Ecocritique as Transnational Commons
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ABSTRACT: The term 'transnational' can be read in two simultaneous dimensions: as ontological description of a primordially queer birthing (*trans + natio*) and as a trajectory of practice engaging with the historical actuality of borders. Ecocritique is centrally transnational in both senses, and ecomedia are privileged vehicles for conflictual practices of friction and suture acting along the line of alienation dividing and binding the two dimensions. This is a fundamental fracture between those who govern – some but only some humans – and those who in varying degrees or absolutely are ruled with limited access or none to the work of ruling. The paper proposes an ecocritical aesthetic politics operating through mediation and communication to produce a commons engaging excluded ecologies and technologies in the co-production of a new political space.

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Projection and its governance

Perhaps the mid-1980s were the last decade of the old-school projectionist, still working on changeovers between two projectors before the advent of cakestands (large flat spooloing systems that got rid of the need for twin projectors) and clockwork and early electronic controls for multiscreen projection rooms. There are still perfectionists in the trade, and work to do in the projection booth. The old-school projectionist would buy a set of standard steel aperture plates cut to the precise ratio of Academy Standard, 1.66:1 and 1.88:1 Widescreen, Cinemascope and the obscurer variants, but each would be filed out of its mathematical correctness to match the specific rake of the projectors, the angle of incidence of their rays on the screen. No doubt the best still do, but in many cinemas the tabs (the curtains at each side of the screen) often show where excess light from the keystone effect, that makes the slanted image wider at the bottom than the top, bounces back from the fabric, evidence of an off-the-shelf rather than a building-specific plate being used. The goal of cinema projection has always been a standard screening experience – the term 'Academy Standard' is clear on that – but the standard had to be achieved by accommodating local conditions. The standardisation format delivered in DCPs (digital content packages, hard drives pre-loaded with the film in the correct ratio and illumination) make this kind of local specificity harder and harder to deliver.

In the old days, films from Hong Kong would arrive on ten-minute reels, much smaller than the twenty-minute reels that UK distributors used. These short reels required change-overs between two projectors, and the most professional presentation meant making sure the second machine was ready as the first reached the end of a reel. Projectionists watched for cue-dots, marks in the lower right hand corner of the frame, that told them when to start the motor, light the lamp and swap shutters between two projectors. The ends of reels were always the ones most liable to be damaged, and though there were lengths of black or clear leader to protect them from the worst effects of flapping around the slowing spin of the lower take-up reel, the chance of splashing into the sump where spare oil gathered, or picking up scratches and tears from dust and debris on the projection booth floor meant that, as the print aged, leaders got shorter, and the risk of damage to the image frames became greater, so that cue dots, in very old prints, had to be re-marked on new frames. Each print gradually acquired a host of such marks of wear, and each became a unique artefact (Fossati 2009, Usai 2000). We believe that this is no longer the case with DCPs. Bitrot, the phenomenon of degeneration in digital files, however, proves us wrong. Celluloid safety film is still the archival medium of choice, and magnetic and optical media notoriously unstable; but archivists know that

there is no such thing as an identical copy even of celluloid. Each film has its own biography etched on its scratched emulsion. Each projector has its own idiosyncratically worn cogs pulling at the perforations. Historically, the local site of projection was a unique place where the final acts regulating films' circulation happened, and left their marks on the films that passed through them. DCPs are intended to be immune to the local. They embody, in far more rigid form, the 1930s' impetus towards a standard product and a standard experience.

Standards are intended to stabilise an industry. Academy Standard came in during the destabilising introduction of sound, which made the previously dominant ratio unavailable because the optical soundtrack needed to fit into the width of the filmstrip. At first individual theatres came up with their own solutions, but between 1930 and 1932, the Society of Motion Picture Engineers and the Academy of Motion Picture Arts and Sciences established a single standard that all studios could use, one that remained stable for twenty years before competition with television encouraged the development of widescreen formats (Huhtamo 2004). Today's instability comes from the multiplicity of screens that films have to be able to fit, from vast outdoor and stadium LED screens to tiny backlit LCD handhelds. As we know from the history of domestic video formats, consumers do not always end up with the best possible delivery system (Lardner 1987). Much the same can be said of the variants on the MPEG standard all but hegemonic in today's market.

The issue I would like to address however is less the quality of end-user experience, and more the issue of governance. There is much to say on the detail of regulation (see for example deNardis 2012). In the discussion of transnational cinema, the issue is first and foremost one of political principle. Engineers take it as given that distribution and exhibition need to be standardised, and that this standardisation requires governance, a word of relatively recent currency denoting regulation effected by corporations, perhaps in consort with or consent from state or inter-state bodies, beside and beyond the role of government, responsible for state regulation of affairs. In the case of industry standards, governance requires the action of inter-corporate organisations like the Academy, the Societry of Motion Picture and Television Engineers (SMPTE) and the Motion Picture Expert Group that gives us the MPEG acronym. Bitter commercial rivals collude to establish the common ground where their competition can be played. Governments, elected or otherwise, academics and consumers rarely intrude into the technical congresses where engineers hammer out standards. If it is the case that media have powers to shape and constrain perception, then the democratic deficit in technical media specification-setting is of considerable significance. It is not only non-expert humans who are uninvited, deemed unconcerned and unaccounted for in such discussions.

Stewardship and ecocritique

Cutting to the chase,– an appropriately cinematic metaphor – only some humans make the decisions, but they are all humans. For all our efforts at ascribing agency to non-human actors, film technologies do not partake in discussions on which formats should become universal. If they did, depending on your persuasion, either there would be no universal standards, or the standards would always be the best available rather than the most profitable. Since neither of these is the case, we can take it that technologies are governed, but do not share in their own governance. The same is true of the raw materials used to make and run them, from metals and oils to hydro and fossil fuel energy. This exclusion is the site ecocritique takes off from.

Early cinema ecocriticism (Ingram 2000, Brereton 2005, Cubitt 2006, Murray and Heumann 2009, 2011) began from films (including animation and TV shows) with more or less manifest ecological motifs. The field expanded with several important anthologies (Rust et al 2012, Gustafsson and Kääpä 2013, von Mossner 2014, Narine 2015, MacKenzie and Stenport 2015, Holm and Taffel 2016) which included a groundswell of work beginning to unpack more complex relations between the physical attributes of audiovisual media and their formal and semantic properties (Maxwell and Miller 2012, Starosielski 2015, Brereton 2016, Starosielski and Walker 2016, Cubitt 2017, Fay 2018, Kaganovsky et al 2019, Vaughan 2019). The development can be seen broadly as a move from explicit to implicit ecological themes and from textual to infrastructural concerns, though neither the explicit nor the textual have been left behind. The importance of ecocritique for *Transnational Screens* is in tracking a theory (and increasingly a history) of moving image media that is properly transnational in the sense that it cannot be thought exclusively locally even though, as I hope to have shown in the nostalgic preamble, the local – and its erasures – remains vital, but precisely because it is where vaster forces, which appear abstract in their global state, are realised.

The Anthropocene is planetary. To call it 'global' aligns it with globalisation, which indeed can be taken as its historical origin (Malm 2016, Moore 2015); calling it 'international' is perhaps less useful, given the failure of nations and international bodies to have as much influence on climate as, for example, the nine companies in the 2018 top ten of the *Fortune* Global 500 whose main business is oil, energy and automotive. The planet names the scale and telos of the challenge. The question, for this journal especially, is whether the transnational is a medium in which either a better analysis of the challenge or a better response to it might become possible. From the Latin roots 'across' or 'beyond' and 'birth', we might re-construct the transnation on the principle that we are all born queer. The thought is a good one insofar as it recalls founding ecofeminist principles,

notably Val Plumwood's (1993) argument that the governing binaries of male/female, homo/hetero and brown/white can all be derived from the subject/object divide that split human from nature. That leaves us with the hypothesis that the queer transnation describes a primal world prior to that division, or perhaps an ontological description of an immanence which, however, as historical entities, we have no access to. The queer transnation in which humans and their ecologies are indistinguishable is affectively true, but historically, another organisation of life follows birth, even if it is not determined by it. The transnational screen belongs then to both worlds: the affective, immanent, queer, primordial zone we might call *mediation*, where action precedes being and mingling precedes termini; and the organised world of *communication*, where connections of the one and the other replace mutual mediation, the distinctions of one and other establishing the terms of separation, and separation drives the demand for (re)unification, where historical rather than ontological forces operate, and which, crucially for any political aesthetics like ecocritique, creates time as an orientation beyond the ontological flux.

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Belonging to two worlds establishes a principle we will need to think through in facing the challenge of governance. In that originary division, the human tears itself away from a world it then grasps as its object (an action re-enacted in 'taking' a photo and 'capturing' data). But that unilateral declaration of independence does not free us from biology or even the powers of the stars that shine on our births. Biology ties us to the planet and the planetary; astral alignment of sunlight, tides and cosmic radiation demonstrate that the planet is not bounded in the way the international or the global are, each tied to circumscribed aspects (political organisation of exclusive groups of humans in the one; organised extraction of wealth from human and natural resources in the other). If indeed ontogeny recapitulates phylogeny, then in birth, at birth, the planetary bios is unbounded, and living is not Being or beings but a practice, and – operating in the double sense of transnational as the traverse between primal transnation and transgression of historical nations' borders – a living cinema is an unbounded practice in a bounded world. Cinema is not environmental, because an environment only environs, only becomes exterior, because it is excluded; nor is it ontological, in Bazin's sense of the word, because it cannot settle for Being, but it is a practice, a temporal art, temporal becoming. And this is the case because a living cinema is a temporal and temporary, constantly reconstructed alliance between three alienated phyla: humans, nature and technology. This is the burthen of the term 'ecomedia'.

Of these three, only humans govern. Ecologies and technologies are governed. In a benevolent frame of mind, when they are not destroying the planet (and denying the planetary), humans offer to be stewards of nature, and sometimes even of technologies. As opposed to environmentalism, which

presumes the exclusion of the environing periphery from the environed centre, the distinguishing feature of ecocritique is that it no longer accepts the role of steward, precisely for the reasons outlined in the passages on governance and standardisation in the first section of this essay. Stewards say they are taking responsibility, but in assuming leadership, they are asserting power, and in the case of technologies, taking control. The aspiration of environmental stewardship is to achieve a similar level of control over an excluded and alienated externality, externalised in order to be controlled, at the same level of control as the governor of a cybernetic system.

As Mouffe (2005) and Rancière (1999) both note, politics occurs precisely at the point where the excluded demand a part in their own government. In the case of ecomedia, the exclusions come on two sides: the exclusion of machines from their own regulation, and of environments. In both cases, active agents are treated as assets. Standardisation is a mode of control whose origins lie in the structure of our oldest communication, language, where the word 'tree' foregathers hundreds of species and millions of unique exemplars, under a single word. Like Joyce's infant Stephen Dedalus deciding that, though God had different names in different languages, 'God's real name was God' (Joyce 1916: 60), natural languages became standards also in the sense of banners of nation, faith, culture and ethnicity, distinguishing their peculiar truths from the fallen tongues of their neighbours and all languages, natural and artificial, from the languageless world of absolute singularities. It is a mark of contemporary culture that, through its immense storage and analytical capacities, this shovelling of unique instances into linguistic or taxonomic categories is giving way to an insistence on the unique targetting of advertising on locatable individuals, and within those individuals to target specific behaviours, so realising the post-structuralist dream of a dissolved subjectivity beyond bourgeois individualism and the stricken ego. A new condition emerges, in which, while representative democracy now recognises every citizen and claims to represent her or him, each citizen is herself or himself a mere representation of a 'blooming, buzzing confusion' (James 1890) of behaviours. The diminishing coherence (bounded unity) of these clusters of actions, tendencies and emotional orientations demands representation; as it demands that we look after ourselves. It is a sign that human beings are themselves becoming environmental that we are each required to act as stewards of our bodies, careers and financial affairs. What humans are the environments of, what text we provide context for, is equally clear. The entity that stores and analyses, that in that sense 'knows' in quantities and levels of detail far beyond even the collaborative knowing of the institution of Science, is inhuman, though served by and in its way serving some few humans. We believed future cyborgs would look like Arnold Schwarzenegger: the actually existing corporate cyborg looks like Google, a vast agglomeration of computers and networks with a few human implants, fired by a single teleology: profit.

Individually, and even collectively, humans are no longer masters of a universe they hold at arms length. It is not that the universe has entered them, but that they have been ejected from their throne, to become raw material for data mining corporations. Just as factory discipline ensured the real subsumption of work under capital, so the contemporary operation of digital technologies ensures the real subsumption of consumption. It is important to understand the new exile of humans from their erstwhile place of exile in order to understand, as a priority, the new possibility for alliance beyond the limits of human-dominated government. From the perspective of the corporate cyborg, humans are indistinguishable from ore-bearing rocks or a fertile stretch of farmland. Data is data: it is stored and traded in exactly the same way whether it represents a tin of beans or a hit song from Beyoncé. Though we still experience the residue of an older exile, we also feel the emerging refuge we must now inhabit, and the friction between them is one of the factors in the global epidemic of mental anguish. The more we experience films on video platforms and in streaming media, the more film enters the affective minefield of the data economy.

We too are governed, and with varying but diminishing degrees of participation in our own governance. This makes us more and more like the previously excluded, externalised and environmentalised domains. The alliance is possible but fragile. The Anthropocene hypothesis points to the revenge of climate on those who wrecked it. The inundation of Mozambique in March of 2019 tells us that it is, as so often, the poor who pay the highest price (whenever a handful of the wealthy perish, as on the *Titanic*, their demise is fabled in song and story: not so the catastrophic mortality of the poor). But even those who serve the requirements of the corporate cyborg most faithfully, consume the most, and get to build their mansions on the highest ground, find their world shrinking as they elect security over risk, while those who consume least are the most consumed, and have the fewest imperatives to become stewards of anything bar their own survival. The concept of stewardship breaks down not because it is politically and ethically bankrupt but because the conditions that made it a viable political option no longer exist.

It is unnecessary to lecture film and screen scholars on the limits of representation. Photography and its descendants excel because their products are not categorial terms like 'tree' but proper nouns (or, if such a thing existed, proper gerunds): these six hundred year old yews with their uniquely tangled branches captured from this specific place, angle and distance in this unrepeatable light (Moon 2014). Whatever the photographer's intention, the photograph itself may, under certain circumstances, only state the bare fact of existence. Yet a fact is not what is the case but a statement about it; and a photograph of a unique tree at a unique moment is still a photograph (or video or

film sequence or audio recording), of a different form (flat, rectangular) and duration than the organism it pictures. Representation is not always less but it is always other than what it represents. When it is less, it is so in quite staggering degree: one MP in the UK Parliament on average 'represents' just shy of 100,000 people. If, like me, you find it hard to speak on behalf of even my closest family, friends or colleagues, the task of speaking for a hundred thousand strangers is surely impossible, even immoral, and yet it is the central organ of rule for, to be kind, a majority of the English-speaking readers of this article, and those for whom this is not the case often wish it were. Representation operates, politically and aesthetically, on the rationale that it is the least worst system, good enough or nearly, whether we speak of election by majority (leaving minorities in the cold) or compression-decompression algorithms like MPEG (creating hierarchies of high and low resolution and colour depth across frames and their succession). Representation is then not an all-or-nothing principle but a sliding scale or spectrum, where some are represented in far finer grain than others. And some never make it into the frame at all. The Universal Declaration of Human Rights is a statement not about all humans, but about the obligations of states to their citizens. A separate Declaration covers the rights of refugees, which is why governments decline whenever possible to call anyone a refugee. Migrants have no claims to rights if they are neither refugees nor citizens (Arendt 1978). Yet they must be governed. Following Rancière's (1999) line of argument, the governed who have no part in government constitute the front line where politics begins, and where existing administration of public affairs meets its most profoundly transformative challenge, in this case the very institution of the nation state challenged by non-citizens who demand a role in their own governing.

Exile from the ego is not the same as migration. It happens deep within the action of rights (consumer rights, property rights, rights to free speech) that are already embedded in processes of governance, even if differentially. The lessening of clarity in representation at the further, larger end of the spectrum (the least powerful, a majority, are the least represented) bleeds into that complete exclusion from representation that the migrant undergoes, but may trigger boundary wars (anti-migrant anger) as easily as solidarity, alas. The distinction between even partial representation and its absence remains obdurate. The case is similar at the boundaries between phyla. Where once the factory was an environment that certain humans had to inhabit, today the human population is an environment that machines inhabit; but machines have not been designed or trained to demand representation, but to represent, to be media of representation and thus of power and control. The exclusion of (some) humans from technology and technology from humans (except those who design and train them) appears definitive. Equally operative is the exclusion of environments from rule: we rule them, sometimes with a good will and ethical precepts, but we, humans, rule. Perhaps

we should demand more from those who claim to represent than from those they fail to speak for, but we rule over rivers, oceans, forests, and they have no part in our polity. It is of course absurd to think of trees voting, or coppices holding forth at council meetings. Absurd because, like the migrant vote, it cannot be thought within the existing administrative paradigm. And yet nature (to use that demeaning and abstract shorthand) not only speaks but howls, and our representatives affect not to hear it. There are, as they say, no votes in it. As if voting changed anything. It is in this context that we look to political aesthetics, especially the aesthetic politics of audiovisual media, to mediate the alienation of humans and their ecologies

Mouffe's fear is that where consensus rules, as it appeared to in the years leading up to the Global Financial Crisis of 2007-8, excluded voices move from assertion to violence. This is what we witness in the exclusion of 'nature' from politics: extreme weather events brought into being by the pressure built up under decades of deliberate ignorance. There is too the question of that other phylum excluded from politics but governed by it. Marx called machinery 'dead labour', the ossified form of the skills and knowledge proper to generations of working people. When I talked about this with Maori filmmaker Barry Barclay he observed that technology is where pakeha (Europeans) keep their ancestors. Anonymous and enslaved, constrained to an external teleology (as both Kant and Hegel describe the determining factor distinguishing machines from living creatures that contain in themselves their own purposes – respectively Kant 1952: §65 [§4],19-24 and Hegel 1969: 711-14 [§1543]), ancestral metalworking and logics persist in the black boxes under our fingertips. We regulate them, but we never ask them what they want. Fearing technology under these conditions is a wise precaution. The ancestors may be angry, or they may be mad. Nonetheless, they are our ancestors and we owe them, big time.

Nelson Guda's *Threshold* climate data sonification project consists, in part, of works like *34 Years of Global Temperature Change in 14 Seconds • For Orchestra and Piano*, where 'the piano notes are the annual temperature data from 1850 – 2015, the orchestra plays chords made of the minimum, mean and maximum temperatures for eight year intervals over that time period'. (https://nelsonguda.com/project/threshold/). Presuming that the data is sourced from a concatenation of physical events akin to the unique incidence of photographs (a thermometer in such and such a position in such and such a location) and that the piano and orchestra imply human musicians and a human transcribing the data into scores, the whole replayed via, in my case, embedded network files to play back in a room full of air, the phenomenon involves the three phyla in a single event (unique in itself because of the acoustic conditions of playback) then we have a system in operation of cooperation between ancestors, living humans and nature. Operation belongs

to the present, but co-operation also encompasses recording – of data and sounds – and action in the present that points towards how we might embrace ancestral voices, not speaking for them but creating conditions that allow them to sound in *this* moment, the only moment in which speech and action is possible. Even if Hegel and Kant were right to insist that machines are deprived of teleology, what has been most profoundly reft from technologies is an eschatology: not a plan for an ultimate goal but hope for a different future. Transnational ecomedia are recognisable where natural, technical and social phyla co-create.

Concepts of community

The purpose, thus, of a border-crossing transnational screen culture is to develop an aesthetic ecopolitics, and its method is to create a commons where the phyla co-operate. Aristotle's distinction serves well: ethics considers how I am to live well; politics asks how we are to live well. The fundamental political question is: who is this we? In Adorno's political ethics, a polity that allows even one person to suffer 'for the greater good' has betrayed its principle (Adorno 2000: 138ff.). The 'we' must be inclusive. Inclusion extends to migrants, prisoners, indigenous peoples, human victims of ecocide, the immiserated and oppressed and other humans excluded from happiness by majoritarian (representative) and thus consequentialist or utilitarian government. The un- or under-represented cannot be left behind. Ecopolitics extends this principle to the non-human victims of ecocide (there can be no happy state with an unhappy environment) and the non-human oppressed (there can be no utopias where our ancestors remain in chains). By the same principles, humans have no right to design utopia, just as the wealthy cannot design utopia for the poor. A designed future is always an extension of the present state of affairs, an attempt to extend control over future time. This is how debt operates, by spending tomorrow's money today, and how waste operates, by dumping excess product not only into remote sites but into the future. The task of ecocritical aesthetics is then not to produce utopias but to create a commons where the struggle over how *all of 'us'*, human and non-human, can be happy can take place

Language was not only a reaction to exile from primal mediation aimed at taking control over nature as object; it was also a symptom of that exile's instigation of the binary divisions between humans that Plumwood (1993) pinpointed. The alienation between humans, created in the exile into communication, demanded community to salve its hurt: language was the first response, a symptom of divorce from the world and an attempt to find an alternative belonging. The arts of picturing, from Lascaux to data visualisation, are not only instruments for controlling the chaos of the world but attempts to become one with it, and to build community around that identification, even if

identification itself is symptomatic of a foundational lack of identity.

It is divorce that makes community and communication necessary if we are to reproduce, that is to ascend from our instigating alienation towards friendship, *amitié*. Beyond friendship, there lie the highlands of politics, the zone of how 'we' are (rather than 'I' am) to live the good life. Unless we had been divided we would feel no need to relate. This relationship, beyond the interpersonal domain of friendship, is community. The task of media, in the very broadest sense, is to recapture the tools for building a post-human commons from the history of language and picturing. In this, transnational screens have a central role because they are so material, because they matter, and their mattering can become central, as it does for example in Jennifer West's *One Mile Film* (Hall 2013), Kidlat Tahimik's works (Tahimik 1989) or Bill Morrison's *Decasia* (Herzogenrath 2015), in each of which the apparatus and the ecology are invited in to participate in production. Much of the use of artificial intelligence in film and game design replicates the history of ancestors in chains: tools to make profit by reducing animation costs, or to use data harvested from shows like *Bandersnatch (author date)* to drive script development for future productions: at some point, and already in varying degrees, the active participation of computers as free creative agents in filmmaking may emerge from the labs and experimental scenes to produce popular works where the future is neither planned nor catastrophic but an open commons where our various aspirations can contest, and where a 'we' that is no longer exclusive might emerge. Community is the goal, but since we cannot have the remotest idea what that community might be like, it is not even a goal. Much of our existing media points in this direction, or cycles around the void where it should be, perhaps because our models of communication prioritise message over channel, signal over noise, and so disparage the mediation that mutates and evolves messages, receivers and senders. A commons also pulls down these ascendancies. Perhaps the place to start will be the work of distribution and display that once involved such care and craft and now lies all but erased under the success of cyborg governance.

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