

Xiao Liu
**Information
Fantasies**

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The photo above was taken in 1993 at a gathering of *qigong* practitioners in west suburban Beijing. Since the late 1970s, a “*qigong* fever” had swept across post-Mao China, attracting more than sixty million regular practitioners. This “*qigong* fever” involved many high-level Party officials and research institutes and universities across the country, as well as leading scientists, such as Qian Xuesen, a most renowned and politically influential scientist, whose name is associated with China’s missile and space projects. In the photo, each of the practitioners, obviously in a meditative trance, was wearing a cooking pot on their head. Dubbed “information pots,” they were expected to receive information from outer space so that a “resonance between heaven and mankind” (□□□□) could be formed.

A cosmological view that was formed and developed around the last three centuries BC, when a unified and centralized political order arose for the first time in the history of China, “resonance between heaven and mankind” provided legitimacy and guidance to the imperial power and its rulership. In this cosmic world, the macrocosm of the heaven and the microcosms of the state and the body became a single manifold set of resonant systems.¹ Yet this view of resonance between cosmos and body gained new meaning in this contemporary context, not only because the cosmological view was now transformed for new “worlding” practices, but because the resonance, considered as revealing of an ideal “human and heaven” relationship (*tianren guan* □□□), was also embraced by Chinese scientists and intellectuals as the philosophical foundation for a more holistic understanding of the human body. The keyword that bound both top-level scientists and ordinary people, official concerns and popular appeal around *qigong*, was “information.” Qian Xuesen, for example, was enthusiastically promoting the study of *qigong* as a shortcut to find out a secret mechanism of more direct and immediate communication between the human body and the information environment. The CCP and the government, having recently officially announced the end of the Cultural Revolution and reorganized themselves around Deng Xiaoping’s economic development plans, were eager to catch up with the Western developed countries and ride on the wave of the “information revolution.” In 1978, Deng Xiaoping, the architect of China’s post-Mao reforms, called for the rapid development in electronic computing, cybernetics, and automation technology at the National Conference of Science. Various predictions of an incoming “information society” gained wide circulation and attention in China, especially with the translation of Alvin Toffler’s

book *The Third Wave* into Chinese and his visits to China in person in 1983 and 1988. (The Chinese translation of *The Third Wave* first appeared in Hong Kong in 1981, and a full translation of the book in mainland China was published in 1983.) In both official and intellectual discourses and in the scientific and popular imagination, “information” was fantasized as the magic force that would bring post-Mao China into a new era. Tied to what I call “information fantasies” in the post-Mao late 1970s and ’80s, the scenario in the photo crystallizes the anxieties and aspirations, as well as the confluences and contradictions, of various social forces and ideologies in a drastically changing society.

First, the fact that people were collecting information from the air suggests that the space without was here understood as an active space full of information.² The pots used for information collection expressed the desire to embrace an uninterrupted connectivity disregarding the boundaries of the terra. This connectivity through the air and outer space was facilitated by other media technologies new to 1980s China, such as wireless broadcasts and satellite technology. China successfully launched the first man-made satellite in the 1970s. The use of synchronous orbiting communication satellite technology for communication and television broadcasts started around the mid-1980s. A photo submitted to a photography competition organized by the Chinese Institute of Electronics in 1984 shows a set of satellite antennas sticking out from an ordinary residential courtyard. The enclosed structure of the yard appears to set boundaries to a seemingly autonomous space, but the antennas reach into the sky, bringing a virtual mobility to the courtyard by connecting it to an invisible network of information circulation. This scenario became increasingly common across the country. Shu Ting, the famous female “misty” poet living in Fujian province, once described the skyscape of her city as: “This is my city / and I long for your arrival / Chimneys, cables, fishbone antenna / Knit a net across the interrupted sky.”³ Since the late 1970s, such antennas had densely occupied the rooftops in Guangdong, a south China province adjacent to Hong Kong. Nicknamed “fishbone antennas” because of their shape, most of them were set up illegally by local residents for the purpose of stealing television signals from Hong Kong.⁴ Throughout the 1980s, these antennas had constantly been the object of controversy, speaking to the contradictions between the liberal desire of opening-up and the persistence of control, between new consumer desires stimulated by the new media environment and a late socialist system that was

still wary of the corruption from the “sugar-coated bullets” of Western capitalism. It was not until 1992, when the programs of four television channels in Hong Kong were officially included into the television networks of Guangdong, that the history of illegal fishbone antennas ended. Incidentally, another, more conspicuous-looking, big, cooking-pot-shaped satellite receiver that became popular around this time was nicknamed “satellite pot” (卫星锅) in Chinese. “Information pots,” “fishbone antennas,” and “satellite pots” all reached into the sky and generated new fantasies of mobility and connectivity, transcending the boundaries of the terra and conjoining humans and information environments.

Half mythical, this new vision of an enveloping information environment was spurred by rapid developments in wireless communication in 1980s China, which turned airwaves into a most powerful medium in both the scientific and popular imagination. Airwaves are about ubiquitous connectivity. The imaginary of mysterious “waves” as the premium media of connectivity appeared precisely at the moment of China’s opening, when the boundaries formed during the Cold War seemed to soften and dissolve. However, in retrospect, this vision of a boundary-free globe turned out to be too idealistic or even liberal-minded. Today, as China boasts the world’s second-largest economy and serves as the world factory for various sleek-surfaced e-products, the deteriorated labor conditions at Foxconn and other contract manufacturers of transnational corporations continue to make headlines. If “waves” as a magic medium promised ubiquitous connectivity, the connections were always uneven and precarious when the negotiations of and conflicts between the local and the global, between socialist sentiments and capitalist logic, constantly inflected the fluctuations of the waves. Though “information fantasies” took over in post-Mao China, there were always ambiguities and discontent toward the advent of the purported “information society.” In this sense, the setting of late 1970s and ’80s China provides a tension-ridden site for a critique of the ineluctable connectivity and for reflections on how the futuristic discourses of “information society” appropriated and competed with socialist imaginations.

Second, striking in the topmost photo is a belief in the necessity of a seamless incorporation of the human body into information environments. The human body is conceived simultaneously as a medium with immense potentiality and as an inadequate medium that always requires some

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Crowd assembles wearing so-called "information pots" fashioned from household pots and pans.

facilitation, such as that of the “information pot,” to strengthen its connectivity. It is precisely this precarious nature of mediation that gives rise to various politics and technocratic visions in manipulating the body and making it the locus for the competition of powers and economic interests. Although the “information pot” scenario appeared as a revival of an ancient philosophical idea, the human body in this scenario was more of a black box for information input and output. The body not only received information from outer space, but it also exchanged information, and thus formed feedback loops between the body and the environment. This had to do with the dissemination of cybernetics, information theory, and systems theory in China, which Qian Xuesen and other enthusiasts adopted as a new frontier of scientific research, but, more important, as a method for analyzing human society, economic structure, Chinese history, and even literature and the arts.

The human body as a medium is not a new phenomenon. Traditional Chinese philosophy and religious practices, as well as spiritualism in the nineteenth century, had featured different versions of the body-as-a-medium within different epistemological modes.⁵ Increasingly pervasive computational environments bring the human body to the center of current media studies, especially in new media scholarship on digitization and networks.⁶ But the emergence of an “information body” – the body as a medium for information processing – in China in the 1980s, on the one hand, registered the ways in which contemporary media technologies transform the perceptions and interactions of the human body with the world, and, on the other hand, was a discursive construction deeply entrenched in the politics of the postsocialist world, accompanying the production and unleashing of consumer desire in the process of marketization, and concurrent with the privilege of “information workers” over factory workers and peasants, who were once valorized as socialist subjects.⁷ This “information body,” however, is not merely a passive receiver or transmitter of information.

Mark Hansen in his *New Philosophy for New Media* highlights the role of the human body in “enframing” information, and the process through which the body, in conjunction with various apparatuses, renders information perceptible and gives forms to digital images. He argues that because digital data “explodes” the framed image that is the basic unit of photography and film, the human body is empowered as a “convertor” of polymorphous

digital data, able to actualize singular experience.⁸ According to Hansen, this process demonstrates the human body as a final site to resist the universalizing and homogenizing power of capitalism epitomized in the unlimited interconvertibility of digital data. Because of its “sensorimotor power to create the unpredictable, the experimental, the new,” the body becomes a site that can resist the capitalist imposition of universal exchangeability as manifested in digital convergence.⁹ As insightful an intervention as it is, this idealized notion of the human body nonetheless is ahistorical, abstracted from any specific socioeconomic conditions. Hansen assumes that the body itself is automatically capable of resistance.¹⁰ My task here is to historicize the ways in which the informationization of the body in post-Mao China concurred with the process of depoliticizing political subjects and the transformation of revolutionary “people” into postsocialist subjects. This process was exhilarating because it stimulated utopian and techno-futuristic imaginations and unleashed desires, senses of freedom, and aspirations for multiple possibilities, but it also turned out to be depressing and dystopian. As socialist subjects were emptied out and marginalized, the human body turned into a ceaseless information-processing machine for value extraction and was increasingly subject to various ideological and marketing “information bombs.”

Finally, but no less significantly: in the photo a cooking pot, usually not used for communication, is turned into what we may call a medium, which produces and facilitates new relations between the human body and the information environment. This transformation of a pot into a medium destabilizes a fixed, conventional conception of medium and raises the question of what media do. Alexander Galloway, Eugene Thacker, and McKenzie Wark have recently expressed dissatisfaction with the general understanding of media as devices and apparatuses in current media studies because this understanding obstructs broader discussions of the modes of mediation. Instead of asking what media are, they call for probing more into the question of “what is mediation?”¹¹ Moving away from the fixed, narrow notion of media as merely devices, we may ask: How is mediation generated and what is generated from the process of mediation? In this instance of the information pot, the becoming of medium provokes us to rethink mediation as the production of relations and the redrawing of boundaries. The reconfiguration of boundaries in both social and technical realms, as Katherine Hayles remarks, is a most salient feature of

cybernetics.¹²

Cybernetics provides a vision of information flowing across humans and machines, life-forms and non-life-forms, which is also a vision of ubiquitous mediation. Yet the seemingly obstruction-free information flows are never a politically neutral process, but, as Hayles insightfully points out, are imbricated in imperial powers and the expansion of capitalism in its drastic removal and redrawing of boundaries. I would argue that, in the context of 1980s China, the seemingly free information flows have to be considered as an effect of mediation that involves the constant negotiation of contradictions and the reconfiguration of relations and boundaries. It is therefore crucial to examine the conditions that make the information flows possible – the redistribution of powers, the eliding and reconstruction of regional, racial, gender, and class differences.

Such a critique of cybernetics is yet to be done, especially beyond the context of Western “developed countries,” which are often assumed as the “origin” and the main ground for the development of information science and technology.¹³ Moving away from the one-directional influence mode, my project contextualizes the circulation of cybernetics and informatics in post-Cold War geopolitics and examines the “information fantasies” in post-Mao China as inseparable from the boundary-destroying and boundary-redrawing processes in various social arenas, the reshuffling of Cold War powers, and the emergence of new sorts of connectivity that are generated during socioeconomic changes. The sense of liberation and excitement accompanied by these processes inspired imaginations of information technologically advanced futures, but the boundary-breaking forces of the market also engendered a postsocialist precariousness that put social values, morality, and human identities in constant crises. It is precisely such rich contradictions of post-Mao China that provide me with a pivotal point to launch a critique of the postwar discourses of cybernetics in explicating its complex entanglement with postsocialist politics.

Not long after the “information pot” photo was taken, in 1994 the CCP changed its tolerating and endorsing policy, denouncing *qigong* as a “pseudo-science,” which eventually ended the decade-long “*qigong* fever.” In the same year, full internet connectivity was achieved in mainland China. Although there had been burgeoning local networks and restricted access to the internet among research universities in Beijing, Chengdu, Shanghai, and other big cities since the late

1980s, it was not until 1994 that full access to the World Wide Web was realized. The decade of the 1980s before the arrival of the internet witnessed dramatic social changes in Deng Xiaoping’s China. While the violent suppression of nationwide demonstrations, mainly led by college students on June 4, 1989, put an end to speculations about varied possibilities of the future, the overnight color-changing in Eastern Europe and the dissolution of the Soviet Union in 1989 and 1990 were assumed to signify the end of the Cold War. In 1992, Deng accelerated market reforms and China’s integration into the global market. Today, China has never more deeply enmeshed in global information capitalism. According to Yuezhi Zhao and Dan Schiller, with an average growth rate of more than 25 percent, the China-based information technology industry had already become the world’s fourth-largest by 2000. Many enterprises in the information industry are joint ventures or are operated with influence from foreign shareholders, and the enormous Chinese market has been seen as having irresistible appeal by transnational corporations.¹⁴ In other words, China’s transformations into postsocialism and its integration into the global information system took place simultaneously as two intertwined processes.

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See Nathan Sivin, "State, Cosmos, and Body in the Last Three Centuries B.C.," *Harvard Journal of Asiatic Studies* 55, no. 1 (June 1995): 5–37; John Hay, "The Human Body as a Microcosmic Source of Macrocosmic Values in Calligraphy," in *Theories of the Arts in China*, eds. Susan Bush and Christian F. Murck (Princeton University Press, 1983): 74–102; and Robin D. S. Yates, "Body, Space, Time, and Bureaucracy: Boundary Creation and Control Mechanisms in Early China," in *Boundaries in China*, ed. John Hay (Reaktion Books, 1994), 56–81.

2
Of course, the sky and outer space constantly occupy the imagination of communication and give rise to many of what John Peters calls "sky-born" media. Rather than being empty, the sky is often conceived as the environment for the interactions between the human and the other. The development of communication technologies, from telegraph to wireless communication and radio and television networks, has also fueled all sorts of paranormal and spiritual imaginations and discourses to do with the sky and the atmosphere as the active space and agent for the encounter and mediation of different forces. See John Durham Peters, *The Marvelous Clouds: Toward a Philosophy of Elemental Media* (University of Chicago Press, 2016); and Jeffrey Sconce, *Haunted Media: Electronic Presence from Telegraphy to Television* (Duke University Press, 2000).

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Shu Ting, "Huanghun Xing" 黄昏星 (Stars in twilight), *Shanghai Wenxue* no. 7 (1982): 44–45.

4
Li Xiaoying and Wang Yu, "Chengshi fengqi yugutianxian, Gangfeng beijian" 城市风区与天线 (Fishbone antennas sweep across cities, and fashion of Hong Kong move northward).

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See *Communicating Bodies: Body as Medium in Religious Symbol Systems*, eds. Alexander Ornella, Stefanie Knauss, and Anna-Katharina Hopinger (Pano Verlag, 2014); Sconce, *Haunted Media*.

6
To give a few examples: Mark B. N. Hansen, *New Philosophy for New Media* (MIT Press, 2004), and *Bodies in Code: Interface with New Media* (Routledge, 2006); Bernadette Wegenstein, *Getting Under the Skin: The Body and Media Theory* (MIT Press, 2006).

7
About the representation of laboring bodies in the Mao era and the elevation of mental labor over physical labor in post-

Mao China, see Paola Iovene, *Tales of Futures Past: Anticipation and the Ends of Literature in Contemporary China* (Stanford University Press, 2014), chap. 1, 19–49. Lisa Rofel regards the production of various desires and the creation of "desiring subjects" as crucial to China's reconfiguration of its relationships to a postsocialist neoliberal world. Although she focuses on the post-Tiananmen world of 1990s China, this process of producing "desiring subjects" began as early as the 1980s with the start of marketization and especially the commercialization of culture in the mid- to late 1980s. See Lisa Rofel, *Desiring China: Experiments in Neoliberalism, Sexuality, and Public Culture* (Duke University Press, 2007).

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Hansen, *New Philosophy for New Media*.

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Hansen, *New Philosophy for New Media*, 2.

10
The celebration of prediscursive affect in recent media studies often ignores the fact that the affective capacity of the body is increasingly subject to the value extraction of information capitalism. Autonomist feminists and Marxists such as Michael Hardt and Kathi Weeks use the term "affective labor" to refer to labor for "the creation and manipulation of affects." Steven Shaviro adopts this line of Marxist critique in his discussion on media and affect economy in *Post-Cinematic Affect* (Zero Books, 2010). See also Luciana Parisi and Steve Goodman, "Mnemonic Control," in *Beyond Biopolitics: Essays on the Governance of Life and Death*, eds. Patricia Clough and Craig Willse (Duke University Press, 2011), 163–76. Weihong Bao also questions the understanding of affect as prediscursive. Instead, affect itself should be examined historically as a discursive construction and understood as susceptible to political and economic manipulation. See Bao, *Fiery Cinema: The Emergence of an Affective Medium in China, 1915–1945* (University of Minnesota Press, 2015), 14–17.

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Alexander Galloway, Eugene Thacker, and McKenzie Wark, *Excommunication: Three Inquiries in Media and Mediation* (University of Chicago Press, 2014), 7–10.

12
N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (University of Chicago Press, 1999); and "Cybernetics," *Critical Terms for Media Studies*, eds. W. J. T. Mitchell and Mark B. N. Hansen (University of Chicago Press, 2010), 145–56.

13
Hayles, *How We Became Posthuman* mainly focuses on the development of cybernetics in North America. Andrew Pickering explores another genealogy among a group of British thinkers from the 1940s to the present. See Andrew Pickering, *The Cybernetic Brain: Sketches of Another Future* (Chicago: University of Chicago Press, 2010). Slava Gerovitch traces the history of cybernetics in the Soviet Union and how cybernetics was conceived as a universal method of problem-solving and a language of objectivity and truth. See Gerovitch, *From Newspeak to Cyberspeak: A History of Soviet Cybernetics* (MIT Press, 2002). Benjamin Peters provides a fascinating history of the rise of economic cybernetics in the Soviet Union, the attempts to build a "unified information network" to manage the national economy, and its unfortunate failure. See Peters, *How Not to Network a Nation: The Uneasy History of the Soviet Internet* (MIT Press, 2016). Eden Medina uncovers the history of short-lived socialist experiments in Chile under Salvador Allende by adopting a cybernetic system for economic management. See Medina, *Cybernetic Revolutions: Technology and Politics in Allende's Chile* (MIT Press, 2011). Yuriko Furuhashi explores the interconnections of cybernetics, architectural design, and multimedia environment in the case of Expo '70 held in Osaka. Furuhashi, "Multimedia Environments and Security Operations: Expo '70 as a Laboratory of Governance," *Grey Room*, no. 54 (Winter 2014): 55–79. In general, scholarship on cybernetic histories in the non-Western and Asian context has been limited, and even less has been written on the historical connections between the advent of postsocialism and the sudden pervasive discourse about a coming information society around the turn of the 1980s.

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Yuezhi Zhao and Dan Schiller, "Dancing with Wolves? China's Integration into Digital Capitalism," *Info* 3, no. 2 (2001): 137–51.

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