the 2008 Credit Crunch.

3.3. Ecology and Technology

These semiotic operations of navigation—industrial, financial and subjectifying—are understood by Hui to function within a recursive dynamic with ecological processes (Hui 2019). This challenges Heidegger's characterisation of capitalism as enframing nature (Heidegger and Krell 1993) and is evident in the example of the guimbal turbine, given by Gilbert Simondon,

which is both heated and cooled by the river current it converts into electricity (Simondon [1958] 2017). Another example, cited by Guattari, is an experiment by Alain Bombard in which an octopus native to the polluted waters of Marseille harbour died when it was placed in a tank of clean salt water (Guattari 2000). Malm identifies this recursive dynamic as the operating structure of fossil economies, which he describes as 'socio-ecological structure[s]' (Malm 2016, p. 12). From this viewpoint, the capitalocene manifests as an accumulative process Deleuze and Guattari identify as stratification that re-codes ecological processes. They identify the following two articulations: sedimentary territorialisation consisting of deductions from particle flows that impose a statistical order of connections and successions, and structural stabilisation, in which such compounds are actualised (Deleuze and Guattari [1988] 2007, p. 46). Strata continually enfold, rupture and abut connecting different timeframes, "creating relative fields of reterritorialization" (p. 62). In the context of industry, an example is the machinic association between coal and steam engine that creates the technological basis for subsequent dieselisation. Ecology and technology recursively stratify untimely and discontinuous series informing the mise-en-scene of the sensible forced to conform to chronometric regulation—"acting counter to our time and thereby acting on our time" (Nietzsche [1873] 2007, p. 60).

Navigation, therefore, facilitates modulation as a cybernetic phase of capitalism. Subjectivity, politics, industry, finance, technology and ecology and subjectivity are grafted onto the digital processes of navigation as the operating language of capital. These inter-articulated cybernetic machines bring differing priorities into play, deforming the capitalocene's appearance and indicating the potential for fragmentation sustained by the differing cosmologies it homogenises.

4. Cosmotechnics

Cosmotechnics positively values contingency to fragment and pluralise the capitalocene and bring forth the interaction of specific cosmologies. Hui explains it as "the necessity to fragment the system and therefore sets limit to any single all-encompassing system" (Hui 2019, p. 38) and develops his thesis through a critical analysis of three models of the inhuman. The first model is a de-humanising tendency within 'progress' Hui seeks to evade, whereby cybernetic organology—the inter-dependent development of human action and machine processes (Ibid, pp. 248–50)—results in a planetary field of technologised reason that Pierre Teilhard de Chardin describes as the Noosphere (Teilhard de Chardin 2004). The second model is the inhuman as an absolute contingency, or non-human materiality as posited by Meillassoux. What we experience as structural invariants (the laws by which we understand the universe to function), Meillassoux argues, are facts that we cannot ground in necessity, yet we can grasp absolute contingency as an object of knowledge from this insight (Meillassoux 2008, p. 39). Hui notes that Meillassoux values non-commensurable difference in opposition to a reading of Deleuzian material flux as constituted by differences in degree appropriated by the thinking subject (Hui 2019, pp. 258–59). On the contrary, on the first page of *Anti-Oedipus,* Deleuze and Guattari claim that "Everywhere it is machines" narrating a universe of enfolded productive materialities, or a multiplicity of cuts resonating within a virtual flux (Deleuze and Guattari [1972] 1994, p. 1). The subject is one such machine, whose thought, Deleuze claims, awakens involuntarily in "the claws of a strangeness" (Deleuze [1968] 1994, p. 139). This third model of the inhuman is theorised by Simondon through the notion of individuation—a metastable process that composes and decomposes components according to internal intensities and affective encounters. Simondon compares this process to the formation of a crystal seed when resonances between disparate intensities in its milieu enter a pre-individual synthesis, which Deleuze and Guattari refer to as a haecceity. Simondon terms this process "problematic disparation", an "amplificative operation" that triangulates discontinuous series (Simondon [1989] 2009, p. 206). Simondon explains, "[T]he individual is to be understood as having a relative reality, occupying only a certain phase of the whole being in question—a phase that therefore carries the implication of a preceding pre-individual state" (Ibid, p. 6). Cosmotechnics

develops out of the critical interaction of these three models to fragment and pluralise the monstrous cybernetic organology of the capitalocene, "to conceive the inhuman as a possibility that transcends the system" (Hui 2019, p. 263). Firstly, Meillassoux's hyper-chaos theorises absolute externality against which human certainties break up but offers a meagre facility to re-activate thought (Hui 2019, p. 259). Alternately, the capitalocene compulsively reactivates the same impulse in a multitude of contexts. Finally, though Deleuze does not offer overarching theorization at an intellectual distance, as Meillassoux seeks, his proof comes by way of analysing the practice of disparative becoming, which amounts to a theory of productivity from which the problematic as a force of fragmentation and disparative pluralization stand as key terms for cosmotechnics.

In the subsequent analysis of montage and navigation, we articulate techniques of disparative becoming that montage can initiate through the disruption of digital pathways in the name of a pluralistic invention of new modes of action. Deleuze and Guattari underscore this intent when they state, "the people and the earth must be like vectors of a cosmos that carries them off; then the cosmos itself will be art" (Deleuze and Guattari [1988] 2007, p. 381). The creation of the new within the recurrent demands a disarticulating synthesis of cultural/technical becoming. According to Pieter Lemmens, cosmotechnics underlines that "technology is not a universal, transcultural category but essentially dependent in its unfolding on a non-technical cosmological factor that is culture-specific" (Lemmens 2020, p. 5). Accordingly, action within differing cosmologies mobilises specific cultural/technological assemblages so that the question of locality couples with senses of *techno-diversity* in ways that offer a conceptual apparatus through which the recursive and cybernetic structure of technical systems can transmutate (Hui 2020). To unfold this possibility, we sustain a dialogue between Deleuzian, Rancièrian and Farockian constructions of montage. These distinct analyses, shaped through mutual critique, each offer a distinct service to the cosmotechnical project by elaborating a distinct mode of fragmentation/pluralisation. So, whilst Deleuze analyses the effect of montage upon the genetic conditions of thought, Farocki views montage as a technique of ideological critique, and Rancière claims montage invokes equal rights of interpretation, nonetheless these positions resonate as a set of analytic machines. What we mean here is that each machine supports the others in their distinctive contribution.

5. The Movement-Image

Let us set up this resonance by examining the centrality of Deleuze and Rancière's analysis of cinema to Farocki's critical introduction of navigation in his 2014 lecture Computer Animation Rules. First, Farocki employs Deleuze's concept of the action-image to explain the integration of navigation's digital algorithmic processes with users' sensory-motor actions (Deleuze [1983] 2005, p. 159). Farocki compares navigation to the structured space of the videogame by referring to Galloway's claim that the successive continuity of digital navigation exemplifies Deleuze's concept of the action-image (Galloway 2006). Here, navigation is disclosed from a first-person viewpoint, which Farocki compares to the function of the Steadicam shot in cinema (Farocki 2014). Second, Farocki's dependence upon the language of cinema to explain digitality demonstrates the necessity of a pre-existing analytic framework for his arguments. This point is underscored by Jacques Rancière's critique of Deleuze's own dependence upon histories of theatre and literature in his Cinema One (1983) or Cinema Two (1985) to "extract, after the fact, the original essence of the cinematographic art from the plots the art of cinema shares with the old art of telling stories" (Rancière 2006, p. 6). Farocki explains the emergence of navigation and its non-indexical constructive function by synthesising the Deleuzian genetic analysis of cinema, and historic explanations Rancière claims establish the terms of analysis. Zarzosa identifies two forms of co-implication, between "a becoming-image of the fable and a becoming-fable of the image" (Zarzosa 2011, p. 58). Analytic modes graft onto new technologies, establishing a resonance between the end of the explanation and the explanatory means available.

We extrapolate from this observation to an example of a historic montage and claim it sets up the same rhythmical intersection of analytic machines. Farocki's 1990 film *Leben: BRD—How to live in the Federal Republic of Germany* comprises different types of everyday testing/rehearsal/training within German society cut into series and interrupted by mechanical tests of design objects. On the cut and series as production techniques, Farocki's aim is for "another image" so that which "exists between the images becomes visible" (Farocki cited in Elsaesser 2004, p. 24). This could be an Eisensteinian conception of the interpretative gap from which a third thematic meaning follows—perhaps here, the idea that people are like machines. We could also extend this to consider the serialisation and recurrence as the metronomic rhythm of capitalist production or the fact that the social structure must reactivate and maintain itself each day. We might also interpret these recurring sequences in terms of Deleuze's model of the movement-image as destabilisations of the subjectivising dynamics of the capitalocene. Developing Henri Bergson's claim that "matter is an aggregate of images" (Bergson [1896] 1991, p. 9), Deleuze's movement-image is described by Anne Sauvagnargues as a "taxonomy of the cinema to correspond to the constitution of the subject" (Sauvagnargues 2016, p. 104). Deleuze articulates the following three stages: (a) a perception marking a formative moment of subtraction and selection within the universe; (b) an action enfolding sensory-motor possibilities as a zone of indetermination; (c) an affection unifying the sensory-motor arc as a point of coincidence between object perceived and acting subject. The movement-image is not simply a continuum; selection, enfolding and unifying constitute its structure as an interval. Viewed in these terms, Farocki's film maps oscillating patterns of subject formation through processes of testing, rehearsal and maintenance. The third belongs to a Rancièrian dialectic between fable and image that accentuates the gap in which selections, uses, and interpretations correspond to or contradict historically specific models of thought and action. In this analysis, the sequencing of cuts comprising Farocki's film sets up chains of interpretative pluralisation. For example, Rancière claims Vertov's *Man with a Movie Camera* can be read as a panoptic observation of events or a democratic connection of movements (Rancière 2014). Rancière re-positions montage as a catalyst so that Farocki's desire to locate "that which exists between the images" manifests as a socio-historical flux of interpretation (Farocki cited in Elsaesser 2004, p. 24). Rancière concludes each such appropriation must acknowledge that something else or more could be said or done and references a shot of a telephone exchange within Vertov's film, "[W]here operators do nothing but insert and remove jack plugs that complete communications independently of their own will" (Rancière 2014, p. 31).

The following three models emerge: Farocki identifies montage with an analysis of contradiction; Deleuze identifies proliferation and discontinuity with the breakdown of the sensory-motor circuit; Rancière posits an originary discontinuity between viewpoint and movement, "the delay or interval that makes it possible for the gaze to put a story to a face" (p. 31). In the service of cosmotechnics, the capacity for disarticulation inherent within each analytic machine is intensified by the necessity of its co-existence with the others (as each operates against the backdrop of an inhuman virtuality), bringing neurosis to bear upon user engagements to create new linkages of locality, culture and technology, or germinal cosmologies. Montage is re-imagined as a disruptive function within the monomania of the capitalist process against a background of contingency.

6. The Time-Image

We conceive montage as a general stochastic opening and a catalyst of modulative individuation. This follows the contrast Hui draws between modulation = control and the possibility of modulation = individuation as a social process (Hui 2015, p. 88). Like the scores of Iannis Xenakis that show points of connection unfolding within endlessly varying arrangements, we conceive reception as disparative action that initiates interstitial syntheses resulting in new taxonomical configurations that pluralise and fragment feedback mechanisms as cosmotechnical becoming. Deleuze identifies this generative

process of naming and arranging series as a "table of montage [. . .] conceived as a table of categories" (Deleuze [1985] 2010, p. 178). Deleuze claims Jean-Luc Godard's film *Slow Motion* demonstrates how montage can initiate a movement from problematic (conditions set for unknown elements) to disparative synthesis (the fixing of elements within categorisations because it tests a "montage of categories, which each new time, corresponds to a cutting of categories"). So, in *Slow Motion*, Goddard tests four categories "'The Imaginary', 'Fear', 'Business', 'Music'", and this brings a new problem into view: "What is passion?" (Ibid, p. 179). Sauvagnargues explains how such a visual cutting together of ideas constitutes a mode of thought, as it "invents new categories, new ways of laying out lines of thought, and in doing so, changes the world" (Sauvagnargues 2016, p. 113). Such a process of disparative amplification disrupts the sensory-motor circuit producing an interplay between the actualised linkages of the capitalist assemblage and the virtual whole. A circuit or crystal-image develops, opening an intensive variation so that what is perceived within the interval now confronts a full potential or virtuality of what might be perceivable (Sauvagnargues 2016). The crystal brings forth the unevenness of times enfolded within the "present-time" of navigation as "an infinitely contracted past [. . .] constituted at the extreme point of the already-there" (Deleuze [1985] 2010, p. 96). The constituted is then shown as a split in time: "two dissymmetrical jets, one which makes all of the present pass-on, while the other preserves all the past" (Deleuze [1985] 2010, p. 79). The first is the selected actual, and the second is the virtual past preserved indiscernibly. Both reflect each other, bringing thought into an encounter with the unthought, inhuman, or differential whole from which any world at all is made and with which it is out of step. Thus the constituted comprises actualised configurations of strata or sheets of the past constantly refolded into the movement-image. Deleuze compares this process to a Boulanger Transformation, a mathematical process akin to kneading dough, whereby a square may be stretched into a rectangle, which is then folded to create a new square. The outcome is that two initially related sites can be separated and enfolded within different layers. (Deleuze [1985] 2010). The movement-image enfolds and disassociates strata within its process, and the time-image disarticulates stratified configurations initiating an encounter with the differential whole. A dynamic of breaking open and putting back together becomes central to montage, which any of the models considered above can perform, setting modes of desiring to record out of phase and establishing a mechanism of re-convergence.

Disarticulating the movement-image to produce an encounter with the crystal-image becomes a central concern for montage, which Deleuze theorises in reference to the work of Alain Resnais. In the 1961 film *Last Year in Marienbad* made with Alain Robbe-Grillet, sequence shots convey a couple's isolated recollections that disconnect the present of past, present of present and present of future, making the continuity of succession impossible (Ibid, p. 113). Similarly, in Resnais's 1968 film *Je T'aime, Je T'aime*, the present of recollection becomes muddled in a time travel experiment and is replaced by a recollection of having felt the love that cuts across sheets of the past in the form of discontinuous montages (Ibid). Or, as a cinematic example of the Boulanger Transformation, Resnais's 1956 *Bibliothèque Nationale* features tracking shots of archived books and artefacts that survey different strata configured within the museum's catalogue (Ibid, p. 117). Disconnecting identification, the discontinuous appearance of themes, and surveying enfolded strata can each be used to produce crystals of the modulative dynamics of analogue and digital processes. Each example approaches the time-image by disarticulating the movement-image.

These procedures are extended in montage after navigation, which starts with disarticulated crystals estranged from connections forced by navigation. It posits the crystal-image as an end and addresses the receiver with unfolding virtualities and statistical potentialities. By laying out dissected materialities, this new work reverses the "grafting of code onto an analogue flux" presenting an array of machines in formative resonances and reframes the receiver as a participant who coordinates an alternate productivity (Hui 2015, p. 78). This condition is anticipated in Harun Farocki's 2006 installation *Worker's Leaving the Factory in Eleven Decades*, which comprises twelve cuboid monitors laid out in a line across the

gallery floor, looping twelve sequences of the film. The installation physicalises the film strip aligning fragments that loop footage of workers leaving factories in different decades, breaking down continuity and leaving viewers to establish associations and contrasts. Such works extend Eisenstein's conception of cinema as part of the sphere of production, literally " . . . a tractor ploughing over the audience's psyche" (Eisenstein 2016, p. 62), and propose montage as a cutting-apart that leaves navigational pathways "torn and reversed", situating consumers as producers of new disparative syntheses. (Deleuze and Guattari [1988] 2007, p. 13). This is a common feature of the installations of Lara Almarcegui, Adrián Villar Rojas, and Danh Võ, whose shared interest in ruins allows them to articulate the developmental reciprocity of strata Deleuze and Guattari have termed the mechanosphere as follows: "a semiotic fragment rubs shoulders with a chemical interaction; an electron crashes into a language . . . " (Deleuze and Guattari [1988] 2007, p. 77). For example, the installations of Almarcegui reverse urban construction and present a taxonomy of aggregates from urban development projects in intersecting piles. In agreement with Rancière's analysis of a scene of arable labour in Eisenstein's 1929 film *The General Line*, these works value upheaval. In the film, we see a tractor break down and a farmer sacrifices her skirt as a temporary fix. Clothing is re-functioned, social mores are disrupted and a 'desynchronisation of times' is produced (Rancière 2022, p. 104).

Disarticulation, upheaval, desynchronisation—regarding these matters Vietnamese/Danish artist Danh Võ simply says, "art should estrange" (Bagheshirin 2020). The artist's 2020 installation *Chicxulub* at White Cube Bermondsey in London addresses the concept of home as problematic through a layout of personal, religious, political, and ecological objects. Fragments resonate across cultural histories (including the reference to the Cretaceous–Paleogene extinction in the exhibition's title), establishing reception as a rhizomatic process of connecting.

> Front yard—a wooden pavilion provides seating amongst plant life/cardboard sheets taped on the glass front doors block exterior light.
>
> Front gallery—wood burning stoves punctuate the space/a vitrine contains a statue of Mary bearing a nasturtium vine upon a Roman axe head/boxes bearing brand logos painted in gold leaf contain sculptural fragments/paper lighting panels referencing Isamu Noguchi illuminate the gallery.
>
> Middle gallery—a dying apple tree is scaffolded with timber/a sculpture of Christ's torso hangs above a set of doors.
>
> Rear gallery—a stained-glass window partially covers the entrance/plants grow under U.V. lights on the floor/a sculpture of a torso is lit by U.V. atop a vitrine and a wax cast of the artist's lover's feet hang inside/fragments of religious architecture cover half of the rear wall/a woodpile with inset metal stars resembling an American flag covers the other half (the wood in the pile fires the stoves and exhausts on the day of the 2020 American Presidential election, leaving metal stars on the floor).

American neo-colonialism, Vo's own Vietnamese Christian background, plant growth and hybridisation, different beginnings and different endings and the fragile nature of community oscillate across processes and connections established by this exhibition. Vo invites audience members to engage feedback patterns across the technology–environment complex as crystals of time, re-routing chains of association and establishing the following new processes: dissection and lay out emerge as a rhizomatic method.

7. Maestra

Such heterogeneous presentations situate audience members as agents of disparative production, reconfiguring the ploughed strata of the capitalocene. Put differently, the power to disengage surplus extraction as axiom lies with the people as workers within the navigational flux, who take action beyond resource extraction, energy depletion and ecological destabilisation conceivable. Montage establishes this process by setting analytic machines

in resonance (Deleuzian breakdown of genetic conditions of thought, Farockian ideological critique and Rancièrian dialectic of fable and image) to serve the ends of fragmentation and pluralization characteristic of cosmotechnics. These actions disengage the sensory-motor circuit, open a state of intensive variation or crystal image, and bring forth the unevenness of times, which in the context of contemporary art Danh Võ terms estrangement. We identify this model of Simondonian/Deleuzian modulation = individuation as a social process with Maestra, the daughter of Erysichthon. Maestra possessed an ability to shape-shift that Erysichthon exploited. He sold her into enslavement on the assumption she would be able to escape and then repeated the process when she did. In an etching by Antonio Tempesta from a 1606 edition of Ovid's *Metamorphoses*, we see Erysichthon's pointed finger commanding his daughter (Figure 2). One day she faithfully returned to find her father consuming his own flesh, at which point she took on the form of a hind and left. In a similar manner, living on Earth means unlearning the imperatives of control society, breaking with navigational techno-economic homogenisation, and embracing cosmotechnical becoming as the end of modulation.

Figure 2. Antonio Tempesta, Plate 81: Erysichthon Selling his Daughter (Diversas induta Mitra diversis divenditur), from Ovid's 'Metamorphoses' 1606, Etching, Dimensions: 103 × 116 mm). Credit: The Elisha Whittelsey Collection, The Elisha Whittelsey Fund 1951.

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