Graham J. Murphy

Insectalia Technics

Jussi Parikka. *Insect Media: An Archaeology of Animals and Technology*. University of Minnesota Press: Minneapolis and London: 2010. 281pp. \$25.00

Jussi Parikka's Insect Media: An Archaeology of Animals and Technology is a collection whose raison d'être is found in the "nonhuman": the animal world in general, especially entomological worlds marked by multiplicity and metamorphosis, as well as "media technologies of modernity that are defined by wavelengths, speeds, and slowness that are beyond the world of the unwired human being" (203). It is a complex and multifaceted study informed by media theory, posthumanism, animal studies, and techno-cultural research and application, diverse disciplines that converge into what Parikka calls "insect media," a "transversal" field that moves from 19th-century thinking about animals (particularly the growth of entomology) into 20th- and 21stcentury considerations of swarms, network culture, and the "transmutation of bodies and their sensoriums," including new "diagrams of tapping into and capturing such bodies in technocapitalist projects" (205-06). Insect Media maps this "transversality" in seven chapters carefully organized into two sections. Section One — "Nineteenth-Century Insect Technics: The Uncanny Affects of Insects"; "Genesis of Form: Insect Architecture and Swarms"; "Technics of Nature and Temporality: Uexküll's Ethology"; "Metamorphosis, Intensity, and Devouring Space: Elements for an Insect Game Theory" addresses themes encompassing "scientific research and biology to science fiction, the physiology of movement and perception, avant-garde aesthetics, and the non-Cartesian philosophy of the early twentieth century" (xxx). Section Two — "Animal Ensembles, Robotic Affects: Bees, Milieus, and Individuation"; "Biomorphs and Boids: Swarming Algorithms"; "Sexual Selection in the Biodigital: *Teknolust* and the Weird Life of SRAs" — is largely situated post-WWII and articulates such technological environs as cybernetic loops and perception qualities that link machines and animals, as well as the inspirations of swarm behavior upon the development of semi-intelligent systems. Included in Parikka's nonhuman studies are forays into art and popular culture before Insect Media concludes with a lengthy analysis of Lynn Hershman-Lesson's Teknolust (2002), a film about self-replicating automatons (SRA) that is "a peculiar intervention into the practices and representations of biodigitality as it has been discussed since the 1990s" (171). The two sections are separated by an intermezzo and bracketed by both a prologue and an epilogue that are extremely effective in encapsulating the main arguments Parikka advances in this deft study of "insect media."

In the Acknowledgements, Parikka dedicates *Insect Media* to "Milla: we hate insects and spiders together but love things material, not least cultural theory" (vii). As the product of someone who hates insects, Insect Media is a truly remarkable achievement for its dexterous handling of the materiality of a "transversal" field that is grounded in entomology, but by no means restricted to it. Parikka organizes his study around biopower and intensity ("[a] differing force of creation, a becoming, an intensity creates what we perceive" [xxii]), the relationality and intensive potentials of assemblages ("compositions, affects, and passages in a state of becoming and a relationality that is the stuff of experience" [xxv]), and diagrammatics ("spaces of possibilities or topologies of potential singularities that are the potential modes of actualization of a certain body plan" [xxvii]). Parikka acknowledges he cannot address all the various articulations and permutations of "insect media," but what nonetheless emerges is an inspired project that maps the contradictory attitudes towards insects and technologies in late-Victorian culture, the appositionality of instinct/intelligence and perception/sensation, insect cities and theological notions of divine architecture, biopolitics and rational management of bodies, swarming behaviors and technologies, metamorphosis and game theory, surrealism and avant-garde artists, cybernetic zoology and hylomorphism, bee waggling and ant pheromones, biomorphs and boids, and New AI and A-life.

Insect Media is assisted by Parikka's keen ability to synthesize and deploy a range of cultural theorists, including Henri Bergson's bio-philosophy, William Morton Wheeler's myrmecology, Jakob von Uexküll's ethology, Richard Dawkins's biomorphism, Roger Caillois's work on mimicry, or Karl von Frisch's studies of bee waggling as a linguistic system. The unifying thread, however, is the central importance of not only insects but animals in toto: "It is crucial," Parikka writes, "to recognize their position in the history of media and their value for a media theory of individuation and nonhuman animal bodies. We have to be aware of the material specificity and framing of contemporary digital technologies, where the specificity stems both from an account of the singularities in current network protocols and software and from the 'animal' mode of digital culture" (203). Insect Media might appear in danger of collapsing under the weight of a potentially cacophonous array of cultural theorists, but Parikka helps readers navigate the theoretical terrain with a clear critical arc and indispensable summaries in key sections to maintain connections from one chapter to the next.

There are some irritations, however, that find *Insect Media* buckling in a few instances. First, while the book adroitly deploys complex critical approaches without sacrificing too much of its coherence, there are moments when Parikka appears too-readily

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enthralled in his own critical acrobatics to clearly illuminate some of the critical theory. This is particularly notable in the use of Baruch Spinoza and Gilles Deleuze and Félix Guattari: readers less familiar with these theorists' works will likely find the learning curve a little too steep as too few handholds with which to grasp the material are offered by Parikka. Prior grounding in Spinoza and especially Deleuze and Guattari would certainly be an asset to the dedicated reader. In addition, the organizational structure of Section Two is generally less fluid than Section One: whereas the latter moved forward from one chapter to the next in a seamless manner, the former is noticeably choppier and resonates less effectively, at least when compared to Section One.

As a cultural studies scholar whose primary work is the overlap of science fiction/utopia studies and animal studies, my only persistent frustration has to do with Parikka's handling of art, avant-garde aesthetics, and popular culture. On the one hand, Parikka does a generally admirable job of exploring cultural articulations of a "transversal insect media" in diverse art forms: Hershman-Lesson's Teknolust, Lewis Carroll's Alice in Wonderland (1865), Samuel Butler's Erewhon (1872), Sarah Peebles' electroacoustic Insect Groove (2006), Jean Painlevé's Le Vampire (1945), or the Winnipeg Art Gallery's "Bug City" exhibition (2005-'06) all make appearances, albeit theorized in an at-times unbalanced manner, as some are the subject of scrutiny while others only warrant a few remarks. On the other hand, Parikka repeatedly acknowledges the seeming importance of (literary) science fiction for his project, but he effectively does nothing substantial with this content. At one point he remarks that the uncanny worlds of insects encompassed "genealogies of weird creatures but also a potential future of novel forms of life. Here the rise of the science fiction genre of weird, often enormously sized insectoid creatures is to be noted, at times also part of popular discourse" (24-25). This is all Parikka offers on the subject.

In exploring the relationship between insect imagery, Fordist organization, and fears of mechanization, Parikka quickly points to such early twentieth-century dystopias as E. M. Forster's "The Machine Stops" (1909), Karel Čapek's *R.U.R.* (1921), Josef and Karel Čapek's *The Insect Play* (1921), and Fritz Lang's *Metropolis* (1927) as exemplars of the "insect machine," a dehumanizing, emotionless society whose insect mechanicality "developed into an influential trope that has continued to be recycled in various productions from science fiction to other forms of popular culture" (43). This material could have been developed in greater detail and expanded to include other contemporaneous dystopias, including Yevgeny Zamyatin's *We* (1921) or Aldous Huxley's *Brave New World* (1932). It would also have been interesting to observe

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Parikka's critical apparatus applied to science fiction's refurbishment (not its recycling) of a "technics of nature" that doesn't immediately superimpose a "dystopia" designation upon utopias constructed (literally or figuratively) around insect colonies: Charlotte Perkins Gilman's Herland (1915), John Wyndham's Consider Her Ways (1956), Frank Herbert's Hellstrom's Hive (1973), James Tiptree, Jr.'s "Houston, Houston, Do You Read?" (1976), or Stephen Baxter's Coalescent (2003) are all narratives that come immediately to mind as equally useful in this enterprise. In this vein, H. G. Wells' The First Men in the Moon (1901), Frederick Philip Grove's Consider Her Ways (1947), Theodore Sturgeon's The Cosmic Rape (1958), or Bernard Werber's Les Fourmis (1991) might have helped expand Parikka's critical engagements with hive collectives and a Deleuzian/Guattarian becoming-insect, theoretical conceits that are prominent in Insect Media. Parikka's handling of the instinct/intelligence dialectic also seems perfectly primed for Frank Herbert's The Green Brain (1956), Bruce Sterling's "Swarm" (1982), or Rudy Rucker's The Hacker and the Ants (1994).

Finally, Parikka assesses 1980s-era software and digital spaces as "more akin to the Cartesian space of coordinate systems as a reservoir of possibilities that was introduced in William Gibson's idea of cyberspace than it is an understanding of the relations of extensions and mutuality that other discourses have been trying to promote" (152-53). The spectre of Gibson later reappears: "[T]he 'coding' of life in informatic units results not in a geometrical data structure, as in William Gibson's Neuromancer, but in an imaginative view of biodigital creatures as affective, interacting, folding in with various cultural forces" (176). Once again, Parikka devotes no significant attention to *Neuromancer* (1984), a book he has brought into the dialogue that could lend itself nicely to discussions of "insect media," considering the ubiquitous posthuman cyborg bodies populating its fictive techno-capitalist environs that, on more than one occasion, reference insect imagery and deploy hive consciousnesses. In sum, I remain unclear if Parikka's science fiction references are meant to speak for themselves or if these are again instances of the terrains he admits he cannot adequately cover. If the former, there is a communication gap or problem with transmission; if the latter, one may be legitimately frustrated that print-based science fiction offers nothing more to the arguments of *Insect Media* than un-theorized throwaway references.

In its scope, sophistication, and exposition, Parikka's *Insect Media: An Archaeology of Animals and Technology* reminded me in some ways of both N. Katherine Hayles' *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (1999) and Cary Wolfe's *Animal Rites: AmericanCulture, the Discourse of Species, and Posthumanist Theory* (2003); *Insect Media* might be thought a hybrid of Hayles and Wolfe. In any event,

Humanimalia's readers would be well-advised to acquire Parikka's Insect Media because, in spite of the irritations I have outlined, its successes overwhelmingly eclipse its weaknesses. It intersects with diverse critical fields and should appeal to a wide range of scholars, including animal studies scholars who have an interest in insects, but by no means is it only about the "insect" of "insect media." Parikka's Insect Media is an astonishing (and highly recommended) study that succeeds admirably in underlining "the need to rethink the material basis of contemporary media condition and produce much more complex intuitions that take into account a certain 'activity of matter,' nonhuman forces expressing themselves as part of this media assemblage of modernity" (xx).

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