CHRISTIAN KLOECKNER
SIMONE KNEWITZ
SABINE SIELKE (Eds.)

Knowledge Landscapes North America

American Studies ★ A Monograph Series

Volume 273

Universitätsverlag
WINTER
Heidelberg

AMERICAN STUDIES – A MONOGRAPH SERIES
Volume 273

Knowledge Landscapes North America

Edited by
CHRISTIAN KLOECKNER
SIMONE KNEWITZ
SABINE SIELKE

Universitätsverlag
WINTER
Heidelberg

Bibliografische Information der Deutschen Nationalbibliothek
Die Deutsche Nationalbibliothek verzeichnet diese Publikation
in der Deutschen Nationalbibliografie;
detaillierte bibliografische Daten sind im Internet
über *http://dnb.d-nb.de* abrufbar.

COVER ILLUSTRATION

Logo design: KLINKEBIEL GmbH, Köln
Background image: Ronny Reimer (Photocase)

ISBN 978-3-8253-6627-8

Imprimé en Allemagne · Printed in Germany
Druck: Memminger MedienCentrum, 87700 Memmingen

Gedruckt auf umweltfreundlichem, chlorfrei gebleichtem
und alterungsbeständigem Papier.

Den Verlag erreichen Sie im Internet unter:
www.winter-verlag.de

Contents

Competing and Contested Concepts of Knowledge

Tacit and Embodied Knowledges

SABINE SIELKE, SIMONE KNEWITZ, AND CHRISTIAN KLOECKNER

Knowledge Landscapes North America: Introduction

Knowledge Landscapes North America intervenes in current critical debates on concepts of knowledge and processes of knowledge production and circulation. As knowledge has been proclaimed an indispensable economic resource, scholarly and public discourses increasingly interrogate its established and newly evolving forms and institutions. Concepts of knowledge—seen as more than data and information, yet less than competence, expertise, creativity, or wisdom (see Malecki; Tolksdorf; Weinberger)—, the modes of its production and circulation, and questions of access have become key issues of scholarly and public debate.

These discussions frequently focus on North America and its knowledge landscapes, which retain their crucial position in knowledge distribution despite shifts in global power constellations. The U.S. in particular has established itself as a space generating forms of knowledge that circulate on a transcultural and transnational scale and drive globalization. If expectations concerning economic futures capitalize on regions of East Asia, Latin America, and, more recently, Africa, the global gaze continues to be on North America when it comes to knowledge cultures. The contributions to this volume explore the particularities of these formations by raising pertinent questions: How do North American knowledge institutions drive global knowledge economies—and in what ways are they driven by them? Which agents shape North American knowledge landscapes? What conditions have been conducive to the emergence of innovative knowledges?

This book evolved from the 62nd annual conference of the German Association for American Studies (GAAS) on "Knowledge Landscapes North America," organized by the North American Studies Program and hosted at Rheinische Friedrich-Wilhelms-Universität Bonn in May 2015, which coincided with the 25th anniversary of our program. The topic of the convention—North American knowledge cultures as spatial formations—was inspired

We would like to thank Björn Bosserhoff, once again: his competent and meticulous editorial support assured that this book offers clear views on and smooth travels through North American knowledge landscapes.

by one of our collaborative research projects[1] and resonates strongly within and beyond the American studies community. Our theme travels so well within this territory of scholarly investigation not simply because knowledge formations and knowledge environments have become pertinent issues of a far and wide discussion. "Knowledge Landscapes North America" has also hit a nerve within our field because American studies has always interrogated its own methods and strategies of knowledge production, from Leo Marx's sense that we engage in a "*non*-discipline" (13) to the increasingly radical interdisciplinarity of our field.

Moreover, our discipline's deep concern for matters of race, gender, ethnicity, and, to a lesser degree, class has made us scrutinize "tacit knowledge" (Polanyi; see also Ernst and Paul; Collins) and the many effects of ignorance. In fact, American studies' political edge has also been a driving force for reclaiming marginalized and forgotten knowledges and for acknowledging how North American cultures know in multiple ways. In addition, as we interrogate visual cultures and shifting media ecologies (see, e.g., Mitchell; Uricchio and Kinnebrock), our interdisciplinary enterprise has contributed much to the debates on how knowledge takes form, how it morphs and transforms, and how it circulates globally. All of these pursuits have widened the scope of our field while at the same time we experience deep transformations—and partial erosions—of our own knowledge environment that frame the potential of our work. As a result, the question of what makes up the core, or better perhaps: the necessary nodes of our research and teaching and what we consider sustainable knowledge has moved to the forefront of our day-to-day decisions as 'knowledge workers.'

The economic impact of knowledge—and thus, implicitly, its economic dependency—has been of central importance in scholarship for a long time and is marked poignantly by the publication of Fritz Machlup's seminal 1962 study *The Production and Distribution of Knowledge in the United States*. This assessment of knowledge as a major economic resource coincided with the rise of key concepts such as the "knowledgeable society" (Lane). In part due to the broad reception of sociologist Daniel Bell's *The Coming of Post-Industrial Society* (1973), claims to the centrality of knowledge for a functional society after the decline of manual labor resonated throughout the Western world. They carried particular weight, though, in the United States where, given its demographic diversity, the production and dissemination of knowledge has historically played a salient role. Yet the increasing identification of social progress

[1] This introduction is indebted to work that evolved from that project, "Knowledge Ecologies North America"; we want to particularly acknowledge Elisabeth Schäfer-Wünsche's engagement, research, and insight.

with scientific and technological advancement—in a political climate of the Cold War—also led C. P. Snow to bemoan the separation of the knowledge cultures of scientists and "literary intellectuals."

Along with inquiries into forms and types of knowledge (see, e.g., Tolksdorf), knowledge formation in the sciences became a subject of historical and sociological research (see, e.g., Stehr; Gibbons et al.); moreover, the concept of (technological) innovation was invested with immense expectations (see Newfield in this volume). Since the late 1980s, scholars of various disciplines have concentrated on radically changed modes of knowledge production, including digitization (see Berressem). According to Michael Gibbons et al., this "new" production of knowledge tends toward transdisciplinarity and spaces outside the university (3-6). Emulating this shift, this volume opens with a reconsideration of the emergence of a U.S. American 'knowledge society' and concludes with interrogations of the significance of local and tacit knowledges. The essays reflect on marginalized knowledges as well as on the expertise of literature and the arts; and they map the shifting media ecologies that have affected concepts of knowledge.

Venturing into distinct landscapes of current knowledge production and circulation, the contributions engage highly contested spaces and speak to each other with much intensity. Conceiving of such processes as landscapes, that is, in spatial terms, we think of our analyses as acts of mapping and as a kind of cartography. At best such work can produce a ground plan or topographical atlas that is culturally specific and aims at an interdisciplinary account of what is in fact a thicket of multidimensional and interdependent developments and processes. These processes, we acknowledge, can never be accounted for or even visualized in their entirety, in part because they take place in open as well as subterranean spaces and feed into increasingly global media-based circulations of knowledge. Given such a vast conceptual framework, this book, of course, is limited in scope. Yet by paving new inroads into and outlining select paths of maneuvering through specific knowledge environments, the essays collected here hint at how a multidimensional map of North American knowledge landscapes could possibly be designed in a large-scale collaborative endeavor.

Framing historically and culturally specific kinds of knowledge production and transmission as spatial formations and transformations is more than a rhetorical move. Even though we are aware of the value and unavoidability of tropes and analogical thinking, which we all make use of throughout this book, our approach goes beyond strategies of re-metaphorization and calls for new perspectives and methods. Mapping North American knowledge landscapes as environments means recognizing both the local conditions and the specific agents of knowledge production and foregrounding their interaction. Once set

in a spatial framework, knowledge is always already embodied as well as site- and time-specific. This holds true even for knowledges that circulate digitally and get adapted globally: they seem to move in a disembodied flow, yet circulate between agents, institutions, and organizations located at specific sites, through material conduits, and in environments where actual 'bodies' perform different kinds of work.

Moreover, even as all knowledge is embodied, it always requires mediation—via images, language, and technologies of communication—for its distribution within and between knowledge landscapes (see, e.g., Uricchio). Media and mediation constitute the hinge and habitat of global flows of knowledge. Since knowledge and information have always needed to travel long distances in North America, crossing territories with low (or no) population density, communication technologies have a particular relevance in the U.S. and Canada (see, e.g., Taras, Pannekoek, and Bakardjieva). Furthermore, knowledge is collective and thus shared, yet also contested and bound; it is dynamic and processual and works both explicitly and implicitly. Thinking of knowledge as spaces of multidimensional interaction consequently transforms our conceptions of what constitutes and counts as knowledge and how to approach its analyses.

In line with this attempt at mapping North American knowledge landscapes and shifting perspectives on frames of knowledge production and circulation, the fourteen essays and the interview collected here cover a broad terrain: from the knowledge generated in early American literary culture to the impact of the natural sciences on critical practice to the current state and status of the humanities. At the same time, the collection addresses the complex issues the 2015 GAAS conference raised from the angles of several (sub-)disciplines, ranging from critical university studies to the study of literature, media, and visual culture to environmental history. The contributions pursue four fields of investigation, each of which circumscribes dynamic, mediated interactions within infrastructures of knowledge production that, as a result, themselves transform and morph. Like our convention, this book closes with a conversation with two writers of fiction. The exchange with Rivka Galchen and Joseph O'Neill calibrates the debate on how and what we do and do not know and invites us to envision the scope of North American knowledge landscapes beyond the known.

Knowledge Institutions, Knowledge Economies

The first part of this volume, entitled "Knowledge Institutions, Knowledge Economies," enters into North American knowledge landscapes by critically engaging the ongoing transformation of the university as a central institution of knowledge production and the increasing dependence of knowledge—or rather: what counts as knowledge—on economic utility and cash value. The common concern of Christopher Newfield and Sverker Sörlin is the continuous economic erosion and devaluation of the humanities and social sciences which the authors approach from, quite literally, two different directions. Both, however, draw intensely on personal experience and on their engagement in the politics of higher education.

Christopher Newfield's essay, "New Roles for Academia? The American University and the Knowledge Economy," scrutinizes, in a highly poignant manner, the adaptation of the American university to the demands of current knowledge economies. While the "public ethos" and expansion of the public university after World War II created an institution that meant "mass access," "mass quality," and "sociocultural inclusion," in short: a kind of middle-class "knowledge democracy," the transformation of the university into the instrument of the high-tech economy, Newfield argues, has broken the backbone of the 1960s and 1970s knowledge society. Suggesting that the vast scope and enormous effects of this "major loss" go widely unnoted, Newfield elaborates on what he calls the "consensus paradigm," on the basis of which the overall social value of the university has diminished significantly. As he sheds light on what higher education as an outpost of a post-democratic and post-middle class Western knowledge economy holds in store—not merely in the United States—, Newfield insists on the urgency of revitalizing the knowledge society on a global scale.

Sverker Sörlin's contribution, "Frost on Humanities and Social Sciences? Understanding the Climate Change in North American Knowledge Landscapes," looks at structures and institutions of knowledge production and dissemination from a Scandinavian perspective. Framed as a personal narrative, Sörlin's essay takes us on a journey from the university landscape of Umeå in Northern Sweden to Berkeley and the University of California system, from campus designs embodying and incorporating the humanist ideals of previous decades to the predicaments of contemporary knowledge institutions. Traveling these knowledge landscapes, Sörlin comes to call into question the alleged crisis of the humanities: though austerity policies threaten their funding and student interest both in the U.S. and in Europe seems to shift into fields with better

career opportunities, the crisis discourse, he maintains, needs to be read as political rhetoric in the struggle for a definition of the world we live in. Research in the humanities, Sörlin holds, is conducted with great productivity and vigor, not least with respect to environmentalism and climate change; indeed, he believes its results threaten power interests, particularly in the U.S.

In his essay, "Building Knowledge: Carnegie Libraries as Epistemic Spaces," Alexander Starre revisits the emergence of yet another institution aimed at disseminating knowledge and enabling a new democratic access to learning. Drawing on archival research, Starre investigates how Andrew Carnegie's ambitious library construction program, run between the 1880s and the 1920s, exemplifies how American knowledge landscapes become epistemic spaces, how they constitute local sites and material manifestations of social performances of and struggles between various agents, and how they can serve as a testing ground for emergent forms of knowledge management. The author shows that designing the forms and architectures of these spaces involved countless clashes of group-specific interests and tacit assumptions about the function of a modern library and its role in the distribution of knowledge. As he explores the communicative network around the Carnegie library system, Starre enters fields of contention, e.g., regarding questions of access to libraries in the segregated South or funding and planning disputes between literary societies, managers, and builders. In conversation with Michael Polanyi's concept of "tacit knowledge" and Karen Barad's work on "onto-epistemology," he reassesses the library as a materialized representation of the look and feel of knowledge and its place in a community.

Education and the Circulation of Knowledge

Traditionally, processes of knowledge production and circulation are associated with the far-reaching realm of education, which our volume's second section ponders, moving from early childhood pedagogy to assessments of college life and from seventeenth- to twenty-first-century knowledge practices. Opening this section, Emily Petermann's contribution "From the ABCs to the American Revolution: Poetry and the Construction of Children's Knowledge" examines the sources and kinds of knowledge conveyed to young readers through poetry used for educational purposes, from the late seventeenth-century Puritan *New England Primer* to poems about American Revolutionary war heroes by Henry Wadsworth Longfellow and twentieth-century writers Rosemary and Stephen Vincent Benét. Focusing on the tension between didacticism and entertainment in these poems and how they interact in the construction of children's

knowledge, Petermann demonstrates that "entertainment has consistently been used as a pedagogical tool" although the conceptions of childhood that underlie these knowledge processes keep evolving. She particularly draws our attention to the ways in which aesthetically pleasing poetic features serve ideological purposes, promote patriotic interpretations of American history, and playfully usher child readers into a national community with its specific sense of cultural identity.

In "From Tools to Toys: American Dissected Maps and Geographic Knowledge at the Turn of the Twentieth Century," Mahshid Mayar examines the educational functions of jigsaw puzzles in a historical perspective. First invented and manufactured in eighteenth-century Britain, dissected maps were created and widely distributed in the U.S. by American producers by the mid-nineteenth century. Attributing these puzzles with a significance superseding that of a mere leisure time activity, Mayar discusses the ways in which dissected maps of specific regions, countries, continents, or the world helped produce American children's geographic knowledge during the rise of the U.S. empire. She shows that the selection of geographical areas for dissection, as well as the choice of scale, reinforced U.S. geopolitical priorities; furthermore, manufacturers tended to cut the pieces along political borders, thereby naturalizing these boundaries. Mayar therefore reasons that these popular toys introduced children to shifting national and geopolitical imperatives by engaging them intellectually as well as physically, teaching them to make sense of the dissected pieces as parts of spatial wholes.

Our next two contributions move the focus back to discourses of knowledge in higher education by turning to two influential campus novels and their changing meanings and popularity over time. Sophie Spieler's article, "The Contingency of Knowledge: *Stover at Yale* and the Debate on U.S. Elite Education," subjects Owen Johnson's 1912 novel to a critical re-reading that pays particular attention to its engagement of Yale University's institutional context, its significance for the genre of the campus novel, and its interventions in discourses of elite education in the United States. Using three moments in the text's one-hundred-year publication and reception history—the Yale Bookstore edition (1997), the first edition (1912), and the serial publication in *McClure's* (1911–1912)—as points of departure, Spieler emphasizes how the initially critical text has been appropriated by Yale University: by representing both a quaint, elitist tradition and the democratic overcoming of that tradition, the text has in fact boosted the college's institutional charisma. Although the novel is rarely read and taken seriously today, it voices a still valid critique, Spieler argues, of the pitfalls and problematic values of elitism as a structuring principle of U.S. higher education.

In his essay, "*Stoner*: John Williams's Academic Novel against Academia," Heinz Ickstadt engages a novel that, though first published in 1965, found critical acclaim only when reissued in 2003 and enjoyed commercial success another ten years later. Celebrated for its literary quality and realist mode rather than as a representative of a genre, the story of Stoner—an "ordinary man" who becomes professor at a small college and whose "many defeats" result in his 'stony' withdrawal—gets reframed in the light of the "tectonic shifts" knowledge landscapes have undergone in recent decades. Meanwhile Stoner's "stoic resignation," Ickstadt writes, may be read as a "symbolic 'last stand'" in defense of a lost cause: "that of the university as the embodiment of a Western culture based on its dedication to textual knowledge." It is this kind of knowledge that Ickstadt's reading of *Stoner* unravels, presenting a novel that resists the literary modes of the 1960s just like its protagonist resists changes in his academic environment. Making "toughness in resigned acceptance […] Stoner's virtue," *Stoner* outlines the limits of a short-lived genre that mistrusts, yet nonetheless consecrates academia as a protected space.

Competing and Contested Concepts of Knowledge

The third section of this book capitalizes on some of the crucial issues in an ongoing debate on what counts or can be conceived of as knowledge, and which cultural practices do in fact compete for this designation. In a knowledge landscape whose economically driven transformations have privileged particularly marketable areas of knowledge production—without reducing the overall costs for education and learning (see Newfield)—the fields of inquiry plowed by the humanities and the social sciences, including the exploration of literary texts, have been challenged to reassess their (use) value. At the same time, concepts and practices of knowledge production, e.g., the metaphor and methods of ecology, may travel from one area to another, foreign, environment where they may drive new insights.

The work of Antje Kley and Hubert Zapf responds to this challenge in two seemingly opposed ways: Kley's essay on "Literary Knowledge Production and the Natural Sciences in the United States" holds that literature, as a "view from somewhere," questions and adds to "the view from nowhere" projected by the natural sciences, while Zapf's exploration of "Matter, Metaphor, and Cultural Ecology" adapts a concept from the natural sciences and shows how it can do its work in cultural studies and, in a feedback loop, impact on biology as well. Both authors underline that the boundaries between the disciplines are—and have always been—contested and shifting. More precisely, though, it seems that

both the widely assumed superiority and social relevance and the increasing specialization and differentiation of the sciences have called for a revision of how (studies of) literature and culture shape knowledge landscapes. In fact, one may even sense a desire, first and foremost in the humanities, to undo the many divisions between and within disciplines of knowledge production and to acknowledge our common interest in the inquiry of "natureculture" (Haraway).

Kley's essay takes off from the question of what literature—and literary studies—knows. Especially with regard to biomedical issues, she argues, literature and literary studies speak to the sciences precisely because they expose and reflect on their own point of view, i.e., the "entanglement between the socially embedded subject and the object of knowledge production." Focusing on literary narratives and the life sciences, Kley compares scientific and literary modes of knowledge production. Her analyses convincingly show "how literature 'knows all the details'" that go by mere implication and assumption in most scientific modes of inquiry. The capability, on the part of literature, to communicate through social perspective in both self-reflective and referential manners becomes all the more pertinent, Kley holds, as scientific modes of knowledge production have come to dominate U.S. knowledge landscapes as well as political and administrative decision-making processes.

The new interest in matter and materialities to be observed in the humanities and social sciences is part of a wider response to the challenges current knowledge economies pose. According to Zapf, the rise of the "new materialism" is both a reaction to what came to be seen as the dominance of constructivism and a response to the demands of interdisciplinarity. Critically assessing the characteristics of the so-called material turn and its impact within the framework of cultural ecology, Zapf presents material ecocriticism and cultural ecology as two related, yet distinct directions within recent cultural theory. Both approaches, he underlines, interrogate the interdependence between matter and metaphor and acknowledge tropes as a vital element of thinking and epistemic processes. As a consequence, Zapf argues, the move, within recent critical and cultural theory, "from metaphor to matter" has itself called for a reverse maneuver "from matter to metaphor." Illustrating his observations with a reading of Walt Whitman's "Song of Myself," the author shows how matter and the body can function as sources of poetic knowledge and how the rich resources of metaphor enable the ecopoetic processes of his texts.

The question of how metaphors travel and drive knowledge production is also central to Paula von Gleich's contribution. In "How Black Is the Border? Border Concepts Traveling North American Knowledge Landscapes," she critically reexamines the trope of the border popularized particularly in Chicana/o studies, as in Gloria Anzaldúa's "borderlands" and Walter Mignolo's "border

thinking." Though aware of the violence exerted by borders, these thinkers construed such boundaries as fundamentally fluid, relational, and crossable nonetheless—a view that became a "travelling concept" (Bal) with repercussions in other fields of American studies. Von Gleich, in turn, outlines how limited the mobility of this optimistic, even utopian conception of borders in fact is once we consider the writings of black feminists and Afro-pessimists. The logics of relationality and comparability may have allowed Chicana/o concepts of the border to travel far in North American knowledge landscapes. Yet, it is these very logics, the author holds, that black experience, according to Sylvia Wynter, Frank Wilderson, and Saidiya Hartman, refutes. Proposing to understand these scholars' demarcations between the "'non-human' as Blackness and 'the Human' as non-blackness" as well as between non-black social life and Black social death as epistemological border concepts, von Gleich challenges us to rethink the politics and ethics of our own critical practice.

"No theory of knowledge is complete without a theory of the news," Frank Kelleter proclaims in his essay entitled "Four Theses on the News." Kelleter offers us preliminary considerations for a comprehensive theoretical understanding of the news, providing a framework that contextualizes the evolution of the news in the development of media technologies and practices. The essay aligns the emergence of periodical news in the form of dailies and weeklies with a new, self-assertive epistemology of newness during the enlightenment and traces it back to the invention of print technology. Kelleter locates the news in the field of tension between novelty and seriality, highlighting its role as medium of serial storytelling. He focuses in particular on the place of news media in our current, digital era, as established institutions are confronted with amateur, less cost-intensive forms of communication. The news, he finds, is crucially different from other types of popular seriality, since it—as of now—tends to be self-referential without being self-reflexive. In its contemporary forms, Kelleter argues, news journalism remains curiously self-defensive with respect to the new, customized practices of online communication.

Tacit and Embodied Knowledges

If this volume has so far seemed to predominantly examine the creation and circulation of knowledge from institutional, structural, and conceptual angles, the last section redirects our gaze to take into account how knowledge comes to matter for individual agents and within collectivities. We would emphasize, however, that these perspectives are always already entangled, and that all con-

tributions in this collection pay attention to both objective structures and processes of knowledge internalization or sedimentation. While, for instance, the children's poetry or dissected maps discussed in the second section of this book create their own forms of embodied or tacit knowledge, the essays assembled in the fourth section on "Tacit and Embodied Knowledges" also pay close attention to the forces of tacitness in structures of racial, ethnic, and gendered domination.

Christa Buschendorf's contribution, "Tacit Knowledge in Edward P. Jones's Novel *The Known World*," investigates how literature intervenes into questions of epistemology. Engaging Pierre Bourdieu's theory of "practical knowledge" under the broader category of tacit knowledge, Buschendorf finds a new approach to Jones's 2003 neo-slavery novel and its narrative strategies. She argues that Bourdieu and Jones drive similar issues, i.e., the question why systems of domination, particularly those based on fundamental injustice as in the case of slavery, exhibit such remarkable stability and duration. What are the mechanisms ensuring that these systems work so well, proving resistant to subversion? *The Known World*, Buschendorf argues, shows that slavery, like other institutionalized forms of domination, built on forms of bodily knowledge that helped naturalize power structures and thereby contributed to their perpetuation. Modes of storytelling, Buschendorf demonstrates, have the potential to uncover these mechanisms of naturalization.

In her essay, "Knowledge on Edge: *Resident Evil*, Feminism, and the Rescue of the Female Child," Jeanne Cortiel examines the *Resident Evil* film series for its deployment of female characters in a fictional knowledge regime defined by zombies, clones, and a central computer intelligence referred to as "The Red Queen." Harking back to feminist speculative fiction of the 1970s, *Resident Evil* takes up the motif of the rescue of a female child by an adult woman in order to explore the complex relationships between the gendered body, space, scientific knowledge, and skilled risk-taking. While its male characters are systematically associated with failed ways of calculative reasoning and get excluded from the women's circles of shared knowledge, the film series makes incidental use of feminist strategies of empowerment and locates alternative knowledges in the female body. Yet, the serial narration and its ongoing deferral of closure also implies, Cortiel argues, that epistemological certainties derived from the girl's rescue and the creation of an all-female, queer family get undermined repeatedly. By "continually den[ying] the closure even of extinction," *Resident Evil* departs from earlier conceptions of gendered epistemic injustice and feminist alternative knowledges.

The last essay in this volume addresses the issue of how transforming media ecologies reshape our sense of access to knowledges we consider tacit, embodied, even inaccessible, if not lost entirely. In "Translating Affect: Inuit Cinema, Affect Theory, and Knowledge (Re-)Production," Russell J. A. Kilbourn shows how work done by the Inuit film and video production company Igloolik Isuma—the focus is on the so-called "Fast Runner" trilogy: *Atanarjuat: The Fast Runner* (2001), *The Journals of Knud Rasmussen* (2006), and *Before Tomorrow* (2008)—interrelates digital video technology, historically determined filmmaking techniques, and Inuit storytelling to convey indigenous knowledge and produce cultural memory. Approaching these films by way of film theory and comparative close analysis, Kilbourn makes use of Deleuze's category of the "affection image" to interrogate the assumptions behind Isuma's technical-aesthetic approach to self-representation and cultural preservation, e.g., by way of the long take or the close-up. His attentive, illuminating readings of selected scenes delineate how Inuit indigenous knowledge and First Nations epistemologies are rendered, perpetuated, and inevitably changed—yet in part solely on-screen.

The final contribution to this book is Andrew Gross's conversation with authors Rivka Galchen and Joseph O'Neill. As their novels and short fiction reflect intensively on how different disciplines, discourses, and media shape distinct forms of knowledge, Galchen and O'Neill were ideal partners for a reading and panel debate on what literary practice contributes to North American knowledge landscapes. Adopting as its headline the title of Galchen's 2014 collection of short stories, *American Innovations*, this exchange on systems of knowledge production extended into the realm of politics and the economy: circling back to the questions of what fiction knows and how it knows it, the dialogue between authors and literary critic maps areas of the larger territory fiction covers in contemporary knowledge landscapes. Since they "launch their narratives from the border of the knowable," Galchen and O'Neill highlight the potential of fiction to leave behind well-traveled roads and make us, as O'Neill puts it, jump "into the cold ocean." And just as we are surprised, again and again, by what lights up when we light out for the territory of fiction, this book invites the reader to travel knowledge landscapes of North American studies that remain to be mapped.

References

Bal, Mieke. *Travelling Concepts in the Humanities: A Rough Guide*. Toronto: U of Toronto P, 2002. Print.

Bell, Daniel. *The Coming of the Post-Industrial Society: A Venture in Social Forecasting*. New York: Basic Books, 1973. Print.

Berressem, Hanjo. "Actual Media | Virtual Media." *Critical Matter: Diskussionen eines neuen Materialismus*. Ed. Tobias Goll, Daniel Keil, and Thomas Telios. Münster: Edition Assemblage, 2014. 186-207. Print.

Collins, Harry M. *Tacit and Explicit Knowledge*. Chicago: U of Chicago P, 2010. Print.

Ernst, Christoph, and Heike Paul, eds. *Präsenz und implizites Wissen: Zur Interdependenz zweier Schlüsselbegriffe der Kultur- und Sozialwissenschaften*. Bielefeld: transcript, 2013. Print.

Gibbons, Michael, et al. *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies*. London: Sage, 1994. Print.

Haraway, Donna J. "Introduction: A Kinship of Feminist Figurations." *The Haraway Reader*. New York: Routledge, 2004. 1-6. Print.

Lane, Robert E. "The Decline of Politics and Ideology in a Knowledgeable Society." *American Sociological Review* 31.5 (1966): 649-62. Print.

Machlup, Fritz. *The Production and Distribution of Knowledge in the United States*. Princeton: Princeton UP, 1962. Print.

Malecki, Edward J. "Everywhere? The Geography of Knowledge." *Journal of Regional Science* 50.1 (2010): 493-513. Print.

Marx, Leo. "On Recovering the 'Ur' Theory of American Studies." *Theories of American Culture, Theories of American Studies*. Ed. Winfried Fluck and Thomas Claviez. REAL – Yearbook of Research in English and American Literature 19. Tübingen: Narr, 2003. 3-17. Print.

Mitchell, W. J. T. *Image Science: Iconology, Visual Culture, and Media Aesthetics*. Chicago: U of Chicago P, 2015. Print.

Polanyi, Michael. *The Tacit Dimension*. 1966. Chicago: U of Chicago P, 2009. Print.

Snow, C. P. *The Two Cultures and the Scientific Revolutions*. Cambridge: Cambridge UP, 1998. Print.

Stehr, Nico. *Knowledge Societies*. London: Sage, 1994. Print.

Taras, David, Frits Pannekoek, and Maria Bakardjieva, eds. *How Canadians Communicate*. Vol. 1. Calgary: U of Calgary P, 2003. Print.

Tolksdorf, Stefan, ed. *Conceptions of Knowledge*. Berlin: De Gruyter, 2012. Print.

Uricchio, William. "Things to Come in the American Studies-Media Studies Relationship." *American Studies Today: New Research Agendas*. Ed. Winfried Fluck, Erik Redling, Sabine Sielke, and Hubert Zapf. Heidelberg: Winter, 2014. 363-82. Print.

Uricchio, William, and Susanne Kinnebrock, eds. *Media Cultures*. Heidelberg: Winter, 2006. Print.

Weinberger, David. *Too Big to Know*: *Rethinking Knowledge Now That the Facts Aren't the Facts, Experts are Everywhere, and the Smartest Person in the Room is the Room*. New York: Basic Books, 2012. Print.

Knowledge Institutions, Knowledge Economies

CHRISTOPHER NEWFIELD

New Roles for Academia?
The American University and the Knowledge Economy

The most common metaphor for the university in English is "ivory tower," which suggests a permanent foundation, an impregnable fortress, and inhabitants cut off from the world. For better and also for worse, none of these things are true about the contemporary university, which is a franchise vendor, a contract researcher, and an assessment provider. If we have to stick with building metaphors, an American university is much like a suburban office building attached to a shopping mall. I personally think of the university as more of a sailboat—taking the crew to new places (not necessarily where it thought it was going), usually over society's horizon, where everybody can have adventures. For me as a student, the university was a site of the *voyage*. I went to university with the knowledge of how it had transformed the lives of my parents. My mother went to UC Santa Barbara when it was a teacher's college, but spent most of her time reading Russian and Victorian novels and modernist poetry, and we know where that leads—towards a certain expansiveness, a sense of independence, a possible demandingness towards political leaders. My first-generation university parents had a sense of the size of the world, the complexity of problems, and a confidence or at least comfort with different kinds of people. They wanted to see the world. But where did I get the idea that this was something the university did—that is, that it was the university that created the capacity to go on voyages and to think new things because of them?

The Meaning of the Public University

The idea came from the public *ethos* of the U.S. university after World War II. It was specifically the *ethos* of the public university as it underwent a massive expansion with several major effects: to incorporate returning war veterans back into society, to defuse the social movements of the 1930s, particularly the labor movement, and to expand research relevant to both economic and military competition with the communist world during the Cold War.

What did these elements add up to? In the early 1960s, the already-renowned University of California president Clark Kerr used the term *knowledge industry*. He meant to describe the shift in U.S. society towards an increased use of theoretical knowledge by business, but also by the society overall. Ten years later, the sociologist Daniel Bell called this the knowledge society (212-65), and Bell's term accurately captures what Kerr meant.[1]

The knowledge society had one indispensable institution: the university. "Originally," Kerr wrote, "it served the elites of society, then the middle class as well, and now it includes the children of all, regardless of social and economic background" (*The Uses of the University* 88). Kerr called it the "multiversity" (1-34) but also the City of Intellect. He wrote, "The City of Intellect may be viewed in a broader context, encompassing all the intellectual resources of a society, and the even broader perspective of the force of intellect as the central force of a society—its soul. Will it be the salvation of our society?" (123).[2]

Was Kerr a kind of Cold War Humboldt? Yes and no. But note the inclusion of all fields. Note also the confidence—the certainty of the power of the "force of intellect" as it forges what we might think of as the unfolding of the historical destiny of mankind. For Kerr, and many others, the university intellect must transform the "mode of production" into freedom, expressed as "middle-class democracy" (94). One major means for doing this was of course military and corporate techno-science: World War II and then the Cold War flooded American universities with money. A second means consisted of "the social sciences and humanities," which "may find their particular roles in helping to define the

[1] Kerr and Bell both relied on what Bell called Fritz Machlup's "heroic effort to compute the proportion of GNP devoted to the production and distribution of knowledge," which Machlup claimed reached 29 percent in 1958 (212). Kerr's knowledge industry was the foundation of Bell's knowledge society, in which "the sources of innovation are increasingly derivative from research and development" and "the weight of the society […] is increasingly in the knowledge field" (212).

[2] Similarly, Bell wrote, "All this growth goes hand in hand with a democratization of higher education on a scale that the world has never seen before. No society has ever attempted to provide formal education for the bulk of its youth through age nineteen or twenty (the junior college level) or through age twenty-two, yet this has now become the explicit policy of the United States. Just as in the 1920s a decision was made to provide a secondary school education for every child in the country so, too, in the past two decades, the decision was made to provide a college education, or at least some years in college for all capable youths in the country" (216).

good as well as the true and to add wisdom to truth" (93). Kerr put special emphasis on the university's role in formulating ethical and social coherence.[3]

The third means was a campaign to convince the general public that its aspirations required strong universities. Kerr and others fought agonizing political battles on behalf of this vision of the public university. What enabled them to be willing to fight, and to *win*—for a time? There were two sources of this policy activism. First, they built the university as a public good for the full spectrum of a democratic society. In 1945, ten to twenty mostly private universities continued to control most research revenues and elite social networks as they had since the nineteenth century. The arrival of demobilized soldiers on campuses through the GI Bill turned a much larger number of universities into national players. They not only had more money—they had a popular, though generally implicit, public mission.

Public meant three things as the concept evolved through the 1950s and 1960s into the 1970s. First was mass access. The term access meant that you could afford to go and would not run up debt. More fundamentally, access meant that you could get into the public university—that you would actually be admitted to it. UC campuses were all close to open admission into the early 1970s, and most accepted all applicants who met baseline requirements.

Second, the "public" in public universities meant mass quality. The great flagships—including Ann Arbor, Austin, Berkeley, Bloomington, Chapel Hill, Columbus, Iowa City, Madison, Urbana-Champaign—did not take a back seat in quality to Ivy League universities but competed with them and, in emerging fields in particular, often won; the publics offered competitive quality on a scale that private universities could not match and never would. That was in research. In teaching, the public idea was to elevate the individual capabilities of huge numbers of students. Public universities did not reject everyone who was not already on a high level. They took nearly all comers and then improved them after they got in. No offense to Stanford or Harvard, but these universities minimize their public impact by accepting and improving only those students who are already at the top of the achievement pyramid before they have attended their first class. In contrast, there has been enormous public impact in taking

[3] See also Kerr's inaugural address as President of the University of California: "Looking ahead, it seems to me that at least four paramount tasks present themselves to the university in our society. On[e] is to continue to stimulate the quest for knowledge. Another is to transmit our knowledge to future generations. A third is to enable us to remain masters of our knowledge, to prevent the complete fragmentation of our view of ourselves, our society and our universe. The fourth and perhaps most exacting is to assess the values which our knowledge should enable us to serve."

mid-level achievers and making them good or great. Mass quality in public universities has meant reducing the mediocrity of the masses—taking the vast majority of us allegedly mediocre folks and our middling backgrounds, average levels of ambition, and not-so-great personal focus, and making us really good at some things. Mass quality has consisted, implicitly, of *Bildung*—personal development—on an unprecedented scale. Of course, this was presumed to lead to economic development, as the Morrill land-grant legislation demanded, and as politicians invariably insist upon. But the means and also the tacit end was instruction that combined subject mastery with individual cultivation. When they functioned well, public universities taught content while doing liberal-arts style work on what we might now call "creative capabilities," adapting work by Martha Nussbaum and others.[4] Universities also furnished the concepts and created the conditions for the "identity politics" revolution often associated with Michel Foucault's and Judith Butler's work on the fluidity of gender as well as sexuality. In such cases, intellectual content and personal identity were addressed together in a combination of great public power.[5]

Third, the "public" in public universities meant sociocultural inclusion: women, people of color, and religious minorities were included and sometimes even valued. The most important form of integration was racial, but in a land with what one recent cultural geographer calls the eleven nations of North America, public universities also established conditions of general cross-cultural equality (Woodard). Assimilation to WASP norms became decreasingly the university's operative assumption. This was a long, slow road, and we are

[4] In *Not For Profit: Why Democracy Needs the Humanities*, Nussbaum discusses "cultivating capabilities" that are essential to democratic public life. For example, chapter 3 offers a useful discussion of psychological capabilities that allow the negotiation of group differences without the resort to violence. A follow up work, *Creating Capabilities*, describes the "capabilities approach" to human and social development. "Creative capabilities" is a summary term that Nussbaum does not use in her description of the major "capabilities." Most relevantly here, she insists that "the attitude toward people's basic capabilities is not a meritocratic one—more innately skilled people get better treatment—but, if anything, the opposite: those who need more help to get above the threshold get more help" (24).

[5] Identity politics extended rather than broke with or betrayed what Kerr had called the research university's "liberal knowledge" (*The Uses of the University* 2) This can be more easily seen by comparing the humanities' disciplinary assumptions to those of the natural sciences and engineering, rather than focusing entirely on differences within the humanities.

nowhere near the end of it.[6] We still have ongoing problems of racial climate on campuses coast to coast, as well as gender trouble signaled by the national debate about sexual assault on campus. But the goal of racial equality persisted as a double bind: the university could not fulfill an egalitarian vision, yet it could not settle for *not* fulfilling it. "Public" did start to mean anti-exclusion on the basis of race, culture, or other identities, with the outcome being the possibility, for the first time in U.S. history, of a solidarity society formed by what we now call the 99%.

I offer a summary chart that shows, from left to right, social challenges in the 1950s and 1960s, the traditional mainstream position, the public university's general, if often implicit stance, and finally, the nonconservative middle class that the public university was producing—to the pleasure of many people and the horror of certain economic and political elites. My point is clear in the figure's title.

Challenge	Traditional Middle-Class	Public University	Nonconservative Middle-Class
Multiracial mass democracy	Experts follow elites	Free / open access	Majoritarian democracy
Early decline of profits; unhappy workforce	Management vs. labor; managers loyal to elites	Bildung – deep personal development	Value created by skilled white-collar degrees
Racial equality in post-WASP society	Cultures are unequal; assimilate to WASPs	Egalitarian inclusion and diversified curriculum	Postsegregation: emergent cultural equality

Fig. 1. Public University for Mass ("Middle Class") Democracy

The U.S. faced challenges in the political, economic, and cultural domains (rows 1-3 respectively). By the 1960s, traditional conservatism (column 2) no longer offered functional responses, even though the majority of the middle class remained loyal to them. My claim here—argued at length elsewhere—is that the public university offered meaningful problem-solving in these three dimensions where the political right and center were failing (see Newfield, *Unmaking the Public University*). The society imagined by the nonconservative middle class represented a major expansion of democracy in those three zones

[6] As the UCLA historian Michael Meranze reports, African Americans and Latinos did not catch up with 1967 white college participation rates until 1994 and 2009, respectively, by which points white participation had leapt ahead (1319).

(column 4). The mass white-collar middle class—John Kenneth Galbraith's "technostructure" (22-23)—began to take for granted a kind of bourgeois labor theory of value that entitled it to much of the proceeds of the new wealth they traced back to their own expertise.[7]

So, a central reason for the post-war public university's success was its public-good pursuit of democracy in three dimensions. A paired reason was that this kind of knowledge democracy fit with the way business and political elites understood the knowledge society. The crux was that all but the most right-wing elites agreed that capitalist society had to be a knowledge society. The reason was simple: capitalism required innovation. Innovation needed to be continuous and thus widespread. The theory of the knowledge society argued that while an earlier capitalism had a long-running engagement with exploitation, slavery, imperialism and the like, a mature capitalism would create value through invention. That required public universities because they offered the mass production of the human capacity to innovate.

This was an idealization of post-war capitalism, of course, but it was an idealization with world-building powers. The visual representation of this public university system has been handed down to us by the photographer Ansel Adams, who was commissioned to do a centennial book by Clark Kerr about the country's leading public research university system, the University of California. There were the traditional old world spaces at Berkeley—the ivory tower. There was cultural fusion at UCLA—Spanish Moorish Mexican democratic imperial something. At Davis—the future is already a Martian Chronicle. San Diego—the university without walls, open to the four winds, creating something new with the energy that was always rushing through. Irvine—the whole campus lowered onto the barren Orange County piedmont by black helicopters from the Planet of the Apes. Irvine was space, no final frontier. The power of the imagination did build a new world.

From the Knowledge Society to the Knowledge Economy

As it turned out, Kerr's presidency was the beginning of the end of this knowledge society and its public-good mega-university. A local Cold Warrior named Ronald Reagan ran against a popular governor in 1966 by redefining Berkeley's City of Intellect as the City of Subversion. Reagan won, and fired Clark Kerr early in 1967. The American political right has waged culture wars

[7] The theory of human capital was a leading neoclassical articulation of this view; see Becker.

and budget wars on universities ever since. The core conservative claim has not changed in the subsequent fifty years: the university's development of three-dimensional democracy is an attack on American power, on American heritage, and on the American business system. After a half-century of steady effort, this framing has succeeded at its core goal, which was to sever the university from its popular base as the servant of everybody's personal and vocational aspiration. The general public still expects the university to be there to help when, as the novelist Po Bronson once put it, society "enter[s] into an infinite loop and stop[s] responding." But these expectations for universities have shifted to its contribution to a knowledge *economy*.

You might be wondering whether I am referring to the shift to neoliberalism driven by Reagan and Margaret Thatcher, and whether I will discuss marketization and privatization. Yes and no. I do think privatization is a central strategy and technique in our own era (see Newfield, *The Great Mistake*). But many concepts and practices get pulled into the gravity field of neoliberalism and none emerge, so I am going to use different terms.

A knowledge *economy* is something quite different from a knowledge *society* (see UNESCO). The knowledge society assumed the vast majority of the society would participate in capitalist innovation, which had its economic outcomes through relatively participatory intellectual means. The knowledge society includes everyone and everything connected to the application of information—all the employees who use information at work, and also the public and private institutions that support them. This concept wrongly excluded blue-collar workers and ignored racial differences, but it covered the millions of undergraduates that American universities were releasing into the workforce in the post-war years.

In contrast, the knowledge economy is based in what we call the tech industries and the small number of mostly science and technology workers (and bankers and managers) who are seen to add value—directly—to the high-tech economy. A knowledge economy seeks returns from advanced technology that is always created, patented, developed, and marketed by a technical elite. As for sociocultural research, the knowledge economy needs only a specific type that sometimes goes by the name of "design thinking," and it does not need a large number of people with these skills. A knowledge economy detaches sociocultural knowledge from the social world and sees wealth-creation as an autonomous, dominant driver of social policy.[8] The knowledge economy also separates sociocultural from economic thought. In a second move, it elevates the

[8] For a treatment of the long-term effects of reducing an economy to supposedly pre-cultural and pre-institutional rules, see Bowman et al.

latter to the dominant position. Financial self-interest has become a higher form of practical reason that undergirds entrepreneurship and controls our era's master narrative. Knowledge about the social, cultural, and psychological effects of self-interested economic decisions are secondary.

This is a major loss, as many battles were fought in the 1960s and 1970s to make sure the U.S. was a knowledge *society* on questions such as environmental pollution. A knowledge society would respond to popular as well as to expert knowledge—to knowledge developed by, for example, the mothers who in the late 1960s lived in the area of the Love Canal in upstate New York, who saw their families getting sick, and who forced various governments to investigate what became the most famous toxic waste remediation site in U.S. history. In contrast, our current knowledge *economy* entitles major actors to subordinate any knowledge defined as non-economic (or anti-economic) to economic goals. For example, Apple Computer's imperative of tax avoidance suppresses discussion of the damage reduced corporate taxes have done to the health, education, transportation, and other public systems of its home state, California (see Duhigg and Kocieniewski).

The effects of the shift from knowledge society to knowledge economy are enormous but not widely noted. Take one of the most urgent of our major problems—climate change. Economic goals have induced the pro-environmental U.S. president to expand fossil fuel production through fracking. In 2015, Barack Obama endorsed the fossil fuel industry's strategy of using the melting of the polar ice as an opportunity to do more oil drilling in the polar region. The same is true for a second major global problem, which is what W. E. B. Du Bois once called "the problem of the color-line" (3). Knowledge economies are not very interested in the cultural knowledge that emerges from the world's unprecedented racial, ethnic, religious, linguistic, and cultural mixtures—less interested in sociocultural knowledge such as what happens to working-class black populations in places like Ferguson, Missouri, when the city's revenue needs drive racially discriminatory law enforcement practices. The epistemological failure to develop and act on knowledge across cultural differences leads to chronic overpolicing of minority communities, and in other countries to permanent low-intensity warfare and large-scale international migration. Take a third problem, sometimes called the "democratic deficit": knowledge economies are compatible with post-democracy, that split between official leaders and the popular will that we see all over the world. A fourth problem is what I think of as the emergence of post-middle class societies in the West, where high skills are compatible with low wages. Knowledge economies not only tolerate lower wages for university-level jobs, but seek lower wages through outsourcing, offshoring, and other economically rational practices. My point here