CULTURAL KNOWLEDGE WORK

THE POLITICS OF KNOWLEDGE WORK IN THE POST-INDUSTRIAL CULTURE

UNDERSTANDING THE DISSEMINATION OF KNOWLEDGE OF THE SCIENCES, HUMANITIES, AND THE ARTS

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Foreword

René Stettler has successfully worked for over two decades to establish ongoing publically accessible, dialogue between leading thinkers in the world of arts, sciences and technological development, which contributes to an evolving framework of ethical and social responsibility. His knowledge of the field is deepened by his personal relationship with many artists and scientists of world stature, whose theses and values he weaves into the fabric of his own advanced thinking. His intellectual journey leads us into a future of a fruitful diversity of ideas, attitudes and behaviours, which is both grounded and forward-looking.

The book examines, within a holistic frame of transdisciplinarity, work practices in the knowledge fields, and their effects in the post-industrial culture on public understanding and identification with the arts and sciences. It seeks to provide a utopian vision of an alternative future that might support a contemporary cultural epistemology. René Stettler sees the possibility of cultural change arising from informed public debate, and from adaptations within the ecology of information that might yield new ideas, practices and attitudes. This is a call, both informed and impassioned, for social action, referencing a number of successful projects undertaken by the author.

Within the framework of construction, production and distribution, the book promotes a *second-order* perspective on cultural work that challenges contemporary forms of political power and social control. It is a call for action at the interstices of cultural disciplines, where uncertainty and contingency can be celebrated in the search for new forms

of practice, sustainable environment awareness, democratic debate, and enriched qualities of individual and social interaction.

It is a work of profound reflection and intellectual courage, based on thorough scholarship, exemplary ethics and visionary sensibility.

Roy Ascott, August 2013

Acknowledgements

I owe a great debt to many individuals who helped to make this book possible. First, I am grateful to Roy Ascott, who provided enormous amounts of encouragement and friendly support. I would like to thank Roy for his guidance and advice in the context of my earlier doctoral thesis on the subject of this book. I thank in particular David McMullan and David Turnbull, who both responded unfailingly to requests for assistance. David Turnbull's book *Masons, Tricksters and Cartographers* opened the door to an understanding of our differing ways of producing knowledge and the ways in which knowledge practices work today.

The explorative atmosphere of my sessions with the Planetary Collegium helped me to acquire important insights into and understandings of research in cultural work practices and their role in the humanities and the arts as producers of valuable knowledge and defenders of civilisation. I am especially grateful for conversations with Martha Blassnig, Margarete Jahrmann and David McConville during and beyond the sessions of the Planetary Collegium. I particularly thank Michael Punt and Mike Phillips, who, with their knowledge, experience and creative thinking, have helped to shape my vision. I am indebted to Christina Ljungberg, who gave me valuable insights into other research fields. I thank Christina for her great help and generous support that I have received during discussions on the topic of my research. I want to offer very special thanks to David Matley for the critical and meticulous reading of the entire text.

I am deeply grateful to a large number of people for conversations about science, philosophy and ecology. They include, in alphabetical order, Simon Berther, Reinhold Bertlmann, Dick Bierman, Bob Bishop,

I am especially grateful to Guy André Mayor and Beny von Moos, who both passed away a few years ago, for challenging philosophical discussions about science, art, culture, mind and life. They both recurrently encouraged me to explore the epistemological and political dimensions of cultural projects, practices, institutions and people as producers and mediators of knowledge in order to make sense of a deeper social and moral-ecological understanding of the post-industrial culture.

And finally, I want to thank my son Pablo, my sisters Gaby and Karin and their husbands René and Beat, and my parents Heidi and Karl, who have both passed away. My family has supported my efforts in many helpful ways and I thank my son, my sisters and my parents for entrusting me with their knowledge, experiences and insights into life domains with which I am not so familiar.

Note on Terminology

The key theme of this book is an exploration of the potential for a renaissance of *cultural work* and *knowledge* in the global cultural economy. Throughout, the emphasis is on a particular kind of creative cultural labour that links knowledge to the different practices of cultural work which I will colloquially call "cultural knowledge work". While I will define the cultural work and cultural workers I am concerned with in the Introduction, I will set "cultural work" and "cultural knowledge work" in quotation marks in various parts of my text. When "cultural work" is placed between quotation marks, I have reservations about the prevailing practices of cultural work and the function and meaning of cultural work as defined in prevailing theories. "Cultural work" can then be associated with a more open and progressive concept of cultural work practice. "Cultural knowledge work" is mostly set in quotation marks in the first part of my text, but in the later chapters I more often use the italicised version of *cultural knowledge work* without quotation marks. *Cultural knowledge work* (CKW) is a propositional concept that by definition is investigated in this book with regard to the epistemic features of cultural work, and the "epistemology"/ecology of the cultural labour process.

Another focus of this research is concerned with the reconceptualisation of what I recurrently refer to as (techno-)socio-cultural spaces of knowledge. When *techno* is bracketed, *(techno-)socio-cultural* refers to the kinds of cultural, epistemological and political spaces that we construct in the process of targeting audiences with collective matters-of-concern which are framed by the complex socio-economic-technological (post-industrial) reality that we inhabit. When *techno* is *not* bracketed, *techno-socio-cultural* refers more precisely to the systematisation and

dissemination of knowledge in spaces/places in which the cultural performance and reproduction of technoscience are particular issues (such as the Gotthard Base Tunnel exhibition; see *Building a Transalpine Railway Tunnel and Manufacturing a Public and Transient Cultural Space of Knowledge*).

The humanities and arts are associated with a form of knowledge production in contemporary society. Their scope is broad, concerned with diverse social, cultural and analytical practices which accomplish inherently reflexive and often contemplative tasks—a complex of primarily critical or speculative ideas, methods/disciplines, values, intellectual and social demands as distinguished from the mainly empirical approaches of the natural and social sciences as well as science and technology.[1] In this context, the *humanities- and arts-based dialogues* imply the diffusion of knowledge of this kind as well as the provision of material-semiotic responses to socio-technological and political post-industrial reality in cultural environments.

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[1] My understanding of *the humanities and arts* overlaps with Michael Gibbons et al.'s definition of the humanities in his work *The New Production of knowledge* (1994), which I have used for this book. For further references on the work of Gibbons et al. see «The Scope of this Book».

The Scope of this Book

> We are always attempting to retie the Gordian Knot[2] by criss-crossing, as often as we have to, the divide that separates exact knowledge and the exercise of power—let us say nature and culture. (Latour 1993:3)

I was 13 years old in 1968 when Stewart Brand published the *Whole Earth Catalog*. At that time, I was too young to understand that this was—alongside the landing on the moon a year later and the paramount aesthetic revelation of seeing the Earth, the "Blue Marble", from a distance—the beginning of the "environment". 40 years later, this whole environment—our home planet—is at stake due to climate change and environmental destruction, which is potentially disastrous for life and civilisation. Our linear pursuits and activities of economic growth and material consumption, as Fritjof Capra argues (2002:208), are causally connected to global warming, climate change and the changing life conditions on the planet. These issues are now scientifically evidenced and no longer hypothetical.[3] Thus, my highest ambition is that this book should contribute to a theoretical framework of legitimate considerations in which reflections of how to modify our anthropology of creation may add to a finer sense of possibility for the cultural production and dissemination of knowledge, the redefinition of the *politics* and *ecology* of cultural work, and the exploration of a practice-based "epistemology".

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[2] *The Gordian Knot* is a legend associated with Alexander the Great. It is often used as a metaphor for an intractable problem solved by a bold stroke, "cutting the Gordian knot".
[3] Scientists who study global warming and climate change are currently in a state of suppressed panic. Things seem to be moving much faster than their models predicted. In *Klimakriege* (2008), the German sociologist Harald Welzer criticises the blindness of the social and cultural sciences with regard to the expected dramatic consequences of global warming.

I grew up in a small village at the foot of the Alps near the city of Lucerne in the heart of Switzerland. During my adolescence, my emotional and intellectual awareness of the whole gamut of the fragile conditions of life and human culture was impacted and formed by the unreconciled political atmosphere of the Cold War and the threats of a nuclear war between America and the former Soviet Union. Having thus experienced my childhood and adolescence, in a sense, as an ontological uncertainty and a threat to the societal and cultural collective in which I was raised, I had as a boy a recurring dream of my village being invaded by foreign military forces. Moreover, the Catholic environment with its rich cultural tradition and symbolic figurative world made me experience myself as embedded in processes between materiality and semiosis, a very deep involvement in the reality of symbolic and sacramental spheres, religious doctrines of incarnation and trans-substantiation.[4] As a consequence, my understanding of and relationship with the concepts of "human", "nature", and especially with "human nature", "human culture" and the universe were deeply entangled in an awareness of a small and subtle matrix of "high stake balancing acts" (Haraway 1997b:47) in a morphing environment— a struggle between the physical and the non-physical, the organic and the non-organic, the material and the semiotic, the epistemological and the political.

In 2008 when I started working on my earlier thesis on which this book is based, I was diagnosed as having Lyme disease. Lyme disease or *borreliosis* is an emerging infectious disease caused by a species of bacteria (*spirochetes*). The diagnosis coincided with the beginning of the crisis of the world's financial systems, impacting the world's economy and

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[4] I owe the awakening of memories and forgotten experiences in my Catholic childhood to Donna Haraway. On several occasions, Haraway recalls the experience of Catholicism at a young age which had a deep impact on her intellectual development (Haraway, Goodeve 1997b:54-55; Haraway 1997a).

markets on a global scale. The sudden realities of abused fiscal responsibility by banks, global economic recession, unemployment etc. revealed the timeliness of investigating in greater depth the significance of the topic of my book, that is, to explore the role of the humanities and arts as producers of new knowledge and defenders of civilisation. The biological conditions and global economic and political frameworks in which I was embedded—the complex networks of nature and the convoluted networks of human society—led me to reflect on the kind of taken-for-granted order of the contingent rhizomes to which my existence and that of other beings belonged. I began to make sense of Capra's (2002) under standing of the connections between life, mind and society—the hidden web of life, consciousness and social reality. Furthermore, the thinking of R. Buckminster Fuller[5]—one of the most important American thinkers of the 20th century and visionary for the 21st century—his fascinating mix of utopian vision and organic pragmatism, his credo of "more for less" and his belief in the interconnectedness of all things encouraged me to pursue many of my thoughts that are articulated and developed in this book. It was R. Buckminster Fuller's work which sensitised me to the issue of closing the gap between the natural sciences, technology, the humanities and the arts.

My encounter with *borreliosis* framed the writing process and my entire intellectual journey. Going through the process of healing, that is, eliminating or rather inhibiting the radius of power of the *spirochetes* in my body, gave me valuable insights and food for thought. My interest in the 3.5-billion-year-old bacterial pathogen leading an asymmetrical war against my life tempted me to keep track of biological and physical metaphors as I started to take tremendous pleasure in structural-functional complexes

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[5] Richard Buckminster Fuller (1895–1983) was an American architect, designer and visionary.

at microscopic levels.[6] During the medical treatment,[7] I developed a respectful attitude for the inscrutability of natural phenomena, and the complexity of the interplay between human activity and ecological processes.

A New Communal Space for Knowledge

A central aim of this book is to contribute to the concept of a new communal space for knowledge—a social and symbolic space with a whole new ecology in which diverse interests, knowledges and values can co-exist (cf. Turnbull 2000). The spectrum of my interests and themes thus began to evolve around the following key questions:

- To what type of future public cultural "spaces" of knowledge and "models" of traffic for knowledge should we aspire?
- What future cultural work practices are needed to sustain these "spaces", and the ontological, epistemological, moral and ethical dimensions that our being-in-the-world entails?
- How should the contingency of human experience be addressed in domains of the cultural production and dissemination of knowledge?
- What answers to these questions support the retying of the Gordian Knot?

These questions—I am tempted to say—are rooted in my childhood and adolescence. They have "materialised" or rather ripened in my mind

[6] As a "true super-microorganism" borrelia bacteria outwit the body's immune system and change its function by using deceptive strategies and camouflage; they survive temperatures of up to minus 50 degrees Celsius (Storl 2007:51, 52). Spirochetes' strategy is to "excrete antibiotic toxins" or to "adopt cystic form while they fall into a long sleep until the biological environment has improved" (Ibid.:27, 51)

[7] I took *doxycycline*, Pfizer's first once-a-day broad-spectrum antibiotic, but then followed Storl's recommendations by using a plant named *Fuller's Teasel (Dipsacus fullonum)* for which a number of medical properties, though not proven in medical trials, are claimed, among them curing Lyme disease, antibiotic properties and improved circulation.

in the past 50 years, and today express my commitments and very personal concerns with the contemporary problems of rationality, reflexivity, transdisciplinarity, globalisation and ecological thinking, including those relating to the rational and authoritative forms of knowledge that my people and my culture have created.

The work of a number of authors in science, philosophy, sociology, the history of ideas and other disciplines have contributed thoughts and themes to this book. The Czech-born media critic and philosopher Vilém Flusser has been a key figure with his seminal view of the future of design, cultural ethics and our ways of "designing" the world. Flusser's (1990) criticism of the "stubbornness" and the "non-creativity" of politics, which, in his view, is based on "outdated categories" such as "nuclear weapons", "energy crisis", "distribution of goods" or "Third World", has accompanied me throughout the writing process. A number of authors have encouraged me to pursue ideas across the borders of academic disciplines. The work of these authors with a heart-and-mind concern with ethical issues spurred me to combine different approaches, and to address the contemporary challenges of cultural, social and environmental renewal. The late Heinz von Foerster, who introduced epistemological doubts to cybernetics, thus confounding the mechanistic ideas held by early cyberneticists, impressed me with his legendary enthusiasm and unforgettable vitality during public lectures. I was fortunate to witness one of his public talks on the occasion of the 1992 Berne conference *Der entfesselte Blick,* organised by Gerhard Johann Lischka.[8] Von Foerster's ethical and aesthetic imperatives, which focus on seeing ourselves as a part of the universe, as *participants* rather than outside observers, have influenced my thinking as much as Fritjof Capra's insights into social and economic pitfalls in *The Hidden Connec-*

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[8] Gerhard Johann Lischka is an Austrian-Swiss media theorist and editor.

tions (2002). Capra's concepts of how to build ecologically sustainable communities provided many insights and helped me to understand how to implement sustainability in civil society through cultural work. The work of Flusser, von Foerster, Capra and especially that of the Austrian non-dualist philosopher Josef Mitterer made me aware of the tendentious dichotomies inherent in our political and epistemological representations.

However, the main sources that have inspired me in writing this book, and that I have used in order to make sense of a deeper understanding of contemporary culture and knowledge, are, first, the writings of the French historian Michel Foucault and those of the French sociologist Bruno Latour. A brief introduction to the work of Latour and Actor-Network Theory, including its significance for the theoretical framework of this book, will be presented in the Introduction. Many of the ideas of these authors concerning the forces and human behaviours that drive and determine science, politics and the economy have contributed to my text. The work of Gregory Bateson in *Mind and Nature* (1979), and Humberto Maturana's and Francisco Varela's guide to the formation of cognition and human intelligence in *The Tree of Knowledge* (1987) have added an incentive to understand the biological roots of the human constitution, and our capacity for ethical reflection, deliberation and decision-making. Michael Gibbons et al.'s work *The New Production of Knowledge* (1994), which explores the changes in the ways in which scientific, social and cultural knowledge is produced, supported me in some of my ideas concerned with the future of the cultural production and dissemination of knowledge. It also encouraged me to rethink established cultural practices and policies. The European Commission (EC) report *Taking European Knowledge Society Seriously* (2007)[9] on key

[9] The producers of the report are Ulrike Felt and Brian Wynne. The highly-qualified international expert group consisted of Michel Callon, Maria Eduarda Gonçalves, Sheila Jasanoff, Maria Jepsen, Pierre-Benoît Joly, Zdenek Konopasek, Stefan May, Claudia Neubauer, Arie Rip, Karen Siune, Andy

issues concerning science and governance in the EU has sensitised me to diverse policy concerns and to new ways of addressing the problems we face today with "reflexive" thinking. The report encouraged me to explore my concept of "cultural knowledge work" (CKW) and supported me in attempts to define a more sustainable cultural life. By proposing an ethics of freedom, Michael Hardt's and Antonio Negri's work *Commonwealth* (2009) has given me insights into a possible constitution for our common wealth. It supported me in focusing on the problem of how to articulate the vision of a global commonwealth adequately from the perspective of the cultural workplace. *Commonwealth* has also challenged and enriched my thinking concerned with the biopolitical production of knowledge in the age of globalisation. Ulrich Beck's examination of the 21st century risk society, drawing together the new world order where terrorism, financial turmoil and global climate change haunt our lives and engender new risks, has given me valuable insights into the human situation and a cos-mopolitical perspective from which to reflect on our self-inflicted pro-blems. Finally, a valuable resource has been Mark Banks'[10] *The Politics of Cultural Work* (2007), in which he provides an overview of the intellec-tual traditions that appear to be supporting emergent empirical studies of cultural work. Cultural work has been substantially neglected in the litera-ture as a topic of research. In his work Banks offers a broad theoretical understanding of cultural work from the perspective of "critical theory" approaches ("Frankfurt School" Marxism)[11] and a "governmental" ("neo-Foucauldian") approach that sees cultural work as a mode of managerial "business-oriented" authority.

Stirling and Mariachiara Tallacchini. In order to make the collective authorship of the 14 personali-ties more transparent, I will refer to it in this book as the work of Felt, Wynne et al.
[10] Mark Banks is a British researcher and author with interests in cultural work, media culture, cultural policy and urban space.
[11] Critical theory approaches such as the Frankfurt School have investigated cultural work from the scope of social conditions such as the problematic alienation of cultural workers from the possibility of "authentic self-formation", as Banks points out (2007:182), and thus stress the impact and the consequences of the cultural industries, exploitation of workforce and economic globalisation etc.

Grasping the Socio-Technological Post-Industrial Reality

Overall, my text is concerned with the transient, epistemological, and political dimensions of cultural work, institutions and people as authorities and mediators in the business of grasping our socio-technological post-industrial reality. In using the word "post-industrial", I draw on the theories of Daniel Bell (1973) and the taxonomy of George Ritzer (2007). Although the theory of the information revolution may provide a clearer theoretical and empirical framework than the commonly used term "post-industrial society" (examples of post-industrial societies include the US, Canada, Japan and Western Europe), my understanding of "post-industrial" is based on the idea of a society in which an economic transition has occurred from a manufacturing-based economy to a service-based economy, on the diffusion of national and global capital and on mass privatisation. Among several salient changes in social structure associated with the transition to a "post-industrial society", Ritzer's taxonomy emphasises that *theoretical knowledge* as the basic source of innovation is increasingly important in a post-industrial society *instead of* practical and empirical know-how. Advances in knowledge lead to the need for other innovations such as ways of dealing with *ethical* and *moral* questions. Therefore, the exponential growth of *theoretical* and *codified knowledge* is central to the emergence of the post-industrial society. Further, in post-industrial societies new intellectual technologies such as cybernetics, game theory and information theory are developed and socially implemented.[12]

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[12] See the conclusions in chapter IV «Epistemology of Post-Industrial Cultural Work» with regard to the discussion of second-order cybernetics as a paradigm for the ethical, aesthetic, pragmatic and political convergences of cultural work.

Theory of Cultural Work

My final aim is to develop a new theory of cultural work. The book thus ventures into the intentions and motivations behind three selected cultural projects. These projects strongly evoke the extraordinarily heterogeneous complexity of post-industrial knowledge. The first is a public exhibition on the new 57km-long Gotthard Base Tunnel, the longest tunnel in the world, which will be under construction in the Swiss Alps until 2016.[13] The second is Jennifer Baichwal's[14] documentary film *Manufactured Landscapes* (2006)—a portrayal of the Canadian photographer Edward Burtynsky and his work on China's industrial revolution; and the third is Ai Weiwei's[15] social performance *Fairytale* at Documenta 12, for which the artist invited 1,001 Chinese people to the city of Kassel in 2007. My inquiries into the nature, theory and practices of cultural work will address challenges, contradictions, interests and imaginations around these three projects.

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[13] The Gotthard Base Tunnel is a new railway tunnel under construction in Switzerland. With a projected length of 57km (35 miles) and a total of 153.5km (95 miles) of tunnels, shafts and passages it will be the longest tunnel (of all railway and road tunnels) in the world upon completion, ahead of the current record holder, the Seikan Tunnel (connecting the Japanese islands of Honshŭ and Hokkaidō). The tunnel is part of the Swiss AlpTransit project, also known as New Railway Link through the Alps (NRLA), which also includes the Lötschberg Base Tunnel between the cantons of Berne and Valais (Vetsch 2002:152-56; *The New Gotthard Rail Link.* AlpTransit Gotthard Ltd. [Ed.] 2005:2-5, 8-9, 14).

[14] Jennifer Baichwal is a Canadian filmmaker.

[15] Ai Weiwei is a leading Chinese artist.