FOREWORD

Some Assembly Required

ONE OF THE OLDEST STORIES going in the history of technology is what Lewis Mumford called *etherealization*. In this story, innovations progressively liberate us from matter, from our bodies and our jobs, from clocks and desks, from anything dull and ordinary. Nineteenth-century commentators on the telegraph and the railroad, including Karl Marx, made the eighteenthcentury poet Alexander Pope's thought about annihilating space and time ubiquitous in reflection about the convulsions of modernity. Charles Horton Cooley, the pioneering sociologist, famously wrote in his 1894 dissertation that "transportation is physical, communication psychical." Daniel Bell, in The Coming of Post-Industrial Society (1974), saw the preindustrial extraction of raw materials and the industrial production of goods as giving way to a new service economy in which knowledge was the highest value; he thought mining, for instance, of relatively little relevance to his forecast for coming times. For current examples, we need look no farther than the technoliberationist talk and sleek products coming out of Silicon Valley. Etherealized terms such as cloud computing and wireless, now normal in everyday speech, are perfect examples. What could be more earthy than the cloud or cable-y than Wi-Fi? And how does anyone ever manage to say "fulfillment center" with a straight face?

This book is a refreshing counter-blast to the ethereal narrative. It shows what the university can do at its best, as a place where thinkers can dissent against prevailing powers, analyze the fatuousness of prevailing ideologies,

imagine what could be, and pull away from easy frames of reference, even if university life is subject to many of the same dispiriting pressures as other cultural industries. Forget the idea that mining or shipping are no longer relevant; drop the fantasy that your devices come to you immaculately conceived and without labor pains. This book gives voice to new and old histories. Slavery lives on in digital life. Bodies still bleed. Minerals are still pulled from the earth by people under precarious conditions. The sea matters. The earth has not gone away. The material circulation of political economy drives the work of all media. The logistical imagination is alive and well!

Logistics has a long history, and if it was originally defined as the art of assembling and supplying armies, we might think about different sorts of armies. Friedrich Kittler was enamored of the fact that the Greek word stoikheia-which featured in the title of Euclid's geometry and was translated as elements—also means letters and soldiers, that is, things that are arrayed into lines—as of battle, poetry, or parallelograms. Like Paul Virilio, Kittler deplored—at times with an alarming eagerness for military matters—the civilian orientation of most media history. War is hell, as military people know better than anyone, but war's sheer repulsive awfulness doesn't mean we should turn our gaze away. In battle, representation always tilts into operation; there is no easy separation message and medium. To study war is also, as many have told us, to study capitalism-Marx's famous "bellum omnium contra omnes," the war of all against all. We shouldn't leave logistics to the generals and the captains of industry. It is too important a style of thinking for a moment of such massive planetary turmoil, in part because it shows that media are not just channels for ideology, but that channels are themselves ideological. This volume hacks logistical thought for critical purposes.

Media studies may yearn for the fleshpots of interpreting content—something we generally know how to do well—but this book offers a different invitation: to look at *time, space, and power*. This was a formula fitting the work of Harold Innis—which we might update to *time, space, and energy*. A logistical focus on media history opens up much wisdom about past and present. Writing, the ur-medium, might have been developed to store oral poetry in the exceptional case of the Greek alphabet, but much of the history of scripts has been managerial, executive, and computational. Digital media have their backdrop in ancient bookkeeping—of labor hours, celestial motions, wheat, and beer. Even if the term *logistical media* is of relatively recent coinage, the practices and concerns it indexes have been around since human beings first used stones and baskets, clothing and fire, to shape their worlds and selves.

This volume also invites a refreshing turn in intellectual focus. I remember in the 1980s several hip writers telling us we had to drop the ideas about technology developed in the 1940s and 1950s. Those years gave us too much "mass society" talk, too much worry about the dinosaurs of electrical power generators, nuclear bombs, and cultural industries like film and television! Now we were surrounded by new nimble digital mammals and savvy users equipped to wage semiotic guerrilla warfare against the dinosaurs. We know how that story turned out; Apple used it, in fact, in its famous 1984 Super Bowl ad of the lone brave woman taking down Big Brother, and generations of cultural studies majors, schooled in such doctrine, went on to staff the creative industries. I welcome the return of the big and the raw, along with the small and the refined, at a higher turn on the spiral. Those dinosaurs never went away; they just went out of scholarly sight. They went infrastructural. Extractive economies never vanished. We still depend on oil, timber, coal, and corn, to varying degrees of tragedy. We were once told that unmasking ideology was too crude a method for the subtleties of cultural flows. Peter Sloterdijk, in his Critique of Cynical Reason (1983), decisively showed just how hazardous and tired a tool it can be. Unmasking can be crude, and it encourages both an arrogance about knowing better than others and a metaphysically shallow split of appearance and reality. But crude times can call for crude responses. The old-fashioned exposure of lies is still fully relevant! There is plenty of propaganda on the prowl. The task is to figure out how to combine an ontological account of media as infrastructures of being with an epistemological one that allows us to say when being is wrong or bad.

Not that these essays are crude in the least. They are often musical in spirit. It is remarkable how often many of them wax lyrical. There is a yearning for beauty and freedom here that grows out of and alongside the analysis. There is a poetry about matter in motion, and these essays range across its many modes and moods—lyric, tragic, epic, elegiac, satirical, even mockheroic. I kept thinking of another thinker important for media history, Theodor W. Adorno, who believed a commitment to the aesthetic as a philosophical and political practice of redemption went happily together with a hard-headed analysis of culture industries.

Part of what this book brings is a spirit of copiousness, an abundance of topics, methods, tools, and theorists. I learned some new names and cool moves, and some new words such as *destoolment* and *protocological*. It participates in a florescence of field-defining terms in media studies, as we learn to take metal, seawater, sweat, and wood seriously along with our old standby topics. Media. Means. Infrastructures. Regimes. Technics. Technologies. *Technai*.

Kulturtechniken. Platforms. Containers. Utilities. Standards. Logistics. Materialities. Assemblages. Apparatus. Vessels. Environments. Ecologies. Umwelten. Networks. Actor-networks. Milieux. Ambiances. Ensembles. Kit. Gear. Gestell. Paraphernalia. Tools. Implements. Machines. Equipment. Protocols. Clouds. Elements. Operations. Operative ontologies. Hardware. Software. Wetware. Trappings. Even the term cargo might serve, as made famous by Jared Diamond's Papuan friend Yali—why did white people get all the cargo, Yali asked about the stuff of modernity such as steel axes, Coca Cola, medicine, radios. This book adds assembly codes, supply chains, and much more to our analytic repertoire for understanding the heaped-up stuff of modernity.

Assembly, it is sometimes said, is the least appreciated of the five rights specified by the First Amendment to the US Constitution. Assembly, we all know, is political even when it involves things of all kinds, whether they are parliaments or programs, laptops or loaves, and quarantine has only shown us how potent it is to be with others in the same space and time. It is also sometimes said that the three saddest words in the English language are "some assembly required." This volume shows us why that is not sad, but an opportunity. This book reveals, and embodies, the pleasure and pain, the toil and possibility that come when we work together to assemble something better, clearer, or at least more puzzling than what we have already. May this book unmask the illusionists hiding the earth metals and the human cost in our everyday tools, and may it lift us to a better place through the poetry and music of its analysis—or at least to one more nervous and well-informed.

-JOHN DURHAM PETERS