

Introduction.
Inflections of Technoculture: Biodigital Media,
Postcolonial Theory and Feminism

The notion of technoculture, which gives the title to this special issue, takes us back to the early 1990s when scholars engaged in cultural studies, postcolonial theory and feminism started looking at the implications of new communication and information technologies for the cultural politics of race, gender and class. Inspired by Donna Haraway's feminist figuration of the 'cyborg', Constance Penley and Andrew Ross introduced the volume *Technoculture* (1991) with a description of the impasses encountered by cultural and political critiques of new media technologies around that time. On the one hand, critical research was confronted with the task of countering hegemonic narratives about a "one way flow" of democracy from the West to the rest of the world as seen in Western media's enthusiastic description, for example, of the use of information and communication technologies by the Chinese democracy movement of Tiananmen Square in 1989 (a trend which has continued to these days, see Parvan in this volume). On the other side, there was also the felt need to counter the pessimism of the critical left who debated and lamented "the effects of Western technoculture in other countries" on the basis of the assumption that "we" "have already been fully colonized by the cultural logic of technological rationality and domination".¹ Against both positions, they saw technoculture as a heterogeneous cultural formation that presented complex patterns of control and resistance, subjection and subjectivation, adoption and negotiation.

Even today, not everyone has a handheld digital device that allows them to access both public cultural capital (Facebook, Twitter, et al.), or the individual credit guaranteed by a piece of encrypted plastic. The world does not follow a single (algo)rhythm. Not everyone is fully plugged in, and those who are are not equally so. While in present day sub-Saharan Africa the installation of telephone landlines has been abandoned for the technology of cellular networks, there are at the same time millions there and elsewhere in the world who have never made a phone call in their life. We can also be assured that there are many more women than men, and many more non-whites, who find themselves in this category. At the same time, it is undeniable that the digital economy has produced new modalities of governmentality operating at a planetary level, ready to be transduced into individual localities and singularities. If many of these were initially developed

¹ Constance Penley and Andrew Ross, "Introduction", in Constance Penley and Andrew Ross, eds., *Technoculture* (Minneapolis: University of Minnesota Press, 1991), viii-xviii, esp. p. xi.

within the West, stimulated in the growing intersectionality between the military-industrial-research complex and the media constructions of securitocracy after 9/11, they now constitute the comprehensive policing and politics of movement on the planet. Scans, digital passports and “look into the camera” bio-political controls are producing files of enormous proportions. This is data that is so big that it requires other forms of organised data (software) for it to be read, comprehended and capitalised (both culturally and commercially). If this clearly has enormous industrial and economic impact (from the investment in the research, development and acquisition of all of that hardware and software to the accumulation and extraction of wealth in its digital inventories), it is clearly also profoundly shifting the grounds of social recognition and political action. This means, no matter how ubiquitous it has become, that the technosphere has limits, regional breakdowns and circuits of contestations. There is still a lot of static and noise out there. The proclaimed transparency and purported neutrality of the digital signifier – after all, deep down it is just patterns of 1 and 0 (Hindu numeration brought to the Occident by the Arabs) – can be muddled. The mirror of seamless communication efficiency can be cracked.

² Arjun Appadurai, “Disjuncture and Difference in the Global Cultural Economy”, *Theory, Culture & Society*, 7.2 (1990), 295–310, pp 295-296.

As Arjun Appadurai also argued in the mid-nineties, globalization should be conceived as a “disjunctive order, which can no longer be understood in terms of existing center-periphery models”.² Appadurai’s “technoscapes”, for example, invite us to see technologies not as objective realities which “look the same from every angle of vision”, but as “deeply perspectival constructs” inflected by the “historical, linguistic and political situatedness of different sorts of actors” (296). As he also noted, there is a continual tension between the drive for cultural homogeneity rendering the world transparent to its will, and the multiple modes of resistance and subversion disseminated in its heterogeneous historical composition. In other words, global technoculture constitutes an ongoing problematic. It is a critical space destined to be traversed in multiple directions and translated into unplanned singularities. The seeming neutrality of its means and language – apparently taciturn technology and indifferent digits – poses profound political challenges to any present seeking to avoid its futures being colonised by existing hegemonies. These are the provisional premises that provide the initial point of departure for the diverse critical passages proposed in the essays in this issue of *Anglistica*.

The essays collected in this special issue have been written by a new generation of intellectuals who are re-actualizing and rethinking the complex relation between technology and culture in what Stuart Hall would have called the “current conjuncture”. Most of these scholars have studied or come into contact with the Centre for Postcolonial and Gender Studies and the PhD in Cultural and Postcolonial Studies of the Anglophone World at the University of Naples “L’Orientale” and also participated to a series of joint events organized with the Department of Media and Communications of Goldsmiths’ College, University of

London between 2009 and 2013.³ It is in this context that Maria Fernández's early call for a "postcolonial media theory" has been taken up and creatively developed in a research culture that has encouraged and sustained critical work at the intersection of feminism, postcolonial theory, cultural studies, visual culture and new media.⁴ Such work has been nourished and inspired by the writings of thinkers who have also engaged over the years with this critical intersection: from the now classic texts by Donna Haraway, Stuart Hall, Arjun Appadurai, Trinh T. Minh-ha, Iain Chambers, Paul Gilroy and Edward Said to more recent writings by Rosi Braidotti, Karen Barad, Lisa Nakamura, Wendy Hui Kyong Chun, Kodwo Eshun, Michele White, Paul Preciado, Ash and Sanjay Sharma, Patricia T. Clough, Arun Saldhana, Julian Henriques, Laura U. Marks, Lisa Blackman, Luciana Parisi, Alondra Nelson, Amit S. Rai, Eyal Weizman, and Adi Knutsmann among others.

We can go back here to the image of "technoscape" as perspectival construct which implies a point of view, such as that proposed by Appadurai. The concept of technoscapes can be seen as a strategic tool to counter what Antonio Negri calls "transcendentalism" that is "philosophies of history" and "conceptions of society" which "do not accept locating determinations of reality within the network and within the clash of subjective powers" or "which believe that they can evaluate or manipulate society from an external, transcendental and authoritarian point of view".⁵ As in Donna Haraway's situated knowledges, looking at the relationship between technology and culture from the point of view of new media artists, writers, critics, videomakers, photographers, DJs, novelists and collectives engaged in thinking racism, sex and gender, globalization and new forms of colonialisms, migration, the diaspora, border struggles, capitalism, multiculturalism, produces what we call specific "inflections" of technoculture. This opens up the question for reimagining what we call "biodigital media": media that are both biopolitical in Foucault's sense, that is new technologies for the government of populations, but also media that, as in cyberpunk's early intuition, "stick to the skin, respond to the touch", which latch onto and deploy the mnemonic and sensorial potentials of the body and its automatisms.⁶ If technoculture is a topological surface enveloping the planet, made as much by technologies as cultural practices, affects and meanings, then we might redefine what Penley and Ross called "cultural negotiations" as "inflections" of a global technoculture.⁷ Technoscapes are not only perceived but actually constructed by creative and critical questioning and re-deployment of new media technologies which produce "inflections".

In his neo-Leibnizian treatment of the "territorial image", Bernard Cache defined "points of inflection" as "singular points" which, when related to the "extrema" ("the maximum and minimum on a given curve") can be said "to figure as in-between".⁸ The points of inflections, the singularities of global technoculture, are not located at the maximum of subjection (the compliant and docile automatisms produced by the codes, programmes and interfaces of the likes of Google, Facebook, Apple and Amazon) or at its minimum (the overt revolts

³ A series of workshops and seminars which addressed the relation between postcolonial theory, feminism, and Marxism in relation to media and new media took place between 2010 and 2013 and saw the participation of graduate students and academic staff from both institutions. We would like to acknowledge here the effort generously put into the exchange in the first place by Prof. Angela McRobbie, but also the participation of Julian Henriques, Lisa Blackman, and Prof. David Morley. The Ph.D. programme in Cultural and Postcolonial Studies of the Anglophone World (closed as a result of the latest reform of the Italian University system) was supported by the enthusiasm and participation of (among others) academic members of staff such as Lidia Curti, Iain Chambers, Marina Vitale, Silvana Carotenuto, Tiziana Terranova, Mara De Chiara, Maurizio Calbi and Anna Maria Cimitile.

⁴ María Fernández, "Postcolonial Media Theory", *Art Journal*, 58.3 (Autumn, 1999), 58-73.

⁵ Antonio Negri, "A New Foucault", in *Empire and Beyond*, trans. by Ed Emery (Cambridge: Polity Press, 2008), 227-228.

⁶ The concept of "biodigital machines" is elaborated in a similar way by Luciana Parisi in *Abstract Sex: Philosophy, Bio-Technology and the Mutations of Desire* (London and New York: Continuum, 2004) and taken up again by Jussi Parikka in *Insect Media: An Archaeology of Animals and Technologies* (Minneapolis and London: University of Minnesota Press, 2010). On the relationship between biopolitics and digital media see Tiziana Terranova, "Another Life: The Nature of Political Economy in Foucault's Genealogy of Biopolitics", *Theory, Culture and Society*, 26.6 (2009), 234-265; see also Bruce Sterling, "Introduction to *Mirrorshades*", in *Mirrorshades: The Cyberpunk Anthology* (New York: Ace Books, 1988); and on media as "tertiary retentions". See Bernard Stiegler, "Within the Limits of Capitalism, Economizing Means Taking Care", *Ars Industrialis*, 2008, <http://www.arsindustrialis.org/node/2922>.

⁷ See Celia Lury, Luciana Parisi and Tiziana Terranova, eds., "Topologies of Culture", *Theory, Culture and Society*, 29.4-5 (July-September 2012).

⁸ Bernard Cache, *Earth Moves: The Furnishing of Territories* (Cambridge, Mass.: The MIT Press, 1995), 16.

against corporate domination of the Internet as enacted by heroic hackers such as Julian Assange or Chelsea Manning or by Anonymous). Unlike “extrema”, points of inflection can be seen as “the points of a plateau from where the contour lines diverge”: they are “points of imbalance” or “decline”, which “confer an indeterminacy to the rest of the curve”.⁹ As “intrinsic singularities”, points of inflection “precede the vector” – such as the vectorial movement of new media technologies from the West to the Rest, but also the vectorial convergence of the vectors in the production of points of view – thus representing in Gilles Deleuze’s words “a totality of possibilities, as well as an openness, a receptiveness, or an anticipation”.¹⁰

⁹ Ibid., 18.

¹⁰ Gilles Deleuze, *The Fold: Leibniz and the Baroque* (London: The Athlone Press, 1993), 14–15 and 20.

The questions posed by the essays collected in this special issue are innovative in as much as they approach technoculture from these “in-betweens”, understood as “sites of cosmogenesis and invention”. Can we see a “postcolonial cybersemiotics” at work in Indian, North African and Middle Eastern women dancers, videodancers and choreographers in a way that enables the construction of new conceptions of identity and the diaspora, the body and the archive by means of a unique relation between movement, memory and digital technologies (Portanova; Piccirillo)? How do photographic, cinematic and digital techniques participate in the production of race and what happens when cultural techniques which belong to the Black Atlantic such as the re-mix are applied to the photographic and filmic archive of race and migration (Ferrara; Quadraro)? In which ways have North African and Middle Eastern societies (Egypt, Tunisia, Turkey) and media (Al Jazeera) dealt with the ambivalence of social media in the midst and aftermath of revolutionary upheaval (Parvan; Yetiskin; Sarnelli)? What visions do we find in feminist Afrofuturist science fiction for a post-human, anti-racist and queer evolutionism countering the imaginary of neo-Darwinism and socio-biology (Caporaso)? Can some videogames afford a disorienting kind of embodiment that upsets rather than confirms binary codings of gender (De Riso)? How does contemporary new media art with its neo-materialist ontology stage and counter the depletion of the social and natural world by postcolonial capitalism (Colavecchio)? What are the stakes of the technocultural remodulation of the US/Mexican border and how are activists and artists re-deploying mobile technologies of geolocalization in order to remember the victims and question the process of border subjectivation (Terracciano)?

This special issue opens with an essay by Beatrice Ferrara, “A Mirror’s Permutation of a Nation’: Technology and the Cultural Politics of Race in DJ Spooky’s *Re-birth of a Nation*”. Here Ferrara offers a critical reading of D.W. Griffith’s *The Birth of Nation* (1915) on its 100th anniversary by engaging with “the re-take performed by the African-American DJ and conceptual artist Paul D. Miller aka DJ Spooky”. Miller’s *Re-Birth of a Nation* was at first performed live in international gallery spaces (2004–2008) and then edited and released as a DVD in 2008. What characterizes Ferrara’s take on the relation between Griffith’s racist

modernist masterpiece and Miller's digital re-mix is her insistence on the implication of the technical, the aesthetic and the political in accounting for racialized processes of subjectivation. Her intersection of postcolonial studies and media theory exceeds any mere ideological reading of Griffith's film, choosing instead to see the relation between "technical" and "ethical" levels as a *chaosmotic* one, as Felix Guattari would have it, involving human and non-human forces.¹¹ Ferrara's essay is thus a careful investigation of the role of cinematic and digital techniques in the production of race, which also proposes a methodology for postcolonial media studies. Her focus on "technology and the cultural politics of race" is a genuine addition to a collective endeavour that has seen the important contributions of scholars such as Kodwo Eshun, Alondra Nelson, Julian Henriques, Arun Saldhana, Amit S. Rai and Lisa Nakamura among others.

¹¹ Felix Guattari, *Chaosmosis: An Ethico-Aesthetic Paradigm* (Bloomington & Indianapolis: Indiana U. P., 1995).

Griffith's origin story of the birth of the USA out of the merging of two territories (the white North and the white South) is thus seen as founded in what Gilles Deleuze defined as Griffith's "audacious technical innovation": "organic montage". By working on parallel series of "characters and incidents" that are chained together through a series of binarisms, Griffith created for Ferrara a classic modernist perceptual shock in his audiences – still unused to editing, montage and alternate narration. This perceptual shock, which Jonathan Crary sees as characteristics of the modern production of "attentive subjects", turns the fragmentary and chaotic experience of life in the post-Civil War US into a coherent narrative – a form of "hegemony" working through a "master narrative".¹² This hegemonic story operates not just at the level of signification, but is achieved largely at a 'technical level', as a set of 'cultural techniques' ("modelled after our (body)mind processes") for producing an origin myth (the birth of the nation). The result of these techno-aesthetic procedures is the production of a unitary narrative and an "itinerary of silencing and erasure of other narrations". DJ Spooky's interventions on Griffith's film, on the other hand, deploy the strategy of applying black DJ culture "cut'n'mix" techniques to modernist art cinema. Like Griffith, DJ Spooky too works on fragments, but this time not in order to lock down perception but to make Griffith's voice "stutter and turn into an [unresolved and unfinished] cacophony of potential alternative narrations". The two (cultural) techniques employed by DJ Spooky include the "insertion" of alternative images produced by black artists, and the "juxtaposition" of visual digital effects. This repetition of modernity (with a difference) codes a new cultural operating system where African-American remix techniques oppose and reengineer Griffith's modernist montage – thus countering his disavowal of the death of the American ideals. Befittingly, Ferrara concludes by calling for extension of further work on the larger histories of African American experimentalism as neglected genealogies of media theory.

¹² Jonathan Crary, *Suspensions of Perception: Attention, Spectacle and Modern Culture* (Boston, Mass.: The MIT Press, 1999).

Michaela Quadraro's essay "Ghosting the Postcolonial Archive: Digital Technologies and Diasporic Visualities in Contemporary Black British Art" also

engages with the archive of race, but this time from the perspective of the formation of a British (and European) Black cultural identity. This involves a poetic discussion of recent works by two artists who, according to Stuart Hall's periodization in the key essay "Black Diaspora Artists in Britain: Three Moments in Post-War History" (2006), can be considered as part of the second wave of Black British artists born in the 1960s. The works in question are Keith Piper's digital video *Ghosting the Archive* (2005) and Sonia Boyce's exhibition "Scat" (2013). Quadraro deploys postcolonial and race theory, from Arjun Appadurai's and Achille Mbembe's theorization of the archive to Stuart Hall's approach to cultural identity and Trinh T. Minh-ha's concept of the digital image, to conceive of art practices as an integral part of "the general cultural and political formation of multicultural society". By engaging directly with the importance of visibility and visual culture in the formation of cultural identities, Quadraro draws on feminist philosopher Elisabeth Grosz to argue for the "intensely political nature of art" in elaborating "alternative possibilities" and provoking "a perceptual anticipation of the future". As in Ferrara's essay, we are also confronted here with the elaboration of technologies and techniques that unsettle the archive, question "forms and canons" and explore the relation "between identity and difference, geographical locations and dislocations". Digital technologies express the principle by which as much as one can hope to record the past, there will always be "missed passages", making all attempts at mnemonic preservation also acts of forgetting.

In the digital video *Ghosting the Archive* (2005), for example, Keith Piper re-works the Dyche Collection: a large photographic archive of the work of Ernest Dyche (1877-1973) who was a commercial portrait photographer operating in the inner area of Birmingham settled by communities of migrants from the Indian subcontinent, Africa and the Caribbean from the 1950s onwards. As it has been noticed, these images often became agents of a "reverse immigration" when they were sent back to relatives living in the Caribbean, India and Pakistan. Piper does not treat the Dyche collection, a "found object" which he discovered in the Birmingham City Archive during a period of residence at the Birmingham Central Library, as an innocent artefact. On the contrary, he uses these nameless and dateless series of portraits as the occasion for "the exploration of alternative histories that contain and exceed the frame". In particular, the fact the images found were negatives is treated in Piper's digital transposition as a technique that "obscures race through a reversal of the colour of the skin from dark to light, and from black to white." Re-working the analogue negatives through the digital technique of morphing, Piper allows the negatives to emerge from obscurity, thus expressing the materiality of race: not a "mere reproduction", but a force "that had to be drawn, pulled or extracted" to become perceivable. The other work considered in the essay, such as Sonya Boyce's exhibition "Scat" (2013), include three major pieces: *For You Only You* (2007); *The Devotional Wallpaper* (2008) and *Oh Adelaide* (2010). What connects the three pieces is an interest in the voice and in the

archive as art practice. *For You Only You* is a deliberate orchestration of nonsense that juxtaposes wildly different styles of wordless vocalization, and stages “a form of resistance against the power of language”. *My Devotional Collection* is an archive of CDs, cassettes and vinyl records of Black British female singers collected by the artist since 1999. *Oh Adelaide* reworks instead the archive footage of “American-born jazz singer and entertainer Adelaide Hall (1901-1993)”. This time it is the archive of modern and contemporary popular culture that becomes the occasion for an exercise in the visual and technical diasporic imagination, contributing to the production of what Quadraro calls contemporary “European Black subjectivities in formation”.

Stamatia Portanova’s “A Postcolonial Cybersemiotics: Tradition and Modernity in Shobana Jeyasingh’s Chaomopolitan Choreographies” considers the techniques deployed by the British Indian choreographer in relation to questions of tradition and modernity, origins and diaspora. Jeyasingh’s work is, in fact, characterized by a mixture and a tension between dance techniques inherited from the Indian classical style of dance (Bharata Nayam) and contemporary dance steps inspired by popular music and urban street culture. In her reading of the performances staged by Jeyasingh, Portanova inflects three points of view or perspectives: the postcolonial and its emphasis on “cultural adaptation” and “hybridity”; Peircean semiotics which complicates the binary relation between sign and meaning by introducing the question of “sensation”; and the cybernetic concern with “the adaptive and connective capacities of communication systems”. In particular, Portanova deploys Peirce’s semiotics to argue against the notion that choreography can be simply seen as a language (through an analogy with Christian Metz’s structuralist take on cinema) used to tell the story of postcolonial India. In her critique of the linguistic framework, Portanova argues against the sudden leap from “sensorial perception of the movement to the attribution of a meaning to its constitutive elements” which forecloses any engagement with the multiplicity and openness of “sens/ation”. Peirce’s semiotics allows for a conception of signs “acting as topological figures of continuous active connection” which makes possible for us to see Jeyasingh’s choreographies as producing not only meanings, but also cybernetic encounters. As she puts it, she “does not just transmit significations, but produces inflections”.

Portanova thus deploys three schemas or “trichotomies” introduced by Peirce’s semiotics: as given by the “intrinsic nature of signs” (sinsigns, qualisigns, legisigns); by the relation between signs and objects (icons, indices, symbols); and by the relation between sign and interpretant (rheme, dicisign and argument). This elaborate schema yields a reading of Jeyasingh’s “postcolonial cybersemiotics” that poses the “origin” (such as Indian classical dance style) as “an immanent field of emergence”, not “a past to be exactly re-traced” but a “vague potential” and “jumping off point”. Jeyasingh’s relation to India thus becomes inflected by “a swirl, a clinamen, a deviation” – that is a “postcolonial curvature” of an original

past. The relation between signs and objects as modulated by likeness (icons) connection (indices) and capture (symbols) gives us Jeyasingh's cybernetic relation to India: her "identitarian dance" does not refer to a pure origin, but to an India constituted by "fluidity of borders and shared beliefs", interacting with a "manifold of local and regional traditions". It poses India as a case of "immanent pluralism", a series of "elastic and malleable territories" and a "geopolitical multiplicity". Finally, Portanova considers the ways in which Jeyasingh's work articulates the relation between vague terms such as "contemporary" and "Indian", highlighting the ambivalent feelings of Indian audiences to her work which is perceived as being not Indian enough and hence too Western. Rather than attempting to go back to a simple, pre-colonial reality, Jeyasingh's choreographies take us to a "hypergeographical space" which resonate with Homi Bhabha's notion of the "third space": a "choreographic thirdness" which opens the "classical body" to a chaotomic space defining Jeyasingh as a "nomad of kinaesthetic thought". It is thus the urban contemporaneity that defines her best "beyond Indian (or Western) classicisms", where the distance between India and the West becomes the space "between two gestures, two ways of moving" producing a "wave" or "non-linear contact".

In her essay "A Mediterranean Matri-Archive: Choreographic Fragments of Emerging Corporealities", Annalisa Piccirillo considers the concept of a "Mediterranean Matri-Archive" which connects Iain Chambers's notion of the Mediterranean as "liquid archive" to the feminist figuration of the "Matri-Archive" as "a space of creation, knowledge, cognition, invention and survival" for women. The Matri-Archive is an imagined, perspectival, situated, embodied technoscape that carefully selects and connects diverse experimentations with body movements which cross the liquid frontier separating Europe from its "others". By looking at three video-dance performances by the French-Algerian dancer Nacera Belaza (*Le Cnr*), the Turkish choreographer Geyvan McMillen (*Mahrem*) and the Syrian video-dance of Nisrine Boukhari (*Le Veil*), Piccirillo expands on Chambers' proposal for the Mediterranean as a "methodological resource-zone for alternative critico-aesthetical investigations". Thus "the critical correlation of dance aesthetics and archival praxis" in the Mediterranean today is articulated with a critique of the archive which poses the possibility of another archival strategy connecting the analogue and the digital, the organic and the mediated. The techniques of dance and their encounter with digitalisation allow for the re-mobilization of Mediterranean women's bodies as mnemonic *dispositifs* of recollection. This promotes the invention of new kinds of movement against the foreclosure on mobility imposed by the European Union's migration policies. The matri-archive looks for a "practice of memorial care, a choreography that reclaims the right to mobility" against the weight of the spectral presence of the dead migrant bodies which haunt the Mediterranean sea. The "liquidity of the Mediterranean live-stage" as an archive of bodily movements and fragments of gestures acquires through

digital video technology the capacity to be “re-actualized, dislocated and differed in a specific global digital milieu”. In their video-danced performances, the three artists raise the question of how “the new aesthetics of contemporary dance manage the juxtaposition of flesh and the virtual” while reconfiguring the embodied female memory of other Mediterranean crossings – crossings of bodily movements and sounds. Thus, Nacera Belaza’s dancing bodies are media that receive, host, and bear “all possible beats” – from Larimi Bestham’s Arabic chants to Maria Callas’ voice, from Nina Simone’s to Amy Winehouse’s. The “migration into virtuality” is not conceived as disembodiment but as something that allows for the emergence of “a potential, embodied and new relational force”. In Geyvan McMillen’s danced strategy of “collecting female stories”, the body-archive acts out corporeal strategies that activate “unexpected relations between organic and mechanical bodies, the digital and the analogue”. In Nasrine Boukhari’s mixed-media and installation performative work *Le Veil*, the “im-materiality of digital screens” feeds into and from the “consistency or ‘matter’ of a dancing corporeality emerging and touching on, the surface of a veil”. If, as Laura U. Marks claims, the virtual epistemology of the digital age is a “haptic visuality” where touch informs vision,¹³ then the liquid-digital milieu of the Mediterranean Matri-Archive allows us to envision a potential for the sharing of body movements, fragments, and memories which allows another memory of the Mediterranean to emerge in potential postcolonial feminist figurations.

In “Coded Borderscapes: Locative Media, Memory and Migration in ManifestAR’s *Border Memorial*”, Roberto Terracciano engages with the Augmented Reality art of ManifestAR – a group formed by John Craig Freeman and Mark Skwarek. Their artwork *Border Memorial* (2013) uses locative media and augmented reality technologies in order to document and re-actualize “the memory of migrants who died in the act of crossing, showing the relation between the US/Mexican border and locative media technologies”. *Border Memorial* uses “mobile phone localization features” to superimpose “visual data into the geographical location”, thus performing a “postcolonial critique” of the “reconfiguration and complexification of borders”. Terracciano thus draws our attention to the “augmented qualities of contemporary borders as assemblages in which economies, technologies, politics, architectures and cultures conjoin,” constructing a “borderscape” as “intricate network of portable segregation” mobilizing software as a “space of struggle and negotiation”. As borders are being reconfigured as “spaces generated by code”, they mobilize an “augmented architecture” in “conrescent network technologies”. ManifestAR’s art thus allows for an engagement with the deep embeddedness of code “within the ontogenesis of contemporary spaces” and particularly borders. For Terracciano, borders are “coded spaces”, that is, as Rob Kitchin put it, they are “relational and emergent spaces in which software frames the infolding but does not determine it” and operate through what Gilbert Simondon called “transduction” (ontogenetic

¹³ Laura U. Marks, *The Skin of the Film: Intercultural Cinema, Embodiment and the Senses* (Durham, NC: Duke U. P., 2000).

modulation) rather than translation.

ManifestAR deploys “information visualisation fuelled with data about the number and location of the deaths of the Mexican migrants in order to redesign a geography of mourning in a tactical memorial as a form of visibility and resistance”. It thus visualises “the scope of the loss of life by marking each location where human remains have been recovered with a virtual object or augmentation” such as virtual skeleton effigies of *calacas*, commonly used in the Mexican *Day of the Dead* festival. The “perception of digital objects on the physical ground” generates “a sense of angst and loss affecting the body” at the crossing of virtual geography and physical surface in a “necrographic data map” that mixes “bits and bones” as visualised by smart phone users. Coming after earlier AR artworks such as *ProtestAR* (2012) which deployed AR to permit virtual protest to take place in Zuccotti Park, the site of the Occupy Wall Street movement, and *The Us/Iraqi War Memorial* (2011), “a map of three-dimensional coffins covered with stripped and starred flags ... and carved with Arabic words”, *Border Memorial* enacts a “perversion of code” that is akin to a “blasphemy” (in the sense proposed by Donna Haraway and Homi Bhabha). This “digital reworking of the geography of Mexico and the United States” deploys a use of memory as “a tactic of resistance *and* presence” and what Terracciano calls *implacement* (following Jason Farman and Edward Casey) as “a means for transduction of the physical-digital infrastructure”. The artwork thus achieves the overall effect of turning the American “homeland” into a “suspicious place”.

Roberta Colavecchio’s essay “Eco-Art Machines: A Chaosmotic Perspective on Postcolonial Capitalism” weaves together Sandro Mezzadra’s and Miguel Mellino’s suggestive concept of postcolonial capitalism with the neo-materialist feminist philosophy of Rosi Braidotti and Elisabeth Grosz in close alliance with Felix Guattari’s ecological and chaosmotic approach. Colavecchio draws on the multimedia artworks or “contraptions” constructed by London-based new media art collectives Mongrel and YoHa. Mongrel defines itself as “a mixed bunch of people, machines and intelligences working to celebrate the methods of London street culture” officially founded in 1997 by Graham Harwood, Marvin Jarman, and Richard Pierre-Davis – while YoHa is a spin-off of Mongrel founded by Matsuko Yokokoji and Graham Harwood. Mongrel and YoHa’s work combines street culture and digital media in order to challenge “race, class, gender and sexuality in and through new media technologies”. In particular, the essay examines three installations by YoHa. The first, *Aluminium* (YoHa and Raqs Media Collective 2007), is a “futuristic search engine performing fragments of hidden histories” which re-frame the lost history of aluminium and “the ecology of futurist, fascist, colonial power” connected to it by algorithmically “re-writing and re-framing” documentaries and other promotional films in a “mesmerizing liquid sequence”. The second installation, *Coal-Fired Computers: 300.000 Computers, 318.000 Black Lungs* (YoHa 2010), “powers a computer with two and a half tons of coal”,

programs it to look on the Internet for data of miners around the world who have contracted a lung disease and feeds it back to “a pair of black lungs attached to the contraption”. The contraption thus foregrounds the persistence of coal and mining as a source of energy for clean digital machines in contemporary postcolonial capitalism. The third installation, *Tantalum Memorial* (Mongrel 2008), is “a towering rack of cables and switches showing and performing the hidden cost of our mobile phones” such as the 600.000 yearly casualties due to the “Coltan Wars” in Congo fought over the extraction of the mineral necessary to build “metal tantalum” – an essential component of mobile phones and other technological devices. Colavecchio crucially deploys the notion of “residual aesthetics” to account for the cultural and political interventions accomplished by Mongrel and YoHa where the residue is not only the excess produced by any activity of production, but also potentially and chaotically the trigger for new processes of individuation. This opens the way for a multiplicity of strategies that acknowledge the dispersed agencies of non-human actants such as machines and minerals.

By engaging with the artworks, Colavecchio espouses “a machinic perspective on ecology and capitalism which considers how this interplay is inseparable from the history of colonization as extraction and accumulation of natural-cultural forces”. Colavecchio thus takes up the challenge of the concept of “postcolonial capitalism” introduced by theorists influenced by post-workerist Marxism. For these authors, “postcolonial capitalism” acknowledges the centrality of colonialism in the formation of capitalism which has produced “a complex and unstable cultural condition, a space of continuous contention between capital and its conjunctural *others*”. Crucial to her argument is the notion, derived from thinkers such as Gilles Deleuze, Felix Guattari and Elisabeth Grosz, that “art is a composition of chaos or composed chaos”. Eco-art machines thus constitute “a spatio-temporal reinvention of the world” that restores “transversal connections across mental, social and environmental ecologies”. What is at stake is the foregrounding of the “neo-colonial inflection of high-tech production” which makes the “chaotic variabilities, complexities and exceptions” of capitalism “perceptible” while also creating new affective bonds.

Ebru Yetiskin’s essay “Paratactic Media and Social Networks: Emerging Forms of Resistance to Algorithmic Power in Artistic Practices” takes issue with the new “invisible layers of algorithmic governance” which operate through social media platforms and other forms of data harvesting and digital labor. The concept of “paratactic media” is developed in order to address new types of artistic interventions that expose the logic of algorithmic governance in order to contest authoritarian regimes of power. Yetiskin introduces us to social media platforms such as Facebook and Twitter, which establish new forms of spatio-technical governance through protocols and algorithms. Yetiskin constructs her argument around the notion that “invisibility” has again become an issue in the superficial transparency of social media environments. In doing so, she also forces us to

confront the “growing role of the State in Internet governance” and the dance of coordination and competition, collaboration and friction which characterises the relation between the national state and the new “para-state” form of giant online corporations. The result is a form of “algorithmic governance” defined as the joint governance of social networks by governments *and* corporations”.

Yetiskin draws on the example of the 2013 Gezi Park Protests in Turkey, to show what happened once media censorship in mainstream media pushed segments of the population to “migrate” to social media platforms. This migration, for Yetiskin, was tolerated by the Turkish government because it allowed for new partnerships in “data trade” with telecommunication operators where a surplus of data is extracted from populations in exchange for money. Thus participation in street protests and resistance movements caused an increase in the numbers of social media users which, by means of what she calls their “data labor”, also provided the “known data” processed by “software programs for mass surveillance” run by “digital mercenaries”. Thus, paradoxically, protests are turned into sources of “data labor” that produce “data capital” while also enabling new levels of “state surveillance”, thereby becoming subject to the hybrid power of a “government-corporations” network. Social media platforms have also become the theatre of new types of “psychological operations” such as the timing of a confrontational statement to cause Twitter controversies which distract public opinion while authoritarian or corrupt pieces of legislation are pushed through Parliament. Yetiskin suggests that authoritarian nation states deploy a “depletion” strategy of activist attentional resources by engaging in the continuous production of noise.

In this context, tactical media, one of the earliest forms of activism practiced on the Internet, needs to be revisited and “paratactic media”, a form of artistic practice, can be seen as a response to the neutralization of “tactical media”. This response involves “renewing and modifying” the tools of tactical media within the emerging context of algorithmic governance. Yetiskin’s essay resonates with references to “invisible layers” and “hidden processes” which need to be uncovered (such as the “back-ends” of software platforms that operate beyond the reach of “front-end” interface users). She maintains, however, that these invisible rules can only become visible by paradoxically playing on “friction, noise, cacophony, foolishness, depletion and waste”. Her three examples of Baram Gülesen’ *Live to Pixel* (2013), Paolo Cirio’s *Loophole for All* (2013), and the “Networks of Dispossession” project respond to a situation of repression aided by algorithmic governance by reworking the strategies of tactical media to expose the medium’s hidden processes. In so doing, they show the implication of the “physical” with the virtual” and “produce background information on the medium as such”. Yetiskin concludes by referring to a practice of “precarious resistance and open-sourced processual knowledge production” as also integral to paratactic media. She thus seems to suggest that these artistic practices allow not only for a

critique of algorithmic governance but also for new “autonomous modes of bottom-up action by creative intervention of artistic practice”.

In “Al Jazeera’s *The Stream*: Digital and Diasporic Geographies Beyond the West”, Viola Sarnelli looks at a television show launched and created by the satellite TV network Al Jazeera English (AJE) in 2011. For Sarnelli, “The Stream” can be read as part of an effort “to counter the hegemony of US and European voices in transnational communications”, while also contributing “to the creation of a mediated ‘diasporic’ space – between television and online networks, beyond the space of the nation and the US-Euro dominated world”. “The Stream” blends a number of “different media formats” which that had characterized “AJE’s coverage of the Tunisian and Egyptian revolutions a few months earlier”. The title of the show refers to the convergence between the “stream” of social media and the “televisual flow” as being “at the core of the programme content and aesthetics”. The discussion takes place between the presenter and one or two guests in the studio and participation through Skype, Google+, Twitter and Facebook. The integration of social media is also evident in the ways in which “quantities such as numbers of likes, shares, and tweets ... provide a measure of the success of the single topics discussed and an indication of how important its online community is to The Stream”. This “intertwining between satellite news and social media” enacts a mode of convergence which reinforces Al Jazeera’s “founding narrative of ‘giving voice’ to a collective subject mostly identified as ‘the people’”. In “The Stream”, this collective subject is specified as the “diasporic community” composed of second and third generations Arab immigrants in the West and a wider international public. As such, for Sarnelli, “The Stream” expresses and embodies “a multimedia modernity exceeding the West”. This multimedia modernity enacts a clash between cosmopolitanism and nationalism. At the core of this project she finds diasporic subjectivities that are presented as “fully recognised social actors in a complex modernity” who experience both “a collective, communal dimension” as well as “a more individual, existential mode” – a mixture of “commonality and singularity”. For Sarnelli, “The Stream”, like AJE overall, tries to constitute a space which is intrinsically “diasporic” by combining three main components: “the online community following the show, diaspora as a “common condition” of displacement and the specificity of several diasporic communities”. Diasporic communities are thus “both part of the discussions promoted by The Stream, and a substantial component of the ‘online community’ following and fuelling the show”.

Sarnelli is interested in the ways in which the multimedia convergence enacted by The Stream reconfigures our understanding of “cybergeography” by mobilizing a sense of community within a geographical space which is “eccentric with relation to the dominant centres of media power” thus participating in the formation of alternative “diasporic public spheres”. This is reflected especially in the choice of topics usually marginalized by Western media channels “such as [for example] the

destiny of the Tamil minority in Sri-Lanka, the Oromos in Ethiopia or freedom of speech in Vietnam". For Sarnelli, this allows AJE to go beyond the idea of "diasporic media" by multiplying the diaspora, which is constructed as "a hybrid, multicultural identity, not connected to any specific community of viewers" – as given for example by the knowledge of English as "a lingua franca" in a "perpetual hetero-lingual address". Thus, The Stream can be seen to contribute to the construction of a "post-diasporic scenario, where diasporas and migrations are treated as a given fact". It is just not a question of connecting "diasporas" and "homelands", but promoting "exchanges between individuals that are part of different, overlapping communities (online, geographic, ethnic, religious, etc.)": "multiple diaspora communities" thus correspond to "multiple homelands". For Sarnelli, The Stream contributes "to the creation of a mediated 'diasporic' space – between television and online networks, beyond the space of the nation and the US-Euro dominated world".

Oana Parvan's "Beyond the 'Arab Spring': New Media, Art and Counter-Information in Post-Revolutionary North Africa" looks for new modalities of representation of the so-called "Arab Spring" in the artistic practices of Tunisian and Egyptian techno-collectives such as Ahk Al Kahf Kahf (Tunisia) and Mosireen (Egypt). Parvan contests the "techno-optimistic interpretation" of the mass uprisings in Tunisia and Egypt which led to the ousting of Al-Zibidine Ben Ali and Muhammad Hosni El Sayed Mubarak – an interpretation which emphasised the role of social media, thus reducing the 2011 uprisings to "another revolution of the Other". The notion of the "Arab Spring", Parvan points out, "is based on Western precedents" ("such as the 1848 'Spring of Peoples' or the 1968 anti-Sovietic 'Spring of Prague'") and produces a reading of an "Arab awakening to Democracy" which homogenizes the Middle East and North Africa. Here technology, as in Penley and Ross' example of Tianamen, is constructed as a Western "democratic facilitator". As Egyptian critics have pointed out, the 'Arab Spring' is a simplified account of a "youth-led, social media centred revolution against local dictatorship" which could later be dubbed as "failed". Lumping together "the contradictory and often conflictual interests of 'yuppies' and the unemployed", such a narrative is contested to affirm the ongoing unfolding of the revolution as a becoming that opposes "social inequality and state violence beyond the mere ousting of a dictator". Parvan acknowledges that the demise of Internet censorship policy by Al-Zibidine Ben Ali on the 14th of January 2011 triggered "an explosion of citizen journalism exposing the brutality of the state" and creating "imaginings for resistance", but she also stresses the importance of trade unionism, the work of political opposition parties, and other more informal networks of organization larger than the connected middle classes. Parvan's account of post-revolutionary new media and art in Tunisia and Egypt takes us through a number of ways in which digital technologies, theatre, and street art have come to operate as means to carry on the revolutionary becoming of 2011: the work of digital collectives such as the Tunisian Inkifada,

which created connections between investigative journalism and new media; the theatre of the *Corps Citoyen*'s collective, especially their performance "Mouvma – Us Who Are Still 25", deploying videos as a means to expose "the unseen affective landscape produced by the revolutionary experience", such as "the solitary dimension of anxiety and depression connected to frustrated revolutionary expectations" at the border "between collective struggle" and "solitary suffering"; and especially the practices of the techno-collective Mosireen and Ahl Al Kahf. Mosireen – "an [Egyptian] independent video collective that believes in the visual medium as a site of action rather than a representational tool" – has produced around 250 short documentaries since October 2011, constructing "an open archive of the Egyptian revolution". Their "representational revolution" is "street-based" but it also involves "new media platforms, screenings, performances, debates and workshops". In Tunis, Ahl Al Kahf ("the people of the cavern") whose members have both artistic and trade unionist backgrounds, identifies itself as "a multitude of terrorist networks that fulfil and spread aesthetic terrorism". Inspired by Mohamed Choukri, Edward Said, Antonio Negri and Gilles Deleuze, they conceive the revolution not as a "punctual event" but as an "unfolding duration inspired by the massive struggles of the past". Parvan's essay thus not only articulates a critique of dominant Occidental representations of the "Arab Spring" as a (failed) (social media) revolution, but also exposes us to the ways in which the "revolutionary becoming" of 2011 continues to unfold in cultural practices which mix streets and networks, screens and walls.

In "Gaming Gender: Virtual Embodiment as Synaesthetic Experience", Giuseppe De Riso engages with feminist film theory in order to posit the possibility of conceiving videogames as media which potentially exceed the scopic and gendered regimes of representation to be found in cinema. De Riso then explores a question which contemporary digital media culture seems to pose again with a certain dramatic insistence: the question not only of the visual representation of the female body, but also its relation with the female voice – as when artificial intelligence software (such as Apple Personal Digital Assistant Siri) are given female voices. De Riso considers an example of an anomalous videogame which questions this relation: *Portal* (Valve Corporation, 2007). This "digital audio-visual experience" poses an uncanny relation between a "disembodied" female voice, the point of view of a silent avatar which can only catch glimpses of itself in motion as a woman's body, and a strange "whatever-space" characterized by topological connectivity rather than perspectival representation. De Riso thus asks two questions: in the first place, he recasts feminist critiques of visual pleasure by asking how videogames challenge this model; and then asks how a videogame such as *Portal* changes dominant regimes of visual power. Standing between Scarlett Johansson's voice interpreting Spike Jones's Operating System Samantha in *Her* (2013) and the violent misogynist backlash against women game designer in the *Gamergate*'s uproar, digital media culture seems to foreground the female voice as

eliciting both romantic love and sexualized aggression.

De Riso, then, mobilizes the “affective turn” of the early 2000s to discuss the shift away from representation and language as the main notions shaping cultural analysis for the last decades of the twentieth century. His analysis draws on feminist film scholarship (Laura Mulvey, Kaja Silverman, Teresa de Lauretis, Barbara Creed) and affect theory (Eve Kosofsky Sedwick and Adam Frank, as well as Patricia Ticineto Clough and Brian Massumi) to argue for the synaesthetic character of vision. In *Portal*, the player is led to identify from the beginning with the first person point of view of an invisible and silent avatar (an avatar who sees itself and cannot speak) even when endowed with mobility. The action takes place in a “research project” run by a mysterious company (Aperture Science) and it involves the avatar overcoming a series of “test-chambers” through the use of a “futuristic gun” able to “cut” images and in so doing “bringing distant surfaces together”. The deployment of such a gun is what allows the avatar to eventually catch glimpses of its own body and discover that “it has the likeness of a woman”. The avatar is also addressed by what sounds like a “synthetic female voice” which appears to be “disembodied” but is ultimately discovered to belong to a computer “whose appearance reminds that of an embryo in a fetal position, placed in a funnel-like cavity or recess”. The voice also belongs to the “huge body or envelope” of a building “made of steel and cable”. The encounter between the disembodied voice and the silent avatar unfolds in a “post-visual figure of the environment”, a topological “impossible architecture” requiring a “visceral participation”. In order to address this peculiar situation, De Riso also mobilizes Pierre Schaeffer and Michel Chion’s “acousmatic film theory”, where by “acousmatic” is meant “a sound which is heard but which forecloses any visual perception of the cause or source of its production”. This voice produces an “uncanny state of fear or tension” and is perceived as linked to an “entity or event of almost magical or supernatural power”. It is thus akin to the “maternal voice as sonorous envelope” which surrounds, sustains and cherishes the child, but also makes it feel “entrapped, imprisoned and powerless”. For Kaja Silverman, this originary relation accounts for the unease regarding our relation to the female voice: thus for her a female voice which can be heard but not seen “subverts the regime of gender specularity”. For De Riso, a videogame such as *Portal* goes beyond such subversion in its enactment of a player embodied in a “voiceless female body” who is seen without being able to see one who sounds “like a woman”. For De Riso, *Portal* enacts a strategy which does not just invert gender stereotypes but enacts an “acousmatic listening” which creates “new conditions for watching”.

Finally, Federica Caporaso’s essay “Alien Evolution(s): Race, Cyber-Sex and Genetic Engineering in Octavia Butler’s *Xenogenesis* Trilogy” considers the ways in which Butler’s “futuristic world gives posthumanism an anti-racist founding myth” which operates from “the standpoint of an anti-racist evolutionary science”. The

trilogy of three novels *Dawn* (1987), *Adulthood Rites* (1988) and *Imago* (1989) is a classic of Afrofuturist science fiction which “narrates the formation of an utterly new species resulting from the mixing of humanity with an extraterrestrial race called Oankali endowed with a superior knowledge of biotechnology and genetic engineering and a natural nomadic drive”. Butler inflects a classic science fictional post-apocalyptic scenario (a war has destroyed the planet and decimated the human population) to pose a “becoming other” of humankind as mediated and regulated by an alien race of natural genetic engineers such as the Oankali’s third gender or Ooloi. Lilith is the African American woman who is chosen to become the mother of a new posthuman, hybrid race. Her abduction by the Oankali’s spaceship, as Caporaso points out, resonates with the historical experience of the deportation of African slaves to America thus inducing in Lilith a feeling of loss of control over her body. Lilith will eventually form her own mixed human and alien family which will include two Oankalis (male and female), one Ooloi and several hybrid children or “constructs” who will repopulate the Earth after the definitive extinction of the “genetically flawed” human species. If the Oankali are “the architects of a post-racial post-humanity, the Ooloi can be defined as the genetic engineers who shape bodies as naturally as human beings breathe”. The Ooloi “modify all the traditional modalities of sexual coupling” by acting as “treasured stranger(s), bridge(s), life trader(s), weaver(s) and magnet(s)” who “connect several bodies to one another so as to let genetic material and pleasure flow through assemblages of up to five bodies that can communicate among themselves” – thus constructing what Cathy Peppers calls a kind of “embodied version of the Internet”.

Caporaso considers the “maternal and fleshy” architecture of the alien spaceship as the representation of a “womb-like environment” where “a new act of creation is possible, a rethinking of the self”. The spaceship is made of living flesh which the Oankali can manipulate at will as “a stage for post-humanity to create its performances”. The ship is a territory for posthumanity to make its first steps, while receiving from the aliens the “gift of an unprecedented (cyber)sexual *jouissance*”. In Butler’s trilogy, the posthuman body is portrayed as “an open organism in which flesh merges with technology” allowing for “an infinity of possibilities”. The creation of new modalities of sex passes through the anti-Eve, Lilith, whose body becomes a “borderland” where “contamination among species occurs not only through the ordinary, heterosexual relationship, but through the recombination of DNA, bacteria, and also social and cultural elements”. Caporaso here refers to Luciana Parisi’s notion of “abstract sex” as an expansion of “the feminist politics of desire”. The encounter with the alien opens the human body to connection with others in an “interstitial space in which humans and aliens can ‘meet’ in the form of sensations, memories and information by creating loops of feelings”. The Ooloi’s cyborgian, posthuman sexuality enacts a kind of “queer cybernetics”. Such queer cybernetics is played out in the relationship between humans, Oankali and Ooloi, but especially in the “constructs” – the hybrid race of

the children of humans and Oankalis. As Caporaso puts it, the constructs are *mestizos*, they embody the frontier, situating themselves “in the interstitial spaces between boundaries such as male and female, human and animal, heterosexual and queer in favour of a heterogeneous, stronger species” – the mixture of races which for Gloria Anzaldúa constitutes not inferior beings but a “hybrid progeny, a mutable, more malleable species with a rich gene pool”. Thus Butler’s posthuman genetic engineers deploy sexual selection for the purposes of an enhancement of sexual pleasure and the construction of a “queered feminine modality of sex”.

The special issue closes with two review essays. Stamatia Portanova’s review of Laura U. Marks’ contribution to a non-Western-centric genealogy of new media in *Enfoldment and Infinity: An Islamic Genealogy of New Media* brings out the implications of the geopolitics of digital media, while Tiziana Terranova’s review of Rosi Braidotti’s *The Posthuman* considers the multiple genealogies of the posthuman condition and their implications for her project of refounding the humanities around a “radical posthumanism”.

The essays collected in this special issue clearly argue that between the smooth surfaces and shiny screens of this digital technoscape and the altogether rougher ground of the histories that brought us to where we are today here clearly exist fractures, fissures and frictions as well as new inflections of technoculture. There remain different ways to plug in and surf the circuits, even the possibility to hack and subvert their public semantics. The endless networks and algorithms apparently working for us without rest, can be disturbed by questions of power, access and accountability. Traced within the proliferating histories of the media and communication technologies, their powers can be registered and tapped to be rewound into new critical scenarios.