Introduction: the Anatomy of Dispersion

by Sandy Baldwin

One entryway into this special "Dispersive Anatomies" issue of Leonardo Electronic Almanac is through the title. What does "dispersive anatomies" mean?

Dispersive. Physics tells us that dispersion is a relation characterized by wave propagation. Dispersion relations describe how wave-length intensities and objects travel through a medium. In dispersion, a wave separates into varying frequencies according to relations both internal to the wave and emerging from interaction with other waves. Dispersion is also a philosophical concept. In "Difference and Repetition," Gilles Deleuze introduced the dispersive (used synonymously with the disparate) as the "dark precursor" which "relates heterogeneous systems and even completely disparate things." The dark precursor is the dispersion relation that explains the emergence of intensities and objects. The dark precursor does not appear by name in Deleuze's later work, but dispersion as "difference itself, or difference in the second degree" continue to function throughout his works, including those co-authored with Felix Guattari, as the ground condition for individuation and identity. Dispersion is a basic feature of Deleuze's philosophy of becoming. It brings series of things into communication. We recognize the system created by the communication of dispersed series as the sign of identity and resemblance. For Deleuze, however, the concepts of identity and resemblance are illusory outcomes of the differentiating and assembling work of the dark precursor. Dispersion produces a simulacrum or phantasm. It moves and operates. It is a crystalline network of differences in communication. In fact, there is nothing but such assemblages, nothing but the appearances of identity run through by ambiguity and noise.

If the dispersive was opposed to identity for Deleuze, for Michel Foucault it was opposed to discourse. Foucault's "Archeology of Knowledge" -- appearing in 1969, a year after "Difference and Repetition," and no doubt emerging from dialogue with Deleuze -- argues for a practice of history that would not look at phenomena in terms of structures and organizations but in terms of dispersion. Here, the wave propagation of the dispersive relation is applied to historical events. Foucault's famous historical "episteme" is not a rigid form that deterministically orders events but rather a "space of dispersion." The discursive statements that results from describing the relationships and conjunctions in such an epistemic space are open, discontinuous, and extensible. There is no center to discourse, or we can say that there is a dispersion of centers. Just as with Deleuze's characterization of identity and the object, Foucault's characterization of history is one of events as local organizations in the turbulence of a dynamic assemblage.

Anatomy. The clean medical connotations of the word make it easy to forget the grisly truth. It means the body opened, bloodied and cut, organs and bones visible. To anatomize a body is to put it on display. To display a body anatomically is to know it, to understand its parts, to control what is hidden within. Classical anatomy was in the service of knowledge. At the same time, as much as the body was an object of knowledge and control, it was also the site of institutions forbidding the practice of anatomy. Anatomy was frowned upon as contamination, sacrilege, and danger. As a result, the anatomized body was always chosen from the socially aberrant and pathological, always the body of

the executed criminal or the destitute. Socially voided but scientifically captured and held, without a doubt anatomy meant the body opened as emblem of death, but as emblem only. The anatomical corpse remained an image of our corporeality, and that only briefly. The image lacked depth and duration. Specifically, in an age before refrigeration, the displayed corpse quickly rotted and collapsed. It was no longer anatomical and no more than waste.

There is a theological turn to the concept of anatomy, a return of spirit to resisting matter. Think of John Donne's Holy Sonnet 7: "arise / From death, you numberless infinities / Of souls, and to your scattered bodies go." Anatomy is the promise that in the end all bodies, all knowledge and actions, remain ever in their place. In this classical sense, anatomy resists dispersion. In the classical text, the anatomized figure frequently stands in a noble and oratorical pose, holding its own peeled off skin, its gaze mirroring that of the scientist directed at its own innards. These speaking corpses present a grim and tortured humor. In the edgiest of these images, say in the work of Tulp or Amusco or even Vesalius, the artifice of reason forces the anatomical body to speak with zombie-like uncanniness. By the time of "Gray's Anatomy" -- a book and not yet a television show -- and the British Anatomy Act of 1832, with its ready supply of fresh corpses, we are faced with images of silent skulls and flayed limbs with no connection to the thickness of bodies. Only at the seams or cutting edges did the body turn away from the gaze on the flattened and colored anatomical plate, turn away in order to return and disperse itself into the flesh of embodied corporeality.

Dispersive anatomies. "I facilitate the dispersion of germs!" declares Flaubert's St. Anthony. The body is not whole, not in its place. It is "lamella," in the sense Jacques Lacan adapted from Plato: a weird amoeba-like alien, an organ without a body. The lamella is precisely what the subject must separate from in order to be individual. We must understand anatomy dispersively, that is, in terms of the lamella or of wave propagated assemblages. We must understand dispersion as anatomical, as spoken from the dismembered body part, from the interior of flesh. Guido Ceronetti writes of "the silence of the body" and Drew Leder of "the absent body." Leder adds: "the body is absent only because it is perpetually outside itself." Alphonso Lingis, following the "Anti-Oedipus" of Deleuze and Guattari, taught us to recognize the fundamental incoherence and productivity of body parts. The combination -- unreadable yet operational -- is captured in their dismembered state. Dismembered body parts do not function as whole, self-same, individual identities. They are marked as productive organs, and organs couple with other marked organ-parts into intensive series. No marked organ is a sign. No body is whole. Instead, series of marks are asignifying mechanisms of pain and pleasure. Dispersion underlies these marks, they fall away, erase themselves, but they function.

In this special issue of LEA we are not concerned with philosophical or scientific or historical conceptualizations of dispersion. Nor are we concerned with systems or machines per se. None of these explain dispersion. Dispersion remains beyond explanation. It parasites and infects all explanation. We are concerned with dispersion as the dark precursor of thought and experience. In the same way, we are not concerned with the history or science or philosophy of the anatomical body but with anatomized bodies as history. We are not concerned with anatomies dispersed in the eschatological hope of a return to fullness, but with dispersion before all things as a way of being.

Our opening questions in the call for submissions to this special issue were as follows: "Are we networking or are we networked? Are we networks ourselves?" These are questions of the network as imbrication of body and subject within the object. Moreover, this self-inclusion is itself part of what we mean by a network. Indeed, "network" is the contemporary shorthand for dispersive anatomies as a way of being. It is undeniable that the network describes the contemporary cultural situation, as in Manuel Castells' "network society," but this fact does not give access to a definition or understanding

of a network. Theorization of networks -- the most crucial and pertinent instance being Paul Baran's conceptualization of the theory behind the DARPA network that preceded the Internet -- are after the positivity of networks. Theory wants the concept and control of networks, but networks as dispersive anatomies are noisy and dynamic hybrids, nonconceptual and out of control. They exist in the flux between anatomy and dispersion. In our call for submissions, we sought work that illuminated the multiplicities and pluralities of a world where the real and the digital are problematized, collapsed, and smeared together. More particularly, we called for submissions that could address the possible incoherency of the world of networks. It may be, as co-editor Alan Sondheim argues in his contribution on the "The Uselessness of Monoculture," that a culture of the net is characterized by "insignification, spews, abjections, blurs, avatars, nothing at all." Sondheim characterizes monoculture as a culture that works towards results and resolutions, towards goals and theses, towards the monolith that would be "culture" itself. All this is useless in dealing with the culture of dispersive anatomies. Not only is a monolithic monoculture useless but so are the paradigms and theories it implied. We need other tools and approaches, we need multiple views, much as you get in a computer game where you see the avatar's view, the map, the inventory, and so on.

The results of our call were astounding in the daring and intensity of their grappling with the incoherency of the world of dispersive anatomies. We received dozens of critical essays and artist's statements. We also received a stunning array of artwork that appears in the accompanying gallery curated by co-editor MEZ. What will you find in the essays collected here? By and large, the works in "Dispersive Anatomies" challenge distinctions between theory, criticism, and practice, occupying transdisciplinary spaces with no easy location in familiar systems of knowledge classification. Some of these works appear to be "theoretical" or "philosophical," while others appear more clearly as "criticism." All the works here articulate a range of positions and pragmatics that register and respond to the networks that we exist in, in all their incoherency. Still, along with this incoherency, we can identify some dispersive wave patterns that resonate across the body of this special issue.

As a first wave, consider the "soft-selves" of Andy Clarke's cyborgs. If these cyborgs are born towards the prosthetic and supplemental, they are "naturally" this way not in the least because of their everydayness. In light of Clarke's account, there is no history or invention of the cyborg, despite Haraway and Hayles, or Clynes and Kline. The cyborg has no origin. It is a way of understanding the dispersion of human anatomy as always already in touch with instruments and objects. Think here of the ego which is "first and foremost a bodily ego," according to Sigmund Freud. Alphonso Lingis' contribution similarly disturbs and disperses the site of individual experience. He writes a surface of travel narrative that runs deep with philosophical and anthropological consequence. Lingis does not distinguish body and culture, but illuminates experience as the performative junction of the "inner cauldron" and the "upward array" -- tendencies which are once again part of the asignifying mechanisms of productive organs -- where bodies are given to display and splendor. Tom Zummer's series of profound "annotations" also deal with embodiment as absent and irreal, but add a crucial emphasis on embodiment's "cartographic" inscription. It is important to note Zummer's style as a reflection of the topic into the method of analysis, where the marking of annotation is itself an approach to the seams of the body-media amalgam. The resulting fragments indicate the absent body (thus the provocative "biological-technical embodiment" in Zummer's title). Where Zummer re-situates the problem of post-Benjaminian technical reproducibility in terms of embodiment, Jon Marshall's "The Physiognomy of Dispersed Power" examines the "physiognomy" of the mega-body-machine of postmodern empire. Marshall foregrounds the chaotic magic of empire after Michael Hardt and Antonio Negri: empire's capability for disorder and chaos (a la Hakim Bey), the plurality of empire, the indeterminacy that leads to multiple anatomies.

Given these philosophical anatomizations and dispersions, what are the consequences for artistic practice? As a second wave, consider the innovative distributed presence and play artwork of Blast Theory examined by Maria Chatzichristodoulou (aka Maria X), or Tanya Vujinovic's "Tactile Nods" (where the nod of the title suggests the mix of academic and creative, theoretical and physical/tactile), or the bio-imaging and performance work examined by Joy James. "Mind the gap," James tells us. Of course, the gap is immanent in the "intensities" between the networks of information mobilized by new media art and the real location of artwork in galleries. In line with the other authors in this special issue, James indicates new requirements for theory and spectatorship of art, where "minding" resonates with watching out for, with tending and caring, and with a Zen-like becoming mind-full. Barbara Rauch's essay establishes similarly new conditions, deploying cutting edge cognitive science in examining immersive virtual installations. Rauch shows that reveries and dreams open a different view on VR as simulation. Instead of the goal of representational fidelity to the real, VR can be seen as establishing a continuum and plurality of realities, all "natural" in different ways.

Or consider Franziska Schroeder and Pedro Rebelo's "Sounding the Network," which employs a generalized concept of sound to undermine the tendency to understand networks in terms of the semiotic or readable. Sound is a "disturbant." One connection, of course, is to the aesthetics of the sonic glitch, but Schroeder and Rebelo make the case for wider resonances of sound as disturbant in the network, as they show in the example of performativity in Web 2.0 identity discourse. As Patrick Lichty's essay shows, art exists in the network nowhere more intensely than in works situated in virtual worlds such as World of Warcraft and Second Life. Lichty's tour of significant artistic practices in virtual worlds begins with the translation of existing approaches but then moves to something quite different. The new mixed practice or "cybrid" (following Peter Anders) is characterized by modes of existence simultaneously virtual and physical. "The I in Avatar" follows Lichty with an utterance from the avatar Sugar Seville herself. Seville speaks from the extreme of the cybrid, with an articulate claim for avatar agency and rights. It is worth noting that even the official Linden Labs materials gesture towards the cybrid. The promotional web pages for Second life do not distinguish the "residents" that create the world, leaving "resident" an unclarified amalgam of avatar and anatomy, softly overlooking the distinction between virtual and embodied person, a distinction that becomes increasingly unviable the more time one spends in Second Life.

The final three essays turn from new media art practices to practices of inscription and codification, naming and encoding, on the skin and beneath it. Marko Monteiro's "Molecular Representations" returns to the background problematic of dispersion as Deleuzian dark precursor, which appears as the concept of "molecularization." Monteiro shows that the problem of origin within the representational practices of molecular science, i.e. the problem whether we begin with dispersion or create dispersion through our actions, is dissolved for a serial condition of partial connections. Molecularized coding is also at work in Jon Cates' "A Prospect of the Dispersive Anatomies." Here the molecules are writing and their space of dispersion is the prospect that contains both literary and computational writing practices. Cates employs the density and transtextuality of literary writing and spooky remixology to produce a "pseudocode" that processes texts and algorithms into a null point space of partial resemblance. The special issue ends not with a bang but with a crash, or rather, with the velocity of Ballard's "Crash", a novel that we still have not caught up with. Matthew Holtmeier's "Scars, Cars, and Bodies without Organs" focuses on the discursive heteroglossia of the novel as tied to dispersive anatomies via Deleuze and Guattari's notion of "minor literature." Holtmeier quite rightly stays on the surface of Ballard's handling and disposal of bodies in the novel. Bodies are described in a precisely anatomical way, revealing their depths only in so far as they give themselves over to signs and readings, to the medical texts and pornographies that obsess his characters. The enigma or knot

of the novel is that of the network as dispersive anatomy.

So, catch the waves of "Dispersive Anatomies." We are pleased to release it to you and we thank the many peer reviewers who worked through the dozens of submissions. There are multiple entry and exit points to dispersive anatomies, no end of positions and interoperabilities. Keep in mind that dispersion has two vectors: the breakup or breakdown of coherent objects; and the subsequent attempt to corral, curtail, or recuperate from this breakdown. All that follows is within these vectors.

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