

INTERTEXTS

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Literature and Science: The Next Generation

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Articles

Notes on Contributors	iv
Introduction Bruce Clarke	1
Building the Sex Machine: The Subversive Potential of the Female Robot Minsoo Kang	5
The Perception of Metaphor and the Metaphor of Perception: The Neurodynamics of Figuration Sharon Lattig	23
Becoming American: Evolution and Performance in Edith Wharton's <i>The Custom of the Country</i> John Bruni	43
From Vortex to Vorticism: Ezra Pound's Art and Science Antje Pfannkuchen	61
Nanowarriors: Military Nanotechnology and Comic Books Colin Milburn	77

Literature and Science: The Next Generation

Introduction

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The academic specialization of literature and science is entering its third decade. The Society for Literature and Science (SLS) was founded in 1985; its newsletter grew into the journal *Configurations* in 1993; and, due to a sustained influx of art scholars and new media artists throughout the 1990s and the early 2000s, the SLS reconfigured itself in 2004 as the Society for Science, Literature, and the Arts (SLSA). The SLS was never just about science fiction, although many panels have been devoted to it; nor nowadays is SLSA devoted to art exhibition or performance, although the society is happy to have in its ranks growing numbers of creative people working in digital multimedia formats. What keeps “literature” at the heart of SLSA is its founding commitment to the textuality and intertextuality of cultural science studies, its continued cultivation and assessment of the interdisciplinary and theoretical discourses that provide terms and conditions for research and criticism wide-angled enough to hold the arts and humanities together with contemporary science, technology, and medicine.

Offering a representative sample of the literary scholarship fostered by SLSA, the contributors to this special number of *Intertexts* are all at (or, in the case of Antje Pfannkuchen, near) the beginning of their professional careers. All are literature-department-based scholars, with the exception of Minsoo Kang—a scholar of European history whose research combines literature with science and technology. Kang’s “Building the Sex Machine: The Subversive Potential of the Female Robot” surveys the female-robot theme across national and generic boundaries, as well as across the boundaries of sexual difference. While his discussion goes most deeply into Villiers de l’Isle Adam’s 1886 novel *L’Eve future*—which brings together a fictionalized Thomas Edison as android-constructor with a matrimonially challenged British aristocrat—it details parallel philosophical and technological backgrounds reaching back to the seventeenth century, and assembles an impressive catalog of related literary and cinematic narratives spanning the last two centuries. Kang reports that “in virtually every story of its kind, the experiment goes awry in unexpected and often catastrophic ways.” These “unexpected turns in the technological project result in a crisis of traditional male ideas on the nature of woman and of humanity,” as well as in “the exposure of the culturally constructed nature of gender and the boundaries of the human.”

In “The Perception of Metaphor and the Metaphor of Perception: The Neurodynamics of Figuration,” Sharon Lattig does exciting work at the interface of poetics and cognitive science. Building from the famous “stolen boat” episode of William Wordsworth’s *Prelude*—the author’s adolescent adventure blending the misperception of sublime landscape with the construction of the conscience, Lattig develops a cognitive poetics that interrogates the philosophy of metaphor alongside the neurodynamics of perception. As she describes it, “The preponderance of metaphor, its centrality to our thought, and its robust career as a site of philosophical, linguistic, and cognitive contestation may be accounted for by recourse to a naturalized, Nietzschean function of relation-making.” Her reference is to Nietzsche’s “On Truth and Falsity in Their Ultramoral Sense,” which text bears remarkable anticipations of the sort of neural constructivism studied by cognitive scientists, including neuroscientist Walter Freeman, whose work on sensory perception Lattig details. On this platform Lattig recovers earlier discourses of metaphor developed by I. A. Richards and Max Black, offers some astute criticisms of the more recent work on metaphor by Lakoff, Johnson, and Turner, and works to frame the cognitive processes key to metaphorical perception within an empirical recognition of their environmental embeddedness.

John Bruni’s “Becoming American: Evolution and Performance in Edith Wharton’s *The Custom of the Country*” provocatively connects Lynn Margulis and Dorion Sagan’s evolutionary biology and Judith Butler’s gender theory to the interplay in that novel between specific performances of individual gender and identity and the emergence of a national identity for citizens of the United States, at the same moment that Darwinian ideas are being applied to the rise of modern female emancipation. Margulis and Sagan affirm the concept of autopoiesis—“self-making”—developed by biologists Maturana and Varela, which concept underscores the recursive form and operation of living systems in ways reminiscent of postmodern ideas of reflexivity and situated knowledge. Bruni links the discourse of autopoiesis to the ways that social systems delimit an individual’s field of possible observations and performances. As applied to *The Custom of the Country*, this set of frames clarifies, for instance, how the character Undine’s “craving for social recognition becomes an endless loop of desire that, as Butler posits, ‘precedes and conditions’ the constitution of her identity.”

In “From Vortex to Vorticism: Ezra Pound’s Art and Science,” Antje Pfannkuchen traces the nineteenth-century origins of the modern scientific significance of the term “vortex,” which poet Ezra Pound came to apply to the art movement of Vorticism. As an active gathering of writers and artists in the London of 1914–15, including Wyndham Lewis, Henri Gaudier-Brzeska, and other contributors to the two numbers of the periodical *BLAST*, Vorticism lasted only two years. However, Pfannkuchen shows how “Pound’s enduring commitment to Vorticism’s goals forty years after its short life ended, and his desire to see Vorticism reinvigorated” illuminates

the interplay of science and culture in the modernist period in general, and Pound's own work in particular. As developed by physicists Hermann Helmholtz, William Thomson, Balfour Stewart, and P. G. Tait, the vortex offered a model of the atom that connected matter, energy, and spirit in a physical and metaphysical synthesis that, despite its eventual demise in twentieth-century science, proved irresistible to the modernist poet. In the end, "Pound's project in the arts can be likened to the physicist's search for a 'grand unified theory' that could explain and make sense of all known natural laws."

Colin Milburn's "Nanowarriors: Military Nanotechnology and Comic Books" offers a meticulously documented deconstruction of the distinctions between science and science fiction, writing and illustration, substantive and speculative production, future warriors on potentially real battlefields and comic-book superheroes. Milburn's dismantling of serious epistemological and heuristic pretensions in the direction of adolescent fantasy is made all the more delicious by operating at the very real interface between military funding and academic research in the United States of the twenty-first century. It seems that the Army Research Office funded MIT's proposal for an Institute for Soldier Nanotechnologies (ISN) to the tune of fifty million dollars on the basis of a document multiply embellished with "a mechanically-armored woman warrior" drawn from the comic book *Radix*. As Milburn pursues the narrative opened up by this inadvertent but effective borrowing, it becomes the hinge for a considerable piece of cultural history, "the nonlocal cultural mythologies that frame both military technoscience and comic books, exposing their interdependence": "Indeed, the history of nanoscience has depended upon careful navigation of the fault line between novelty and banality, radical visions and technical immediacy, science fiction and science."

From the mechanical philosophy of automatons, the emergence and dissemination of evolutionary ideas, and the cultural reception of Victorian physics, to contemporary developments in systems theory, cognitive science, nanoscience and nanotechnology, these essays combine thorough textual and archival research with the requisite grounding in the details of past and present technoscience. The authors join their facility in such traditional interdisciplinary skills with a range of current theoretical interests and orientations: the feminist and gender theories of Butler, Laqueur, and Haraway; the theoretical biology of Maturana, Varela, and Margulis; and important recent work in metaphor and narrative theory, which Milburn's essay joins with that of comics theorist Phillippe Marion. The next generation of literature and science scholarship is just beginning, but on this evidence, well begun.